

**KOREAN NUCLEAR
SUPPLIERS**



Korea Nuclear Association
for International Cooperation

KOREAN NUCLEAR SUPPLIERS

KNA

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TEAM KOREA



BUSINESS AREA

Power Supply (Resource Development, Generation, Transmission, Substation Operation, and Distribution) and other related activities, including Research, Technology Development, Investments/Contributions, Businesses Utilizing Real Estate Holdings, and projects commissioned by the Government

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Electricity Transmission, Substations, Distribution and Sale in Korea
- **Overseas Project (Nuclear, 1 Project)**
 - UAE Barakah Nuclear Power Plant #1~4
- **Overseas Project(Thermal, 14 Project)**
 - Jordan Al Qatrana (Gas 373MW)
 - Jordan Amman (Diesel 573MW)
 - UAE Shuweihat S3 (Gas 1,600MW)
 - Saudi Arabia Rabigh (Heavy Oil 1,204MW)
 - Saudi Arabia Jafurah (CHP 317MW)
 - China Shanxi Province (Coal 8,350MW, Wind Power 342MW, Photovoltaic Power 1,853MW, PSH 204MW)
 - Vietnam Nghi Son II (Coal 1,200MW)
 - Vietnam Vung Ang II (Coal 1,200MW)
 - Philippines Cebu (Coal 200MW)
 - Philippines SPC (Coal/Heavy Oil 279MW)
 - Malaysia Pulau Indah (Gas 1,200MW)
 - Indonesia Java 9&10 (Coal 2,000MW)
 - US Ukudu (Gas 198MW)
 - Mexico Norte (Gas 433MW)
- **Overseas Project (New&Renewable, 7 Project)**
 - Japan Chitose (Photovoltaic Power 28MW)
 - China (Wind Power 1,017MW, Photovoltaic Power 7MW)
 - China Shanxi Province (Wind Power 342MW, Photovoltaic Power 1,853MW, PSH 204MW)
 - Philippines Calatagan (Photovoltaic Power 50MW)
 - US California (Photovoltaic Power 235MW)
 - US Guam (Photovoltaic Power 60MW)
 - Jordan Fujeij (Wind Power 89MW)

KEPCO

Korea Electric Power Corporation

Having provided high-quality electricity and stable services with the establishment of Hansung Electric Company in 1898, KEPCO is leaping higher as a global enterprise that leads the future energy industry. KEPCO is committed to earn customer trust by valuing transparency, integrity and safety practices. KEPCO's vision is to create a world of clean and smart energy by thinking outside the box and unlocking enterprise-wide innovation amid the new wave of energy transition and digitalization.

KEPCO operates 33 projects in 15 countries, including the UAE, the Philippines and China, as of April 2025. Our plan is to diversify our overseas businesses in new energy sectors, as well as in renewable energies, while further developing existing projects. We will support the success of the UAE nuclear power plant project, in particular, serves as a model of success in other countries.

We will continue to work hard to become a global eco-friendly energy provider not only by constructing and operating existing thermal power & nuclear power plants but also by expanding low-carbon & high efficiency thermal power generation and new & renewable projects and to secure global leadership by discovering convergence new business models and winning contracts on constructing new nuclear power plants in the medium & long term.



BUSINESS AREA

- **Nuclear Power Plant Construction and Commission**
 - Large-scale NPP such as APR1000/1400
 - Small Modular Reactors such as i-SMR, SSNC
- **Operation and Maintenance, Others**
 - Operating Support Services
 - Technical Support for Refurbishment of HWR/LWR
 - NPP Parts/Equipment/Material Delivery
 - NPP Construction/Operation Consulting Support, Feasibility Study Service, etc.
- **Training**
 - Nuclear Expert Training through a Global Education Institution (KINGS)

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Operating 26 units of NPP
 - Constructing 4 units of NPP
- **Overseas Project**
 - Czech New-Build NPP Project
 - UAE Barakah NPP Project
 - Egypt El Dabaa Project
 - Romania Cernavoda Tritium Removal Facility Project
 - Romania Cernavoda Unit 1 Refurbishment Project

KHNP

Korea Hydro & Nuclear Power Co., Ltd.

Korea Hydro & Nuclear Power Co., Ltd. (KHNP) is the largest electric power company which generates approximately 32.76% of the total electric power generated in Korea with the noble sense of mission and pride of 'supplying electric power in a stable manner to enrich the lives of people and to contribute to the growth of the national economy' as its driving force. KHNP operates 26 units of nuclear plants, 37 units of hydro power plants and 16 units of pumped-storage power plants, and has a total installed capacity of about 31,462MW. In particular, its nuclear power capacity reaches about 26,050MW, leading Korea as the fifth largest nuclear powerhouse in the world.

Amid tightening regulations on carbon dioxide emissions triggered by intensifying global warming, rising energy prices, including oil as well as widespread resource nationalism across the world, nuclear power is considered by many countries as a key energy source for the next generation since 2000.

In this context, in collaboration with the Korean government and relevant organizations, KHNP has been actively carrying out global nuclear power projects around the world such as exporting APR1000/1400 (Advanced Power Reactor 1000MW/1400MW), and providing O&M (Operation and Maintenance) services based on a strong supply chain and project management capabilities accumulated over 50 years of experience in construction and operation of nuclear power plants.



KEPCO E&C

KEPCO Engineering and Construction Co., Inc.

We are Architect Engineer and NSSS Designer

KEPCO E&C is Korea's only nuclear engineering firm with expertise in both Architect Engineering(A/E) and Nuclear Steam Supply System Design(NSSS Design). Over the past 50 years, KEPCO E&C has successfully delivered engineering services for more than 30 units(30,000+ MWe) of nuclear new-build projects worldwide.

KEPCO E&C's engineering services cover Nuclear Steam Supply System(NSSS) and Balance of Plant(BOP) for the construction of new nuclear power plants. The services include feasibility studies, conceptual to detail design, licensing support, engineering management, procurement support, project management support, and technical support. We deliver these services through our project organization with multiple engineering disciplines.

We care for the Lifecycle of Nuclear Energy

KEPCO E&C provides a comprehensive range of engineering solutions across the entire lifecycle of nuclear power plants, from planning to decommissioning and waste management. Our offerings support major equipment replacement, plant refurbishment, and operational improvements. In addition, our configuration management and licensing support help maintain technical data consistency and ensure successful project execution. Moreover, KEPCO E&C has been actively involved in advancing future energy technologies, including next-generation nuclear power plants and fusion energy.



BUSINESS AREA

- **Construction:** Nuclear Power Plant Design (A/E and NSSS Design Services) for Domestic and Overseas Projects
- **Operation:** Operation & Maintenance, Safety Evaluation, Lifespan Management
- **Back-end Management:** Radioactive Waste Disposal, Decommissioning of Nuclear Power Plants
- **Reactor Design:** Capabilities for the Development of Reactor Design

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Architect Engineering Services for Construction of Shin-Hanul NPP #1, 2 (2009-2024), Saeul NPP #1, 2 (2006-2019)
 - NSSS Design Contract with Doosan Enerbility for Shin-Hanul NPP #3, 4
 - Technical Support Services for System Design of Operating NPPs (2008~)
 - Emergency Technical Support Services for Operating NPPs (2021~)
 - Probabilistic Safety Assessment(PSA) and Periodic Safety Review (PSR) for Hanul NPP #1~4 (2018~2024)
- **Overseas Project**
 - UAE NPP Design Services : Architect Engineering Contract (2010~)
 - UAE NPP Design Services : NSSS Design Contract with Doosan Enerbility (2010)
 - Long Term Engineering Agreement with UAE ENEC Operations (2018~)
 - Acquisition of the U.S. and European Design Certification
 - Czech NPP New Build Project Design Services





securing nuclear power plant decommissioning and dismantling technologies.

Reinforcement of the Global Partnership

KEPCO KPS provides price competitiveness by reducing the time taken to procure materials overseas and reducing distribution costs by leveraging our domestic and overseas supply chain networks. Furthermore, KEPCO KPS is establishing a cooperative system with local businesses in overseas markets where there are promising business prospects to provide a better service to clients. To that end, we make concerted efforts to build a supply chain with our partner companies in the field of nuclear power.

KEPCO KPS

KEPCO Plant Service & Engineering Co., Ltd.

KEPCO KPS is a public corporation specializing in providing total solutions for power plant facility diagnosis & performance improvement, power generation facility O&M, as well as new & renewable energy and industrial facilities. KEPCO KPS was established to contribute to the power industry's stable power supply and development by improving the performance and reliability of power equipment for power generation and transmission. Through continuous technology development and human resources training over the past 40 years, it has grown to be a leading domestic power plant maintenance company, boasting technology vaunted in overseas markets.

Notably, KEPCO KPS carries out ROMM and retrofit projects to diagnose and evaluate the current conditions of customer facilities using internal know-how, technical data, professional field experts, and advanced equipment accumulated in power generation facility maintenance, while improving facility performance based on them. All KEPCO KPS employees are united in innovative efforts to transform into a sustainable company by forging ahead in securing technologies for our nuclear power plant decommissioning business and new and renewable energy business.

Specialized Business

Based on our Nuclear Maintenance Engineering Center, KEPCO KPS, which boasts our own production technology, has led the way in the maintenance service market for new and enlarged nuclear power plants by strengthening our strategic partnerships with advanced overseas manufacturers, such as GE and Westinghouse Electric Company. In addition, by securing specialized ultra-precision technology and cutting-edge equipment, and experts in each domain, we reliably offer examination, diagnosis and maintenance services for reactor and nuclear fuel facilities, steam generators, reactor coolant pumps and motors, and main system valves among other facilities and equipment. KEPCO KPS contributes to the safe operation of nuclear power plants and the stable supply of electric power on a national scale by improving and replacing obsolete or aging facilities at nuclear power plants, performing testing and maintenance of a reactor's internal parts, acquiring quality verifications of nuclear power plant parts, and

BUSINESS AREA

- Power Facility Maintenance Industry

MAJOR ACHIEVEMENTS

• Domestic Project

- Provide maintenance services for 26 units of operating Nuclear Power Plants
- Providing maintenance services for 2 units of Nuclear Power Plants*

* Saeul Nuclear Power Plant #3, 4

• Overseas Project

- UAE Barakah Nuclear Power Plant Project (2009)
- Brazil Angra NPP Unit 1 Refueling Project (2014)
- USA NPP Refueling & RCP Project (143 times)
- East Asia NPP RCP. SG Inspection Project (23 times)
- Germany NPP RVISI Project (1 time)
- Slovenia Krsko GTSPR Project (1 time)
- Belgium Doel SG Inspection & GTSPR Project (3 times)
- Sweden Ringhals SG ECT Project (3 times)
- UAE NPP Commissioning & Long-Term Maintenance for 4 units

KEPCO NF

KEPCO Nuclear Fuel Co., Ltd.

KEPCO Nuclear Fuel (hereafter referred to as “KNF”) was founded in 1982 as one of the subsidiary companies of Korea Electric Power Corporation (KEPCO). Since 1989, KNF has been supplying nuclear fuels and related services for all the nuclear power plants in Korea, which are a total of 23 Pressurized Water Reactors (PWRs) and 3 Pressurized Heavy Water Reactors (PHWRs) in operation at present.

In addition, KNF has been exploring the global market as a fuel vendor for overseas customers, and is working on design and manufacture safe and economic nuclear fuel that meets international standards. KNF has begun commercial supply of nuclear fuels to Barakah nuclear power plants (BNPPs) since 2016. KNF also exports nuclear fuel components to the United States (US) and Brazil, provides nuclear fuel design technology services to the US, and exports nuclear fuel equipment to China.

KNF succeeded in the 100% localization of nuclear fuel design and production technologies and processes, and currently it has two fuel fabrication plants and two tube manufacturing plants. Furthermore, a third fuel fabrication plant is being constructed in order to meet both domestic and overseas nuclear fuel demand.

With its valuable experience and top notch technology, KNF is ready to meet customer's requirements and maximize customer satisfaction with the highest quality and safety standards.



BUSINESS AREA

- **UO2 Powder Production**
- **Design and Fabrication of both PWR and PHWR Fuel Assemblies**
 - Capacity: 550 MTU/year for PWR fuel and 400 MTU/year for PHWR fuel
- **Core Design and Safety Analysis for PWR Fuel**
- **Nuclear Services for Plant Operation and Fuel**
 - Fuel Repair and In-Reactor Fuel Performance Examination
 - Safety Analysis and Engineering
- **Zirconium Alloy Tubing Production**
- **Development and Production of Manufacturing Equipment**

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Supplying nuclear fuels and related services for all the nuclear power plants in Korea
 - Total 23 Pressurized Water Reactors (PWRs) and 3 Pressurized Heavy Water Reactors (PHWRs)
- **Overseas Project**
 - Commercial supply of nuclear fuels to Barakah nuclear power plants (BNPPs) (2016~)
 - Export nuclear fuel components to the United States (US) and Brazil
 - Provide nuclear fuel design technology services to the US, and exports nuclear fuel equipment to China
- **R&D**
 - Advanced fuel development for PWR
 - PLUS7™ Fuel (2002), ACE7™ Fuel (2005), HIPER16™ Fuel (2010) and HIPER17™ Fuel (2012)
 - HANA™ (High Performance Alloy for Nuclear Application) cladding development
 - Fuel development for SMART (System-integrated Modular Advanced Reactor)
 - Core design code system development
 - Safety analysis code system and methodology development



DOOSAN

Doosan Enerbility

-Nuclear Business Group-

Doosan Enerbility Co., Ltd.

Doosan Enerbility is the only Korean company specializing in Nuclear Steam Supply Systems(NSSS) for nuclear power plants. Known for its advanced technology, we manage the entire process from design to maintenance. Doosan Enerbility has been able to secure world-class engineering and manufacturing capabilities through the constant pursuit of quality innovation and is providing maximum customer satisfaction based on our quality assurance system. **Doosan Enerbility has supplied 34 Reactor Vessels and 124 Steam Generators domestically and internationally.** As part of 'Team Korea', Doosan Enerbility plays a key role in exporting advanced nuclear systems to Europe and the Middle East. Furthermore, Doosan Enerbility is dedicated to providing the world's safest and most reliable nuclear power plants. With its strong market position, Doosan Enerbility is set to lead the global nuclear power industry.

Reactor Vessel

The APR1400 Reactor Vessel is engineered to endure high pressure and temperature, housing essential nuclear internals and fuel. It features a removable Closure Head for efficient fuel reloading and is constructed from robust ring-forged shells. To further enhance safety, the APR1400 is equipped with four Direct Vessel Injection Nozzles that deliver coolant water from the Safety Injection Tank directly into the reactor core. This design ensures rapid and effective cooling, safeguarding the reactor's operational stability.

Steam Generator

The Steam Generator, acting as a vital heat exchanger, supplies steam to power the turbine generator. It facilitates heat transfer from the Primary Coolant Loop to the Secondary Coolant Loop while ensuring complete isolation of the coolant within each loop. This design guarantees an effective heat exchanger without cross-contamination, optimizing the efficiency and safety of the system.

Reactor Coolant Pump

The Reactor Coolant Pump (RCP) is a type of pump that uses a single spinning part to move the coolant. The part that spins is supported at one end and has a vertical shaft with special seals that keep the fluid from leaking. The RCP is part of the Reactor Coolant System and helps move the coolant from the Steam Generators to the Reactor Vessel and then back to the Steam Generators.

MMIS (Man Machine Interface System)

The Man Machine Interface System (MMIS) functions as the brain and nervous system of a nuclear power plant, monitoring and managing operating conditions to proactively prevent accidents. Doosan successfully developed this critical MMIS technology, which was previously dependent on overseas companies, through dedicated R&D in collaboration with domestic utility KHNP and research institutions. As a leading provider of nuclear power plant equipment, Doosan is committed to delivering the highest quality services. They produce safe and reliable nuclear Instrumentation & Control (I&C) systems built on world-class technology.

MAJOR ACHIEVEMENTS

• Domestic Project

- Reactor Vessel, Steam Generator:
 - KHNP Saeul NPP #1,2 (2011,2012)
 - KHNP Shin-Hanul NPP #1,2 (2015, 2016)
 - KHNP Saeul NPP #3,4 (2020)
- Reactor Coolant Pump, MMIS (Man Machine Interface System):
 - KHNP Shin-Hanul NPP #1,2 (2015)
 - KHNP Saeul NPP #3,4 (2020)

• Overseas Project

- Reactor Vessel, Steam Generator:
 - China Haiyang NPP #1 (2012)
 - USA Vogtle NPP #3,4 (2015)
 - UAE Barakah NPP #1,2,3,4 (2022)



**DOOSAN**

Doosan has accumulated extensive know-how as a specialist in nuclear power plant construction over the past 43 years. Furthermore, Doosan has begun construction of Turbine Island for a NPP in Egypt in 2023. In addition, Doosan is participating as a consortium member in projects in Czech Republic.

Based on expansive experience and exceptional achievements, Doosan is continuously participating in new large-scale NPP projects in domestic and abroad. Doosan is utilizing global No. 1 power plant EPC business capabilities to discover opportunities in Nuclear Power, SMR(Small Modular Reactor) projects.

BUSINESS AREA

- **EPC Work, O&M**
 - Thermal Power, Combined Cycle Power, Desalination, Wind Power, Fuel Cell, Hydrogen Production
- **Construction**
 - Nuclear Power, Building

MAJOR ACHIEVEMENTS

- **Total of more than 320 global projects**
- **Nuclear power plant construction reference is as follows:**
- **Domestic Project**
 - Hanul NPP #1,2 (950 MW × 2) (1982~1989)
 - Hanul NPP #3,4 (1,000 MW × 2) (1992~1999)
 - Hanul NPP #5,6 (1,000 MW × 2) (1998~2005)
 - Saeul NPP #1,2 (1,400 MW × 2) (2008~2018)
 - Saeul NPP #3,4 (1,400 MW × 2) (2016~2026) On-going
 - Shin Hanul NPP #3,4 (1,400 MW × 2) (2023~) On-going
- **Overseas Project**
 - Egypt El-Dabaa NPP #1~4 (1,200 MW × 4) (2023~) On-going
 - Czech Dukovany NPP #5,6 (1,000 MW × 2) (2026~) Potential

Doosan Enerbility

-Plant EPC Business Group-

Doosan Enerbility Co., Ltd.

Doosan began its history of large-scale nuclear power plant(NPP) construction in 1982 with Hanul units 1 & 2. Currently, Doosan is currently executing the construction of Saeul units 3,4, Shin Hanul 3,4 to which the latest safety technology is applied.

Doosan has profound experience in the entire process of nuclear power plant construction which range from civil engineering foundation work to architecture, mechanical installation, piping, electrical & instrumentation and commissioning support. We also have experience of various types of nuclear reactors operating around the world such as FRAMATOME, OPR 1000, and APR 1400. All these experiences are our strong point of NPP construction capability, and we are proud of this fact.



BUSINESS AREA

“Total Nuclear Power Solution Provider”

- Nuclear Power Plant Construction
- Nuclear Power Plant Design Service
- Nuclear Power Plant Performance Improvement & Maintenance
- NPP-related Technologies and Services
 - Research Reactor, Decommissioning, Used Fuel Storage Facility

MAJOR ACHIEVEMENTS

- The sole NPP contractor for the last 55 years without discontinuity.
- The most NPP constructions in Korea (Since 1971)
 - Constructed 20 out of 32 nuclear power units in Korea
 - 26 nuclear power units in Korea and overseas (including ESC* for Bulgaria's Kozloduy NPP Units 7 & 8)
 - * ESC : Engineering Services Contract
- Hyundai E&C has undertaken every First-of-a-Kind (FOAK) nuclear project in Korea since the first unit in 1971
 - Kori 1 : Korea's first nuclear power plant
 - Wolsong 1 : Korea's first heavy-water reactor plant
 - Hanbit 3,4 : Korea's first 1,000 MW-class standard plant
 - Saeul 1,2 : Korea's first APR 1400 reactor
 - Barakah 1-4 : Korea's first exported nuclear power plant

Hyundai E&C

Hyundai Engineering & Construction

Established in 1947, Hyundai Engineering & Construction (Hyundai E&C) has been a driving force behind Korea's modernization and globalization, contributing to the nation's remarkable growth and the advancement of its construction industry. Since entering the global market in 1965, Hyundai E&C has successfully executed more than 880 projects across the world, solidifying its position as a global leader recognized for its sustainable management and technological excellence.

In 2009, Hyundai E&C achieved a historic milestone by securing the Barakah Nuclear Power Plant project in the United Arab Emirates, surpassing major international competitors and marking Korea's first-ever nuclear power export. In the early 2010s, the company demonstrated exceptional capabilities by simultaneously constructing ten nuclear units, including Barakah Units 1-4, Shin Hanul Units 1 and 2, Saeul Units 1 and 2, and Shin Kori Units 1 and 2 — a testament to Hyundai E&C's unrivaled expertise in large-scale nuclear construction.

In 2024, Hyundai E&C expanded its footprint into the European nuclear market by securing the design contract for Kozloduy Nuclear Power Plant Units 7 and 8 in Bulgaria, in collaboration with Westinghouse Electric Company, a leader in the U.S. nuclear industry. This partnership has demonstrated the excellence of the AP1000 reactor design, established a strong local supply chain, and reinforced Hyundai E&C's position as a key partner in the European nuclear sector.

Building on 55 years of nuclear experience, Hyundai E&C is actively developing next-generation reactor technologies, including the 300MW SMR-300, which is currently undergoing detailed design and North American licensing, as well as Molten Salt Reactor (MSR) and Sodium-cooled Fast Reactor (SFR) technologies in partnership with the Korean government. The company is also investing in nuclear decommissioning R&D, a new frontier in the global nuclear industry, to expand its capabilities across the entire life cycle — from construction to decommissioning.

As a proven K-nuclear leader, Hyundai E&C continues to strengthen global partnerships, advance core technological competencies, and diversify its nuclear business portfolio. Through innovation and collaboration, Hyundai E&C is driving the global green energy transition, contributing to carbon neutrality, and paving the way toward a sustainable and secure nuclear future as a true global game changer in the nuclear ecosystem.

Samsung C&T

Samsung Construction & Trading Corporation

Samsung C&T's Engineering & Construction Group has more than 40 years of engineering and construction experience operating throughout the world. The group focuses on the following key areas: commercial and residential buildings, civil infrastructure and plant construction. Its landmark projects include Burj Khalifa - the world's tallest building, the Riyadh Metro Project in Saudi Arabia, and the UAE's 5,600 MW Barakah Nuclear Power Plant Project.

Samsung C&T is expanding its future growth engine as a "Total Energy Solution Provider" by actively strengthening its new business portfolio, including global SMR business and eco-friendly energy business including hydrogen and ammonia business.

As a core company of the Samsung Group and major shareholder of its affiliates, Samsung C&T operates in four key areas—E&C, T&I, Fashion, and Resort—and is expanding into Bio-related businesses.



BUSINESS AREA

- **Civil Infrastructure**
 - Road, Bridge & Tunnel, Railway & Metro, Harbor & Marine, Water Infrastructure
- **Building**
 - High-Rise Buildings, Mixed-Use Buildings, Airports, High-Tech Factories
- **Plant**
 - Nuclear Power Plants, Combined Cycle, Renewable Energy, LNG Storage & Terminal
- **New Business Area**
 - PV+ESS: Life Cycle Cost Optimization, Procurement Strategy, Compatibility & Stability
 - HVDC: High Efficiency of Transmission, Advantageous for Super Grid
 - Hydrogen: Green Hydrogen/Ammonia, System Optimization, Green Certificate
 - SMR: Less than 300 MW Small Modular Reactor and Complement of Renewable Energy
- **Plant Business**
 - Power: Nuclear Power Plant, Combined Cycle Power Plant, Coal Fired Power Plant, Renewables
 - Energy Storage: Energy Storage, Utilities & Offsite, Process Plant
 - Others: 2 Projects in 2 Countries

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Hanul NPP #5,6 (1,000 MW × 2) (1999~2005)
 - Shin-Wolsong NPP #1,2 (1,000 MW × 2) (2007~2015)
 - Saeul NPP #3,4 (1,400 MW × 2) (2016~)
 - Gyeongju Radioactive Waste Repository Ph.1 (100,000 drums) (2007~2014)
- **Overseas Project**
 - UAE Barakah NPP #1~4 (1,400 MW × 4 units)
 - Multiple CCPP and renewable energy projects in MENA, ASEAN, and other regions
- **R&D**
 - Total 76 projects, 59.5 GW (Nuclear 12.4 GW, CCPP 29.1 GW, CFPP 12.7 GW, Renewables 5.3 GW)
 - Over 360 experienced nuclear site engineers capable of delivering 3 large-scale NPPs simultaneously



Daewoo E&C

Daewoo Engineering & Construction Co., Ltd.

Since its establishment in 1973, Daewoo E&C has taken on challenges with the vision of adding new values to our lives. As a company pursues a better future for all, we will expand our businesses to bring changes to more regions throughout the world.

Starting with the construction of heavy water reactor in 1992 to the recent Engineering & Construction services of APR-1000 in Dukovany, Czech Republic, Daewoo E&C has been taking a leading position in the Engineering & Construction of nuclear power plants in the world.

As a reliable partner in the Czech Republic, Daewoo E&C has been successfully providing engineering and construction services for EDUII, a subsidiary company of CEZ.

In addition, Daewoo E&C is the first Korean engineering and construction company that exported its construction technology of nuclear power plants to China, Taiwan and Jordan. Furthermore, we are able to provide comprehensive technical and commercial capabilities across the entire nuclear energy value chain, including nuclear fuel assembly fabrication facilities, commercial nuclear power plants, radioactive waste disposal facilities, and more.



BUSINESS AREA

- Nuclear Power Plant
- Research Reactor
- Radwaste Disposal
- Performance Improvement
- Decommissioning & Dismantling
- Small & Medium Reactor

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Constructing 4 units of Nuclear Power Plant
 - Wolsong Nuclear Power Plant Unit 3&4 (1999)
 - Shin-Wolsong Nuclear Power Plant Unit 1&2 (2013)
 - Performance Improvement of Operating Nuclear Power Plant
 - Constructing CFVS(Containment Filtered Venting System) for Wolsong Nuclear Power Plant Unit 1 (2013)
 - Replacement of Steam Turbine Generator for Hanbit Nuclear Power Plant Unit 3&4 (2015 ~ Present)
 - Constructing Research and Test Facilities
 - Tritium Removal Facilities for Wolsong Nuclear Power Plant (2007)
 - RCP(Reactor Coolant Pump) Test Facility (2011)
 - Proton Accelerator Research Center (100Mev) (2012)
 - Constructing Radwaste Disposal Facility
 - 1st Phase of Low & Intermediate level Radwaste Disposal Facility (2015)
 - 2nd Phase of Low & Intermediate level Radwaste Disposal Facility (2016 ~ present)
 - Constructing the 3rd plant of PWR fuel fabrication (2020 ~ present)
- **Overseas Project**
 - Constructing Research Reactor
 - Jordan Research and Training Reactor (Jordan, 2017)
 - Technical Consultation Service for 4 units of Nuclear Power Plant
 - Qinshan Nuclear Power Plant Unit 1&2 (Taiwan, 2000)
 - Lungmen Nuclear Power Plant Unit 1&2 (China, 2009)
 - Constructing Nuclear Power Plant
 - Dukovany Nuclear Power Plant Unit 5&6 (Czech Republic, 2025)





BUSINESS AREA

- Global Small Modular Reactor (SMR) Project Development and EPC Execution
- Nuclear Power Plants(APR 1400) Construction Project
- Steam Generator Replacement Services Project

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Hanbit NPP Units 5&6 SGR Project (2017 ~ 2021)
 - Hanul NPP Units 3&4 SGR Project (2012 ~ 2014)
 - Hanul NPP Units 1&2 SGR Project (2009 ~ 2012)
 - Shin-Kori NPP Units 1&2 (2003 ~ 2012)
 - Hanbit NPP Units 5&6 (1996 ~ 2002)
- **Overseas Project**
 - Global Small Modular Reactor (SMR) Project Development and EPC Engagement (2023 ~ Ongoing)
 - Norway SMR(X-energy) Deployment Pre-Feasibility Study (2024~2025)

DL E&C

DL Engineering & Construction Co., Ltd.

Since its foundation in 1939, DL E&C has been a core company of the DL Group and has grown into a leading global EPC and development firm. Backed by strong in-house engineering capabilities and decades of field experience, DL E&C has successfully delivered infrastructure and industrial projects in more than 30 countries worldwide.

Having evolved from a traditional contractor to a full-cycle developer, DL E&C now leads projects across the entire value chain—from early-stage development and financing to construction and operation—creating long-term value for clients and stakeholders.

In the nuclear energy sector, DL E&C has completed four nuclear power plant units and four Steam Generator Replacement (SGR) projects since 1996, including the successful completion of Hanbit Units 5 and 6.

Today, DL E&C is actively expanding its role in next-generation nuclear energy by engaging in global Small Modular Reactor (SMR) initiatives. The company supports early-stage project development, feasibility studies, and EPC planning for SMR deployments in key international markets—particularly those embracing modular construction strategies—leveraging its proven nuclear expertise and global execution capabilities.



GS E&C

GS Engineering & Construction Corporation

Since foundation in 1969, GS E&C have achieved noteworthy growth in the fields of Plant, Power, Environment, Infrastructure, Buildings, and Housing.

GS E&C consists of business divisions for plants, construction/housing, infrastructure, new business, and prefab, and is engaged in the business of constructing office buildings, production facilities, residential facilities, and facilities used in refineries, petrochemicals, and the environment.

GS E&C is contributing to sustainable country development by constructing highly efficient and environmentally friendly fossil fuel and nuclear power plants, in addition to clean renewable energy power plants, hydrogen businesses, and SMR (Small Modular Reactor).

GS E&C successfully completed the construction of Shin-Wolsong NPP #1,2 and Shin-Hanul NPP #1,2. Recently, we are also carrying out 'Kijang Research Reactor'. GS E&C is successfully performing and continuously working over 20 years to strengthen the competitiveness of its Nuclear Power business.

In addition to expanding our nuclear power projects, we have acquired the necessary certifications for nuclear business, including KEPIC (Korea Electric Power Industry Code) and ASME. GS E&C has also secured the expertise in nuclear manpower highly qualified for construction of nuclear power plants.

Based on our professional experience in constructing the Shin-Wolsong and Shin-Hanul NPPs, our goal is to execute nuclear power projects both domestically and internationally, as we continue to equip ourselves with safer more advanced nuclear power plant technology.



BUSINESS AREA

- Plant, Power, Environment, Infrastructure, Buildings, and Housing

MAJOR ACHIEVEMENTS

- Domestic Project
 - Shin-Wolsong NPP #1, 2
 - Client: Korea Hydro & Nuclear Power (KHNP)
 - Location: Gyeongju, Korea
 - Period: 2003.08 - 2015.07
 - Features: Optimized Power Reactor 1000 (1,000 MW x 2 units)
 - Shin-Hanul NPP #1, 2
 - Client: Korea Hydro & Nuclear Power (KHNP)
 - Location: Uljin, Korea
 - Period: 2010.04 - 2024.04
 - Features: Advanced Power Reactor 1400 (1,400 MW x 2 units)
 - New Research Reactor
 - Client: Korea Atomic Energy Research Institute (KAERI)
 - Location: Busan, Korea
 - Period: 2022.05 - 2027.12 (in progress)
 - Features: 15 MWt research reactor using uranium-molybdenum plate-type nuclear fuel for the first time in the world



SK ecoplant

SK ecoplant Co., Ltd.

SK ecoplant is a company committed to a sustainable future, creating synergies through the organic integration of its core businesses based on accumulated expertise and innovative technologies. Through responsible business practices and the implementation of ESG management, the company delivers essential, customer-centered value and continues to grow in the global market.

SK ecoplant is establishing itself as a global leader in sustainable development through core businesses: Hi-tech, Solution and Energy. The Hi-tech division delivers comprehensive semiconductor solutions by building semiconductor infrastructure, supplying industrial gases, and providing memory production and recycling of end-of-life semiconductors. The Solution division leads the development of sustainable urban environments—including carbon-neutral industrial complexes—by constructing eco-friendly buildings, infrastructure, and industrial facilities. The Energy division advances carbon neutrality and drives innovation in the energy sector through AI data center power solutions, fuel cells.



BUSINESS AREA

- **Hi-tech Business: Semiconductor Clusters / Industrial Gases / Memory Semiconductor Sales**
 - Industrial Plants, Gas & Power, Power Plants, Refinery Gas, Petrochemistry, Logistics System, Environmental Plants
- **Solution Business: Architectural Solutions / Infrastructure Solutions**
 - Road/Bridge, Tunnels/Underground Space, Railway, River/Harbor, Estates/Housing, Environment, Data Center, Industrial Facilities, Mixed-Use Buildings
- **Energy Business: AI Data Center Integrated Solutions / Fuel Cells**
- **Environment Business: Battery Recycling / ITAD**
- **New Business Area**
 - Semiconductors / AI Data Center / Battery Materials / Pharmaceuticals & Biotechnology
- **Plant Business**
 - Nuclear Power Plants, Combined Cycle Power Plant, Coal Fired Power Plant, Oil & Gas, Refinery & Petrochemical, Industrial Plants

MAJOR ACHIEVEMENTS

- **Domestic Project**
 - Shin-Hanul Nuclear Power Plant #1,2 (APR 1,400MW x 2) (2010~2024)
 - Saeul Nuclear Power Plant #1,2 (APR 1,400MW x 2) (2007~2018)
 - Shin-Kori Nuclear Power Plant #1,2 (OPR 1,000MW x 2) (2003~2012)
 - SK hynix, Yongin Semiconductor Cluster Industrial Complex (2024~2027)
 - Digital Edge, DCK One (SEL2) Datacenter (2023~2024)
 - Gangneung Fuel Cell Project (2022~2023)
- **Overseas Project**
 - China, SK Hynix Wuxi Semiconductor Industrial Complex (2018~2020)
 - Vietnam, Longson Petrochemicals LSPC Package A Project (2018~2023)
 - Iraq, SCOP Karbala refinery construction (2014~2023)
 - USA, SK Battery America Phase 1 & 2 (2019~2022)
 - Turkey, Canakkale Bridge (2017~2022)

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FEATURED COMPANIES

These companies are specially selected as key
SMEs in Korean Nuclear Supply Chain

BHI Co., Ltd.

COMPANY INTRODUCTION

- **BHI Co., Ltd.**, established in 1998, is a global supplier of nuclear B.O.P. (Balance of Plant) equipment and services, including condensers, deaerators, feedwater heaters and the containment building structures. With in-house design and manufacturing capabilities, we have supplied critical equipment to NPP in Korea, the UAE, and the USA.
- **Supplied Products:** Containment Liner Plate, Stainless Steel Liner Work, Containment Pipe Penetration, Sump Strainer, Surface Condenser, Feedwater Heater, etc.
- **Advanced Quality System with Certification:** BHI's nuclear products and services meet the highest industry standards and are backed by essential certifications specific to the nuclear sector. (e.g., ASME N, NA, NPT & N3)
- **Global Experience and Proven Track Record:** BHI's proven track record in thermal power plants—built through global deliveries of boilers and HRSGs—also enhances our capability to supply critical equipment to the nuclear sector.



Certification

ISO 9001, ISO 14001, ISO 45001, KEPIC (MN, SN),
ASME (S, U, U2, PP and NB R), ASME (N, NA, NPT, NS, N3)

PRODUCTS/SERVICES INFORMATION



[Containment Liner Plates (CLPs)]

CLPs, installed along the inner walls of the containment building, act as protection plates against radiation. The CLP package, comprising liner plates, polar crane brackets, penetration sleeves, NSSS forging, airlocks, and hatches, strengthens the containment system.

Domestic Track Records

Main Client	KHNP	
Project Name	Saeul NPP #3,4	Hanul NPP #3
Delivery Year	2023	2018



[Stainless Steel Liner Work (SSLW)]

SSLW is applied to the reactor containment building and other related structures to ensure safe preservation and to prevent the leakage of water, chemical and radioactive materials.

Domestic Track Records

Main Client	KHNP
Project Name	Saeul NPP #1, 2, 3, 4
Delivery Year	2012, 2025

Overseas Track Records

Client (Country)	ENEC (UAE)
Project Name	Barakah NPP #1, 2, 3, 4
Delivery Year	2016, 2018



[Containment Pipe Penetration (CPP)]

CPPs are a specialized fitting that connects the piping systems throughout the containment building. CPPs can be categorized as A3, B2, C2, and C3 types.

Domestic Track Records

Main Client	KHNP	
Project Name	Saeul NPP #1, 2, 3, 4	
Delivery Year	2011, 2025	

Overseas Track Records

Client (Country)	ENEC (UAE)	Toshiba (USA)	Toshiba (USA)
Project Name	Barakah NPP #1, 2, 3, 4	Vogtle NPP #3, 4	Summer NPP #2,3
Delivery Year	2014, 2015	2012	2012





[Surface Condenser]

The condenser converts steam discharged from the turbine back into water, enhancing overall plant efficiency. BHI's surface condensers have up to 1.4 million sq. ft. of surface area and can be applied to power plants with capacities up to 1,400 MWe.

Domestic Track Records	
Main Client	KHNP
Project Name	Shin-Wolsong NPP #1, 2
Delivery Year	2010

Overseas Track Records		
Client (Country)	Toshiba (USA)	Toshiba (USA)
Project Name	Vogtle NPP #3, 4	Summer NPP #2, 3
Delivery Year	2011, 2012	2011, 2013



[HP / LP Feedwater Heater]

A feedwater heater raises the temperature of the feedwater before supplying it to the steam generator. The internal structure of our feedwater heaters consists of three distinct zones: the desuperheating zone, the condensing zone, and the drain-cooling zone.

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Shin-Hanul NPP #1	Saeul NPP #1, 2, 3, 4	Hanul NPP #6
Delivery Year	2024	2011, 2025	2017

Overseas Track Records			
Client (Country)	Toshiba (USA)	Toshiba (USA)	ENEC (UAE)
Project Name	Vogtle NPP #3, 4	Summer NPP #2, 3	Barakah NPP #1, 2, 3, 4
Delivery Year	2011, 2012	2011, 2013	2015, 2017

Website

Address

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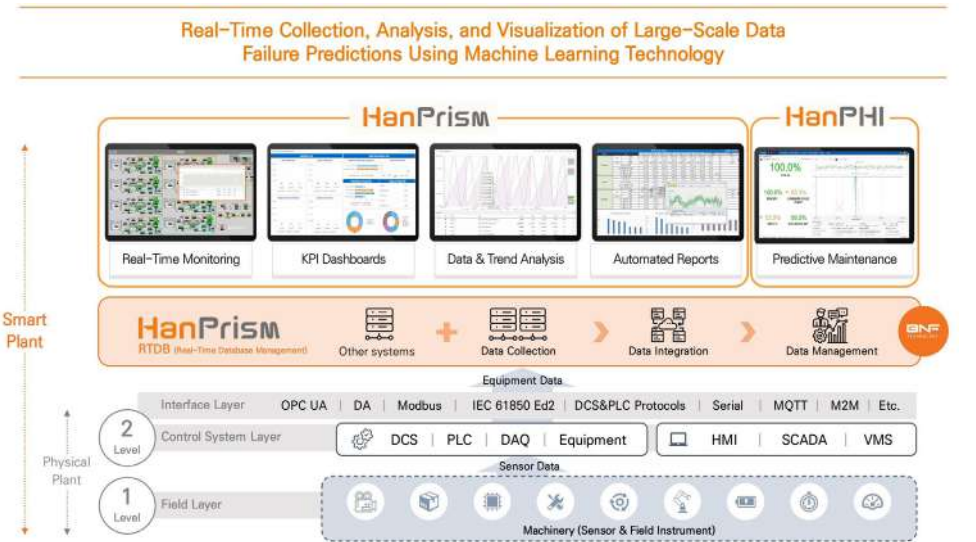
• Contact Number: +82-55-580-6707

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BNF Technology Inc.

COMPANY INTRODUCTION

BNF Technology provides innovative software solutions to help customers in the power and process plant industries achieve operational excellence. The solution is backed by years of experience in AI-based machine learning, advanced pattern recognition, plant data integration management (RTDB & Historian), and predictive analytics. BNF Technology solutions assist organizations in moving towards digitalization and viewing data as a corporate asset. By converting data into actionable intelligence, organizations are able to reduce costs, improve efficiencies, and ensure safety.



- 1. PROCESS
 - ISO9001:2015
 - Software Process Lev.2
- 2. QUALITY
 - KTL Certification(Korea Testing Laboratory)
 - GS (Good Software) Certification
- 3. MAJOR PATENTS(20 International Patents in Korea, US, and EU)
 - Predicting plant health status
 - Industrial plant tracking system
 - Dynamic monitoring for industrial plants
 - Normal operating value range for industrial plants



Certification

PRODUCTS/SERVICES INFORMATION

[HanPrism]

An integrated data management solution that collects, processes, analyzes, and visualizes vast amounts of data generated by equipment sensors. It enables anyone to access and utilize the data anytime, anywhere, supporting collaboration and asset optimization.



HanPrism(Plant Real-time Information Smart Manager)



HanPrism(Integrated Alarm Analysis)

Accurate Trend Analysis

- Analyze trends with multiple time markers and upper and lower limit lines
- Record comments on the real-time trend to save abnormal status results or maintenance history
- Review real-time data statistics including minimum, maximum, and average
- Pull a year's worth of historical data in 2 seconds
- Save favorite points into a private or public group to reference in the future
- Compare different trends at the same time
 - *Historical vs. Real-Time
 - *Point A vs. Point B
 - *Before Overhaul vs After Overhaul

Intuitive Process Monitoring

- Edit process graphics easily using the symbol library and monitor the whole process status at a glance
- Examine real-time and historical data in a pop-up trend with a single click in a process graphic
- Identify abnormal values that blink in the process graphic

Visual Process Graphic Player

- Replay data from any time in the past to analyze an event

Integrated Alarm Analysis

- Manage an alarm list with an equipment hierarchy structure
- Integrate dispersed DCS alarms or PLC HMI alarms into a single system
- Add alarms not registered in an HMI with a site designated alarm set point
- View alarm statuses and set warning levels across your equipment or systems

Improved Reporting with a Microsoft Excel Add-In

- Connect Microsoft Excel's functions to real-time and historical equipment data to create various reports
- Update reports automatically with a single click
- Store and manage frequently used report templates
- Analyze real-time trends in Microsoft Excel

Increased Data Access through the Web

- Access data quickly, easily, and accurately anytime and anywhere through a web-based service
- Analyze data on dashboards and process graphics
- Create dynamic dashboards with built-in graphics and widgets
- Query real-time and historical data quickly and easily

Calculated Tags for Improved Monitoring

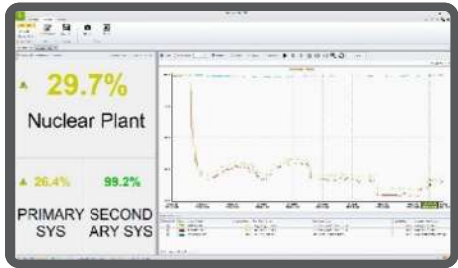
- Create script tags from existing tags
- Add script tags to trends, dashboards, process graphics, and alarms
- Calculate additional data points based on site operations and purpose
 - * Rate of operation, operating time, remaining useful life of the equipment, etc.

Domestic Track Records			
Main Client	KOEN	Daejeon CHPP	KOGAS
Project Name	Implementation of an Operation Information System		
Delivery Year	2003	2018	2025

Overseas Track Records			
Client (Country)	University of Texas at Austin(USA)	Matrix Power Network (Malaysia)	Purdue University (USA)
Project Name	Additional Professional Services Authorization NO.1 for Plant Health Index	Supply & Install of Prism for nur generation plants	Purdue University: 19,000 Tags, M&S, Development Server
Delivery Year	2015	2016	2024

[HanPHI]

A predictive analytics solution that uses machine learning to build models from plant historical data. Provides early warnings to help reduce downtime and maintenance costs.



HanPHI(Plant Health Index)



HanPHI(Real-Time Anomaly Tracking)

Overall Plant Health Condition

- View a real-time health index of the entire plant and main processes
- Identify anomalies across the process through automatic and dynamic early warnings
- Predict critical equipment failures accurately
- Monitor equipment and asset anomalies continuously to reduce unscheduled downtime risk

Real-Time Anomaly Tracking

- Trace anomalies automatically in real time
- Maintain health index accuracy by adjusting values based on relative importance
- Improve reliability of your whole process and equipment in real time

Early Warning Management and Analysis

- Analyze past early warnings and manage real-time warnings
- Manage warning frequency and early warning properties based on the risk level
- Export the alarm list as an Excel or PDF report

Instantaneous Anomaly Detection

- Analyze residuals of the expected versus real-time values for the plant and major equipment
- Search similar past patterns automatically and compare with current patterns
- Review automatically similar or repetitive historical data patterns
- Compare data trend at different times
- Investigate abnormal patterns occurring each cycle

Accurate Predictive Models

- Calculate accurate predictive values by modeling normal, fault-free data
- Adjust predictive modeling by asset type and event traits
- Group points with similar patterns automatically
- Test accuracy of predictive models based on historical data

Domestic Track Records			
Main Client	KHNP	KOEN	Posco
Project Name	Online Early Warning Management System	Online Early Warning Management System	Online Early Warning Management System
Delivery Year	2015	2018	2023

Overseas Track Records			
Client (Country)	The University of Texas at Austin (USA)	LCRA (USA)	KNPC (Kuwait)
Project Name	Plant Health Index	7 LCRA sites for HanPHI	Early Warning System
Delivery Year	2012	2019	2012

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Daedong Metal Industry Co., Ltd.

COMPANY INTRODUCTION

Since 1983, DMB produces Journal and Thrust Bearings for high performing turbo machinery. DMB's bearings are supplying for top performance in rotor system such as turbine/generator. DMB always supports our customers with reliance products.

- **Tilting Bearings:** Equalized Load, Thrust / Journal Bearings (Tilting)
- Turbine Bearings for NPP / TPP / Gas / Steam Turbine
- **Bearing Materials:** White Metal (Babbitt) / Polymer (PEEK)

- High Quality, High Reliability, High Satisfaction
- Bearing Design Capability / Bearing Manufacturing Capability
 - Over 20 years manufacturing and repair experience/short delivery terms



Certification ISO 9001, ISO 14001, ISO 45001

PRODUCTS/SERVICES INFORMATION



[Fixed Geometry Journal Bearing / Fixed Geometry Thrust Bearing]

- Cylindrical Journal Bearing
- Elliptical Journal Bearing
- Offset Half Journal Bearing
- Pressure Dam Journal Bearing
- Plain Thrust Bearing
- Taper Thrust Plate
- Combined Thrust & Journal Bearing

Specification

- Power Plant Industry - Nuclear/Thermal/Hydro
- Compressor / Pumps / Fan / Gear Box / Blower
- Ship Division - Sterntube, Thrust Blocks
- Industrial - Grinding Mill Bearings

Domestic Track Records		
Main Client	Doosan	KHNP
Project Name	Shin-Hanul NPP #3, 4	Saeul NPP #1,2
Delivery Year	2025	2024

Overseas Track Records			
Client (Country)	Toshiba	TMEIC	L&T
Project Name	Vogtle NPP #3, 4		
Delivery Year	2015		



[Tilting Pad Journal Bearing / Tilting Pad Thrust Bearing]

- 5 or 6 Pads Tilting Journal Bearings
- LBP or LOP Tilting Pad Journal Bearings
- For Steam Turbine and Gas Turbine Bearings
- Non-Equalizing Tilting Pad Thrust Bearing
- Self Equalizing Tilting Pad Thrust Bearing
- Direct Lubricate Tilting Pad Thrust Bearing

Specification

- Power Plant Industry - Nuclear/Thermal/Hydro
- Compressor / Pumps / Fan / Gear Box / Blower
- Ship Division - Sterntube, Thrust Blocks
- Industrial - Grinding Mill Bearings

Domestic Track Records		
Main Client	Doosan	KHNP
Project Name	Shin-Hanul NPP #3, 4	Saeul NPP #1,2
Delivery Year	2025	2024

Overseas Track Records			
Client (Country)	Toshiba	TMEIC	L&T
Project Name	Vogtle NPP #3, 4		
Delivery Year	2015		

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E2S Co., Ltd.

COMPANY INTRODUCTION

Starting our business on Industrial Controller and System development, E2S has grown into a leading company of both Power Plant Control & Monitoring System and Alarm Control System with its technological innovation capabilities and experience over 2 decades since our establishment in 1993.

An innovation-driven culture in E2S has brought localization of core systems in Power Plant operation and reputation for high quality, as well in Korean Electric Power Industry. With our sincere efforts to better serve customers with high-quality systems and technical expertise and know-how, E2S has been tapping into global market over Korean Electric Power Industry, putting a lot of resources for R&D.

Addressing all challenges arising from business environment with integrity and technical expertise through R&D and Quality Management, all staff in E2S have been trying to meet customers' needs.

With continuous efforts for R&D in the field of Power Plant Operation, E2S shall do our best to be one of the best system development companies in the world, contributing to convenient and safe electric energy supply to customers.



Certification

- CE Conformance report (EDC-2000, KDR-1500)
- USNRC Safety Evaluation (SE) Report
- TUV SIL-3
- KEPIC Certificate(EN-581)
- ISO (9001, 14001, 37001, 45001)

PRODUCTS/SERVICES INFORMATION



[ACE-1000]

- MODEL: ACE-1000 (Safety grade Emergency Diesel Generator Excitation System)
- NPP Emergency Diesel Generator (Brushless Type) Excitation System

Specification

- Size: W900, D800, H2200
- Dual Channel Analog ECS for EDG
- Class 1E (EMC, Seismic, Environmental)
- Reg. Guide 1.89, IEEE Std 323, 650, 387, etc.

Domestic Track Records	
Main Client	KHNP
Project Name	Hanbit NPP #5, 6
Delivery Year	R&D Completed(2024)



[RTS-7000]

- MODEL: RTS-7000 (Test Simulator for Generator Excitation System)
- Comprehensive performance test device for performance verification of generator excitation system during planned preventive maintenance period of domestic/overseas power plants

Specification

- Equipment that generates simulated signals such as actual generator operation status during generator shutdown periods and can comprehensively test and verify the soundness of the excitation system.
- Excitation systems supplied by domestic and foreign manufacturers such as GE, ABB, BASLER, and Doosan Heavy Industries & Construction can be tested.

Domestic Track Records		
Main Client	KHNP	EWP, KOSPO, KOWEPO, KOEN, KOMIPO
Project Name	Kori NPP, Hanbit NPP, Hanul NPP, Wolsong NPP, etc	Dangjin TPP, Ulsan CHPP, Donghae TPP, Ilsan CHPP, etc
Delivery Year	~2022	~2024

Overseas Track Records	
Client (Country)	Doosan (UAE)
Project Name	Barakah NPP #3, 4
Delivery Year	2017

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Energyyen Corporation

COMPANY INTRODUCTION

Founded in 1995, Energyyen emerged as a leader in the power generation equipment industry, boasting unique product differentiation and serving both global giants and domestic power plants. Celebrated for reaching a \$30 million export milestone in 2009, we have continually advanced through innovation and the implementation of superior technology.

At Energyyen, our customer-centric approach ensures the delivery of high-quality products tailored to specific needs, reinforcing our market presence internationally and establishing us as a pivotal industry hub. Our collaborations with global frontrunners like GE Vernova, Siemens, Rosatom, Arabelle Solutions, MHPs, and Toshiba underscore our commitment to excellence and strategic partnership development.

Our dedication to environmental stewardship drives us towards sustainable manufacturing practices and the pursuit of groundbreaking technologies. Investing over 5% of our annual turnover in R&D underscores our commitment to maintaining our status as a research-driven enterprise.



Certification

- ISO 9001 (2024.07.15. ~ 2027.06.28.)
- ISO 14001 (2023.12.20. ~ 2026.12.19.)
- ISO 45001 (2023.12.20. ~ 2026.12.19.)
- ISO 3843-2 (2021.06.29. ~ 2026.06.28.)
- ASME U / U2 / S (2023.08.25. ~ 2026.08.25.)
- ASME N / N3 / NPT (2024.11.14 ~ 2027.11.14.)
- KEPIC-MN (2023.12.15 ~ 2026.12.14.)

PRODUCTS/SERVICES INFORMATION



[Surface Condenser]

A condenser is a large shell-and-tube type heat exchanger. Its main function is to condense the steam coming from the steam turbine. Energyyen can design and manufacture steam surface condensers in vertical or axial configurations, and in rectangular or circular types.

Domestic Track Records			
Main Client	SGC E&C	Hyundai E&C	Posco
Project Name	S1	Daesan BPP	Shin-Pyeongtaek CCPP
Delivery Year	2020	2019	2018

Overseas Track Records			
Client (Country)	GE Vernova (Switzerland)	Siemens (Germany)	Rosatom (Russia)
Project Name	Heilbronn TPP	Tuxpan CCPP	Akkuyu NPP
Delivery Year	2024	2023	2022



[Deaerator]

This equipment extends the life cycle of other equipment by removing corrosive gases such as dissolved oxygen and carbon dioxide from the water supply in power plants or industrial facilities. It is designed and manufactured in vertical, horizontal, or single-body configurations, depending on the capacity of the water supply.

Domestic Track Records			
Main Client	SGC E&C	Samsung C&T	SK E&C
Project Name	Gwangyang BPP	Gangneung Anin TPP	Goseong Hai TPP
Delivery Year	2024	2021	2019

Overseas Track Records			
Client (Country)	Rosatom (Russia)	Nooter Eriksen (USA)	GE Vernova (Switzerland)
Project Name	Akkuyu NPP	Arab Potash	Panama CCPP
Delivery Year	2024	2024	2022

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GEUMHWA PSC Co., Ltd.

COMPANY INTRODUCTION

[Corporate History]

- Established in 1981, our company is specialized in domestic and overseas power plant equipment maintenance and construction
- The company's business division is largely divided into three categories
 - 1) Power generation maintenance
 - 2) Plant construction
 - 3) Power plant water treatment
- Most of the sales are in the maintenance of nuclear and thermal power facilities and the water treatment of power plants

[Overseas Business]

- Acquisition of overseas construction business license (1994.12.30)
- Bidding to many foreign countries such as Vietnam, Philippines, Kuwait, etc. to carry out construction and service projects
- GEUMHWA PSC INC Affiliate established as a local subsidiary in the Philippines (2013.05.16)
- Participation in the construction won by the original contractor in the form of a consortium with the original contractor
 - Qatar CHPP, Algerian Fertilizer Factory, Moroccan TPP Boiler Pressure Unit, UAE Barakah NPP #1, 2, 3, 4 turbine, and Iraqi Karbala Refinery Project

[Domestic Business]

- The current maintenance of nuclear and thermal power plants has a competitive advantage over other companies
 - Securing trust by maintaining experience of personnel and safe operation of power plants after maintenance
 - Based on the experience of carrying out the maintenance of the Philippines TPP, efforts to advance into maintenance work of overseas thermal power and UAE Barakah NPP

[Technology Development and Product Innovation Capabilities]

- Diagnosing the failure cause of the rotating machine and establishing countermeasure
- Process management and technical supervision guidance of construction and overhaul
- Analysis of the failure cause during maintenance work and establishment of countermeasures
- Utilization and development of labor saving equipment for construction and overhaul
- Technology training for maintenance workers to improve technical skills of sites
- Business establishment research project consignment
 - 1) Research Project 1: Development of Gas Turbine F-Class Maintenance Technology



Certification

- ISO 9001:2015 (Quality Management Systems)
- ISO 45001:2018 (Occupational Health and Safety Management Systems)
- ISO 19443:2015 (Quality Management System Manual for Nuclear Power Supply Chain)

PRODUCTS/SERVICES INFORMATION



[Maintenance Service]

- Construction service for NPP, TPP and chemical plants
- Maintenance & repair work for NPP and TPP
- Maintenance work of water treatment facilities in NPP

Specification

- Routine Maintenance(Preventive, Predictive, Corrective Maintenance)
- Planned Outage Maintenance
- Commissioning Maintenance
- Others and Simplified Maintenance Work

Domestic Track Records

Main Client	KHNP	KHNP	KHNP
Project Name	Shin-Hanul NPP #1, 2 Maintenance	Saeul NPP #1, 2 Maintenance	Hanbit NPP Intake Facility Maintenance
Delivery Year	2025	2025	2025

Overseas Track Records

Client (Country)	ENEC(UAE) - GEUMHWA WTS subcontract
Project Name	Barakah NPP Water Treatment Plant Maintenance
Delivery Year	2025

Website

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HANDOL PUMPS LIMITED

COMPANY INTRODUCTION

HANDOL PUMP Co., Ltd. is an innovative pump specialist company established in March 1993 with the goal of manufacturing world-class centrifugal pumps. We develop and produce a wide range of centrifugal pumps that comply with API 610 and ISO 5199 standards for use in the Oil & Gas, Petrochemical, Power Generation, Chemical, and Pulp & Paper industries.

From the early stages of our founding, we focused on technology development. In 1996, we earned a domestic New Technology Certification for our high-pressure multistage turbine pump technology, and in 1997, we received a commendation from the Minister of Trade and Industry for developing a high-pressure boiler feed pump.

These achievements have not only contributed to import substitution in the domestic pump industry but have also significantly advanced and localized Korea’s pump technology.

Currently, HANDOL PUMP exports its products to 31 countries worldwide and competes with leading global pump manufacturers in diverse markets such as Europe, Russia, the Middle East, Africa, and South America.

In particular, in the European market, we have achieved excellent results by competing in terms of quality and service against advanced companies and have even participated in restricted tenders—an exceptional feat for a Korean SME.

We actively participate in major international exhibitions and trade shows, and have increased brand awareness through bold global marketing, including direct communication with local customers.

Going forward, HANDOL PUMP will continue to lead the advancement of Korea’s pump technology and strive to become the world’s top pump company, promoting the excellence of Korean pump technology across global markets.



Certification · ISO 9001, ISO 14001, ISO 45001, CE, ATEX

PRODUCTS/SERVICES INFORMATION



[API 610 Centrifugal Pumps]

- Type:
- BB1, BB2, BB3, BB4, BB5
 - OH1, OH2, OH3, OH4
 - VS1, VS4, VS6

Application:

- 1. Oil & Gas Production**

 - Crude oil transportation from wellheads
 - Water injection services for enhanced oil recovery
 - Produced water handling
 - Booster pumps for oil pipelines
- 2. Refining & Petrochemicals**

 - Crude charge pumps feeding distillation towers
 - Hydrocarbon product transfer (naphtha, diesel, kerosene, etc.)
 - Cooling water circulation
 - Chemical feed and process circulation
 - High-temperature service (e.g., catalytic cracking, reforming)
- 3. Power Generation**

 - Boiler feedwater pumps (high-pressure, high-temperature)
 - Condensate extraction pumps
 - Cooling water circulation
 - Auxiliary services in thermal and nuclear plants
- 4. Pipeline Services**

 - Crude oil and refined product pipeline transport
 - Booster and terminal pumps
 - Long-distance transportation with high reliability requirements
- 5. Offshore & Marine**

 - Seawater injection/desalination systems
 - Firewater pumps
 - Produced water treatment
 - Offshore platform utilities
- 6. Chemical & Fertilizer Plants**

 - Handling aggressive chemicals
 - Ammonia and urea plant circulation
 - Acid and caustic transfer
 - Cooling and chilled water circulation

Domestic Track Records				
Main Client	KHNP	POSCO	CJ	SK

Overseas Track Records			
Client (Country)	Saudi ARAMCO	INA	ENAP

Website	https://handolpumps.com/
Address	296, Seunggicheon-ro, Namdong-gu Incheon 21634, Republic of Korea
Contact Information	• Email: handol@handolpumps.com • Contact Number: +82-32-818-0105

ILJIN Power

COMPANY INTRODUCTION

Since its founding in 1989, ILJIN Power Co., Ltd. has been a leading company specializing in high-quality equipment and maintenance services for NPP and TPP. Starting with the manufacture of special equipment and pressure vessels, ILJIN Power has steadily expanded its capabilities and certifications, including ASME “U”, “S”, “PP”, and “NB” stamps, as well as Korea’s KEPIC and ISO standards.

With over three decades of experience, ILJIN Power has built a strong reputation through successful execution of major domestic and international power plant projects—including the supply of turbine, boiler, and auxiliary systems for major thermal and nuclear power stations such as Shin-Kori, Saeul, and Barakah.

Our continuous investment in quality systems, facility expansion, and global partnerships reflects our commitment to engineering excellence and customer satisfaction.

Currently, ILJIN Power Co., Ltd. is a registered supplier to major public institutions, including KHNP, providing total solutions from design and procurement to fabrication, quality inspection, and on-site maintenance.

In addition, the company has recently expanded into the hydrogen and fuel cell sectors, further strengthening its presence in the global energy industry.



Certification

- ISO 9001, ISO 14001, ISO 3834,
- ISO 45001, ISO 19443
- ASME (U, U2, S, PP)
- ASME (N, N3, NPT, NA)
- KEPIC - MN, SN,
- CNCAN NMC -05, 06, 07, 12

PRODUCTS/SERVICES INFORMATION



[Shell & Tube Heat Exchanger]

ILJIN Power Co., Ltd. has the capability to manufacture helical heat exchangers as a special type, offering high-quality solutions with optimized fluid flow and enhanced heat transfer efficiency through advanced helical baffle design.

With precise engineering, superior material selection, strict quality control, and customized fabrication capabilities, our technology is widely recognized in plant projects both in Korea and abroad.

Specification

- Equip . Name: EXPORT OIL/BFW EXCHANGER
- SIZE: 19T X 920 I.D X 6,100L ,Material (SHELL/TUBE): SA516-70N + HIC / SA179
- Pressure: Shell 35kg/cm²g Tube 45 kg/cm²g , Surface Area: 1,826m²
- HELIXCHANGER

Overseas Track Records

Client (Country)	KOC (Kuwait)
Project Name	Lower Fars Heavy Oil Development Program Phase 1



[Shell & Tube Heat Exchanger]

ILJIN Power Co., Ltd. is capable of designing and manufacturing various types of Rod Baffle Heat Exchangers. Compared to traditional segmental baffle designs, the Rod Baffle structure offers several technical advantages, including reduced pressure drop, more uniform fluid distribution, improved heat transfer efficiency, and minimized tube vibration.

Specification

- Equip.Name: GAS-GAS EXCHANGER
- SIZE: 30T X 1,900 I.D X 17,300L
- Material (SHELL/TUBE): SA240-304 / SA213-TP304 (ROD BAFFLE)
- TUBESHEET: SA965F-304L (425mm)
- Weight: 123 Tons

Overseas Track Records

Client (Country)	PKN ORLEN S.A. (Poland)
Project Name	PKN Orlen Olefins Expansion





[Pressure Vessels, Tower & Column]

The Emergency Hydrogen Storage Vessel manufactured by ILJIN Power is a high-reliability pressure vessel designed for the safe storage of hydrogen gas in emergency situations. Project-specific design and fabrication are available to meet customer requirements. With advanced structural and thermal analysis capabilities and hydrogen-compatible materials, the vessel is recognized for its outstanding safety and performance in both nuclear and conventional power applications.

Specification

- SIZE: 120T X 3,100 I.D X 20,400 L
- Material: SA516-70N + S5
- Weight: 150 Tons

Domestic Track Records	
Main Client	JGC (Japan) & Hyundai E&C (Korea)
Overseas Track Records	
Client(Country)	Iraq
Project Name	Basrah Refinery Upgrading



[Tritium Storage Vessel for Wolsong Nuclear Power Plant]

A storage vessel designed to safely contain radioactive tritium gas extracted from the Tritium Removal Facility (TRF) of the Wolsong NPP #1 heavy water reactor, by absorbing it into titanium (Ti) sponge for long-term storage (over 50 years).

Domestic Track Records	
Main Client	KHNP
Project Name	Wolsong NPP Tritium Storage Container
Delivery Year	2004~



[Comprehensive Thermal-Hydraulic Test Facility for APR1400 (ATLAS)]

ILJIN Power Co., Ltd. participated in the construction of a PWR thermal-hydraulic test facility operated by KAERI in 2005, using 100% domestic technology. This facility supported the licensing of the APR1400 (Saeul NPP #1,2) and contributed to the successful export of NPPs to the UAE.

Domestic Track Records	
Main Client	KAERI
Project Name	Advanced Thermal-Hydraulic Test Loop for Accident Simulation
Delivery Year	2003~2006

Website	https://ijeng.com
Address	42, Sanam-ro , Onsan-eup, Uiju-gun Ulsan, Korea 44998
Contact Information	• Name: Seung-woo Jeong • Position: Senior Associate • Email: swjeong@ijeng.com • Contact Number: +82-2-2033-9523

ILSHIN EDI Co., Ltd.

COMPANY INTRODUCTION

Established in 1993, the company has over 30 years of experience in the industry. It began operations in the information and communications sector, initially focusing on railway broadcasting equipment. Over time, the company has expanded its business and now holds over 95% market share in the railway broadcasting equipment and supplies paging systems to almost all nuclear power plants in Korea.

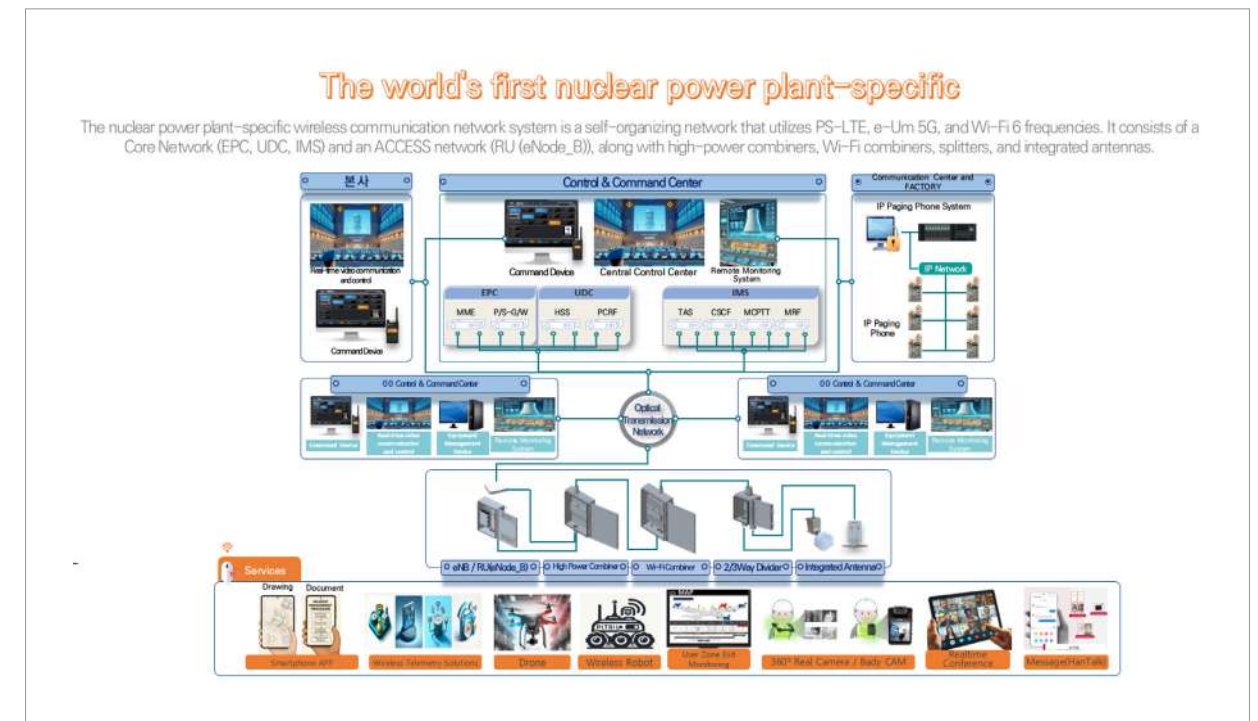
Recently, the company developed a wireless communication system exclusively for nuclear power plants-the world's first hybrid system combining PS-LTE, 5G, and Wi-Fi technologies. This innovation enables disaster-safe communication and high-speed mobile multimedia services.

The company is certified under the ISO 9001:2000 Quality Management System and holds an A-grade quality rating as a qualified supplier to KHNP. It has also been recognized as a technologically innovative SME (INNO-BIZ), a venture enterprise, and a family-friendly certified company, striving to be a trusted partner for its customers.



Certification

- International explosion-proof certification / risk assessment certification / ISO 9001 certification
- KHNP qualified registered quality grade A (radioactive compatibility)
- INNO-BIZ, venture company
- Smart factory certification / family-friendly certified company
- 13 types of direct production certificates
- IP page phone-related patents – IP page phone system using the IP network and 7 others
- Trademark-related patents – Isori and 1 other patent
- Design-related patents – Broadcasting equipment for subway stations and 9 others
- Wireless-related patents
 - A broadband antenna unit for the wireless integrated system
 - A broadcasting and call system in the WiFi and LTE wireless integrated system
 - A wireless integrated system including a remote management module and Wi-Fi combiner with a built-in AP
 - A broadcasting and call system interworking with the wireless integrated solution LTE terminal and page phone
 - A broadcasting and call system using neck band-type omnidirectional camera in the LTE Integrated Wireless System
- ISO9001:2015(No: ISO 9001-0068203)
- ISO45001:2018(No: OHS-0286)
- ISO9001:2015(No: ISO 9001-0068203)
- ISO45001:2018(No: OHS-0286)



[Wireless Communication System for Nuclear Power Plants]

- A System for both disaster-safe communication services and high-speed multimedia services.
- The world's first wireless communication equipment that integrates and processes multi-band signals for nuclear power plants.
- Wide Band(700MHz + 3.5GHz + 2.4GHz + 5GHz + 4.7GHz) multi band processing system.

Specification

- Broadband combiners and splitters support multi-band frequencies. 700MHz PS-LTE, Wi-Fi 6 2.4G/5G, 5G Commercial(3.5GHz), 5G Private (e-Um 5G, 4.7GHz).
 - Wi-Fi Combiner integrates Wi-Fi 6 AP and High Power Combiner output.
 - Support 2x2 MIMO.
- Broadband integrated antenna capable of multi-band reception: A single antenna supports 700MHz PS-LTE, Wi-Fi 6 (2.4GHz/5GHz), commercial 5G networks (3.5GHz), and private 5G networks (e-Um 5G, 4.7GHz).
- Proven to meet Nuclear Power Plant Quality Grade A standards: Environmental durability (thermal aging, seismic resistance, temperature, and humidity)
EMC testing in accordance with RG 1.180 Rev. 1 and MIL-STD-461E standards

Domestic Track Records	
Main Client	KHNP
Delivery Year	2024



IPHS-2000D (Desk Type)



IPHS-2000W (Indoor Wall Type)

[Paging System]

- System Overview:
The IP page phone system provides flexible functions such as open IP, multimedia, and analog integration with analog with IP-based solutions for all industrial sites such as large factories, power plants and construction sites.
- Remote monitoring and management:
 - Provides various remote support functions for status monitoring and setting of the IP page phone.
 - The function upgrade of IP page phone can be performed from a remote program.
 - Provides logging and searching function.

Specification

- IPHS-2000D (Desk Type)
 - Desk type
 - VoIP paging & call
 - Input source AC90~250V (free voltage)
 - Remote adjust speaker volume control
 - Paging zone expandable function
 - 10CH party call
 - LCD & LED display
 - Built-in amplifier applied
 - Conference call Function
 - Serverless function applied
 - In/Out port: RJ-45 × 4 Port(Fiber port: Option)
- IPHS-2000W (Indoor Wall Type)
 - Indoor wall type
 - VoIP paging & call
 - Input source AC90~250V (free voltage)
 - Remote adjust speaker volume control
 - Paging zone expandable function
 - 10CH party call
 - LCD & LED display
 - Built-in amplifier applied
 - Conference call Function
 - Serverless function applied
 - In/Out port: RJ-45 × 4 Port(Fiber port: Option)



IPHS-2000WO (Outdoor Wall Type)



ExHS-IP Series (Explosion Proof Type)

- IPHS-2000WO (Outdoor Wall Type)
 - Outdoor wall type
 - VoIP paging & call
 - Input source AC90~250V (free voltage)
 - Remote adjust speaker volume control
 - Paging zone expandable function
 - 10CH party call
 - LCD & LED display
 - Built-in amplifier applied
 - Conference call Function
 - Serverless function applied
 - In/Out port: RJ-45 × 4 Port(Fiber port: Option)
- ExHS-IP Series (Explosion Proof Type)
 - Explosion Proof type
 - VoIP paging & call
 - Input source AC90~250V (free voltage)
 - Remote adjust speaker volume control
 - Paging zone expandable function
 - 10CH party call
 - Built-in amplifier applied
 - Conference call Function
 - Serverless function applied
 - In/Out port: RJ-45 × 4 Port(Fiber port: Option)
 - Explosion proof class
 - Ex d ib IIB+H2 T6 (Gas)
 - Ex ibD tD A21 T85°C (Dust)

Website	www.ilshinedi.com
Address	3rd FL,80 Hwacggeum-ro,109 beon-gil, /Yangchon-eup, Gimpo-si,Gyeonggi-do, Korea
Contact Information	• Name: HAAM DAE HOON • Position: Managing Director • Email: dhhaam@ilshinedi.com • Contact Number: +82-10-2280-0596

INEM Co., Ltd.

COMPANY INTRODUCTION

INEM Co., Ltd. was established in 2011 with the goal of localizing sealing components for nuclear and industrial applications. Since then, we have been dedicated to developing high-reliability sealing products using rubber materials optimized for radiation environments.

Our radiation-resistant elastomer-based components, including diaphragms, O-rings, and gaskets, have proven their performance through successful deliveries to domestic nuclear power plants and the Barakah NPP in the UAE.

We are a Q-class qualified supplier certified by KHNP, and the only company in Korea with Q-class certification for diaphragms, O-rings & gaskets, and valve packing.

We are expanding our customer base beyond KHNP to include thermal power plants and global valve manufacturers, supported by our smart factory-based MES system that enables computerized rubber mixing and integrated quality traceability.



Certification ISO 9001/14001/45001/10004/27001, 5 Patents

PRODUCTS/SERVICES INFORMATION



[Diaphragm]

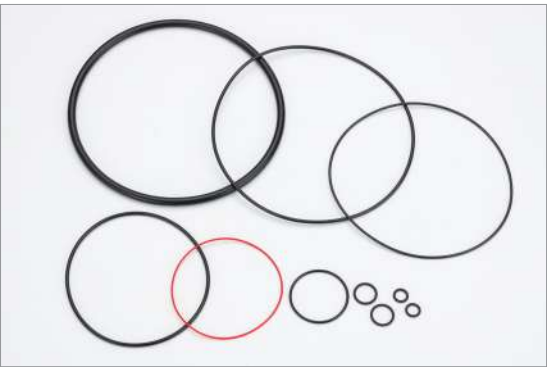
INEM diaphragms control flow in valves, pumps, and flow meters, ensuring reliable performance. Custom-designed for each application, they meet specific environmental and operational needs. Reinforced fibers enhance burst strength for high-pressure durability.

Specification

- Materials: FKM, EPDM, NBR selected based on operating environment
- Composition: Elastomer, reinforcing fiber (yarn or fabric), and an optional metal insert
- Application: Control valves, pressure-reducing valves, pumps, and flow meters

Domestic Track Records			
Main Client	SVC	Unicon	Ilshin Valve
Project Name	Saeul NPP #1,2	Saeul NPP #1,2 Spare part	Shin-Wolsong NPP #1, 2 ESV
Delivery Year	2020	2023	2024

Overseas Track Records	
Client (Country)	Unicon / ENEC (UAE)
Project Name	Barakah NPP #1, 2, 3, 4
Delivery Year	2024



[O-ring]

O-rings are sealing components applied at mechanical joints to prevent fluid leakage. INEM uses specialized rubber materials resistant to heat, pressure, and chemicals, depending on the operating environment. Our designs enhance heat, chemical, and wear resistance, ensuring long-term performance and reliability.

Specification

- Materials: FKM, EPDM, NBR selected based on operating environment
- Composition: Hardness is typically in the range of 60-90 Shore A (adjustable based on application)
- Application: Valves, pumps, pipe connections, and various industrial sealing systems

Domestic Track Records		
Main Client	KNHP	Ilshin Valve
Project Name	Hanbit NPP #3 I&C System	Shin-Kori NPP #1, 2 ESV
Delivery Year	2023	2020

Overseas Track Records	
Client (Country)	Ilshin Valve / Barakah (UAE)
Project Name	Barakah NPP #1, 2, 3, 4 ESV
Delivery Year	2021

Website	www.inem.co.kr
Address	186-6, Techno 2-ro, Yuseong-gu, Daejeon, Republic of Korea
Contact Information	• Name: Soochang Oh • Position: Sales Assistant Manager • Email: sales@inem.co.kr • Contact Number: +82 42-862-7509

International Electric Co., Ltd.

COMPANY INTRODUCTION

- Proven Track Record in Nuclear Power Plants**
For over 40 years, IEC has consistently built a strong track record by supplying various nuclear power plant projects, meeting the industry's highest quality standards.
- Sustainable Supply Chain Management (SCM) for Nuclear Projects**
Owing to the continuous demand for Nuclear Power Plant projects in Korea, IEC has maintained a stable and differentiated SCM network. This commitment is further validated by our ISO 19443 certification.
- Extensive Know-how in Testing and Validation**
Through numerous project experiences, IEC has developed in-depth expertise in executing intensive testing procedures, enabling fast and reliable delivery to customers.
- Comprehensive Product Portfolio**
IEC offers a wide range of stable power control solutions tailored for nuclear and conventional power plants, including UPS systems, inverters, battery chargers, rectifiers, and voltage regulators.

IEC has over 40 years of experience in supplying nuclear power plant projects, backed by ISO 19443-certified supply chain management. The company possesses deep expertise in testing and validation, enabling fast and reliable delivery. Its comprehensive product portfolio includes stable power control solutions such as UPS systems, inverters, chargers, and regulators for both nuclear and conventional power plants.



Certification

ISO19443 / CNCAN Certificate Romania
Class-1E Certificate of KEPIC / Qualified Supplier from Top 5
Korea Power Companies
ISO9001 / ISO14001 / ISO45001

PRODUCTS/SERVICES INFORMATION



[UPS]

It consists of a converter, static switch, MBS switch, alarm devices, synchronization device, and protection devices. During power disturbances, it supplies high-quality power without any interruption.

Specification

- Quality Grade: Class 1E & non-Class 1E
- Application Test: Environmental, EMC & EMI, Seismic Design Test

Description	Phase	Voltage	Stability	Frequency	Capacity
Input	1Ø or 3Ø	120Vac~480Vac	±10%	50/60Hz	800kVA Max.
Output	1Ø or 3Ø	120Vac~480Vac	±2%	50/60Hz	

Domestic Track Records

Main Client	KHNP	Doosan	KAERI
Project Name	Shin-Kori NPP	Shin-Kori NPP	HANARO
Delivery Year	2023	2021	2024

Overseas Track Records

Client (Country)	Barakah NPP (UAE)	Daewoo E&C (Jordan)	Will Technology
Project Name	Barakah NPP #3,4	Jordan Research	Barakah NPP #3,4
Delivery Year	2018	2015	2015



[Inverter]

It consists of a converter, static switch, MBS switch, alarm devices, a synchronization device, and protection devices. It primarily supplies high-quality power to all types of loads that require uninterruptible power. The inverter provides continuous power within its rated capacity.

Specification

- Quality Grade: Class 1E & non-Class 1E
- Application Test: Environmental, EMC & EMI, Seismic Design Test

Description	Phase	Voltage	Stability	Frequency	Capacity
Input	DS	125Vdc~600Vdc	-	-	800kVA Max.
Output	1Ø or 3Ø	120Vac~480Vac	±2%	50/60Hz	

Domestic Track Records	
Main Client	KHNP
Project Name	Hanul NPP
Delivery Year	2023
Overseas Track Records	
Client (Country)	Doosan (UAE)
Project Name	Barakah NPP
Delivery Year	2016



[Battery Charger]

It consists of a rectifier, choke, alarm, and protection circuits. Upon receiving AC power, it supplies high-quality DC power to the battery system or DC loads. The battery system is charged using either floating or equalizing charging methods, and the required charging time can be precisely controlled by the system.

Specification

- Quality Grade: Class 1E & non-Class 1E
- Application Test: Environmental, EMC & EMI, Seismic Design Test

Description	Phase	Voltage	Stability	Frequency	Capacity
Input	DS	125Vdc~600Vdc	-	-	800kVA Max.
Output	1Ø or 3Ø	120Vac~480Vac	±2%	50/60Hz	

Domestic Track Records			
Main Client	KHNP	Doosan	KAERI
Project Name	Shin-Kori NPP	Shin-Kori NPP	HANARO
Delivery Year	2023	2021	2024
Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	Daewoo E&C (Jordan)	Malaysia
Project Name	Barakah NPP #3,4	Jordan Research	
Delivery Year	2018	2015	2022



[Rectifier (Oil Type)]

It consists of a rectifier, alarm, and protection circuits. Two types of operation—constant voltage and constant current—are available.

Specification

- Quality Grade: non-Class 1E

Description	Phase	Voltage	Stability	Frequency	Capacity
Input	1Ø or 3Ø	No limit	±10%	50/60Hz	1000kVA Max.
Output	DC	10A~20000A	±3%	-	

Domestic Track Records			
Main Client	Ecorbit	Ecorbit	KHNP
Project Name	Shin-Kori NPP	Shin-Hanul NPP	Hanbit NPP
Delivery Year	2023	2014	2010
Overseas Track Records			
Client (Country)	MHIEC (Saudi Arabia)	Ecorbit	MHIEC
Project Name	MHIEC	Barakah NPP	Qurayyah
Delivery Year	2017	2015	2012



[Automatic Voltage Regulator (Regulating Transformer)]

It consists of a serial transformer, tap transformer, control unit, alarm, and protection circuits. The output voltage is automatically regulated using a tap-changing regulator to protect loads from sudden input voltage fluctuations.

Specification

- Quality Grade: Class 1E & non-Class 1E
- Application Test: Environmental, EMC & EMI, Seismic Design Test

Description	Phase	Voltage	Stability	Frequency	Capacity
Input	1Ø or 3Ø	120Vac~480Vac	±15%	50/60Hz	300kVA Max.
Output	1Ø or 3Ø	120Vac~480Vac	±2%	50/60Hz	

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Hanul NPP	Hanbit NPP	Kori & Shin-Wolsong NPP
Delivery Year	2008	2007	2008

Overseas Track Records			
Client (Country)	Mongolia	Malaysia	Peru
Project Name		MANJUNG 5	
Delivery Year	2007	2019	2023



[Cast Resin Transformer]

A cast resin transformer is an electrical transformer that uses epoxy resin as the insulating material instead of oil.

Specification

- 1ph, 3ph / 50, 60Hz / Up to 10MVA - 36kV
- Core: Silicon or Amorphous

Domestic Track Records		
Main Client	POSCO	Railway Companies
Project Name	Various Projects	Various Projects
Delivery Year	~2024	~2024

Overseas Track Records			
Client (Country)	Philippines	Malaysia	Poland
Delivery Year	2016	2017	2020



[Power Transformer]

A power transformer is a device used to transmit electricity from power plants to substations. It is widely utilized in industrial facilities such as substations and factories. IEC manufactures all of its products in strict compliance with international standards (IEEE, IEC, JEC, etc.) and has extensive experience in customizing designs to meet the specific requirements of various customers.

Specification

- 1ph, 3ph / 50, 60Hz / Up to 60MVA - 69kV

Domestic Track Records			
Main Client	EASYINSYU POWER	JCM ELECTRIC	POSCO
Delivery Year	2022	2022	2017

Overseas Track Records			
Client (Country)	Argentina	Trinidad and Tobago	Philippines
Delivery Year	2023	2021	1998



[Distribution Transformer]

A distribution transformer is an electrical device that reduces the voltage of electricity coming from power lines, making it safe for use in homes, businesses, and other facilities.

Specification

- 1ph, 3ph / 50, 60Hz / Up to 10MVA - 36kV

Domestic Track Records			
Main Client	Oriental Heavy Industry	DAESEONG	JEIL STEEL
Delivery Year	2015		2011

Overseas Track Records			
Client (Country)	Malaysia	Mexico	Philippines
Delivery Year	2017	2008	2006



[Pad-mount Transformer]

A pad-mounted transformer is an electrical transformer installed at ground level on a concrete pad. It is enclosed in a weatherproof housing to protect it from outdoor elements such as rain and snow.

Specification

- 1ph, 3ph / 50, 60Hz / Up to 5.4MVA - 36kV

Domestic Track Records		
Main Client	KEPCO	Railway Companies
Project Name	Various Projects	Various Projects
Delivery Year	~2025	~2025

Overseas Track Records			
Client (Country)	USA	USA	USA
Project Name	Connecticut	California	New York
Delivery Year	2024	2023	2024



[Step Voltage Regulator]

A voltage regulator is a device that maintains a steady voltage level, ensuring that electrical devices receive a consistent and safe supply of electricity to operate properly.

Specification

- 1ph, 3ph / 50, 60Hz / Up to 2MVA - 36kV
- Core: Silicon or Amorphous

Domestic Track Records	
Main Client	KEPCO
Project Name	Various Projects
Delivery Year	~2025

Overseas Track Records	
Client (Country)	Ecuador
Delivery Year	2016

Website	www.ieckr.com		
Address	98, Singaecheon-ro, Geumwang-eup, Eumseong-gun, Chungcheongbuk-do 27681, Republic of Korea		
Contact Information	• Name: Steve(SungWook) Jang	• Email: swjang@ieckr.com	
	• Position: Overseas Sales, Director	• Contact Number: +82-10-6521-6616	

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Jeongwoo Industrial Machine Co., Ltd.

COMPANY INTRODUCTION

Since our establishment in 1990, Jeongwoo Industrial Machine Co., Ltd. (JIMC) has achieved remarkable growth and expansion in both domestic and international gas plant markets. By leveraging advanced technologies and driven by continuous innovation alongside rigorous quality management practices, JIMC is committed to enhancing our product line through the active pursuit of patents and technological advancements, ensuring we deliver superior solutions to our customers. Furthermore, we recognize our social responsibilities and actively participate in community support initiatives for marginalized populations, with all employees contributing to these efforts. Looking ahead, JIMC will prioritize research and development while maintaining the highest standards of quality management, guided by our business motto, "Pure the Earth, Cure the Life." We are dedicated to making a meaningful impact on the global energy supply.

JIMC is implementing an integrated management system aimed at continuously enhancing the company's efficiency and swiftly responding to the evolving needs of our customers, in accordance with ISO 9001, ISO 14001, and ISO 45001 standards. We are consistently improving our tools and methodologies to ensure the highest quality of our products. At JIMC, we prioritize building trust with our customers, and our entire team is dedicated to this commitment.



Certification

ISO 9001/14001/45001/ EN ISO 3834-2 ASME "U/U2/S/PP",
KEPIC-MN

PRODUCTS/SERVICES INFORMATION



[Condenser Tube Cleaning System & Debris Filter]

CTCS (Condenser Tube Cleaning System) is a simple, closed, ball re-circulation loop. A non-clogging pump carries sponge rubber balls out of an inline ball recirculating unit and injects them into the inlet water flow



of the shell and tube. The balls are forced through condenser tube by the differential pressure so that balls clean the tube. Screen(s) located after the outlet of tubes remove the balls from the main cooling water flow and feeds them back to the pump for recirculation or collection.
DF (Debris Filter) is designed to effectively prevent fouling from fibrous, coarse and marine life type debris larger than the selected filter performance size. By removing the debris from the cooling water inlet flow, tube fouling and plugging will be drastically reduced.



Specification

- Flow Capacity 1,800 to over 100,000 m³/h
- Connection Diameters DN 800 to DN 3,600
- Filtration Fineness 5 to 9 mm (with customizable options based on debris type)
- Housing Material Corrosion-resistant steel
- Temperature Range Max 80°C
- Control System Programmable logic controller (PLC)
Additional Options Safety valve integration, Filter
- Optimization Control Program

Domestic Track Records			
Main Client	KHNP	Posco E&C	Hyundai Engineering
Project Name	Saeul NPP #3,4	Pulau Indah CCPP	Datan ADD-ON CCPP #7
Delivery Year	2018-2020	2023	2022

Overseas Track Records			
Client (Country)	Siemens (Germany)	Wood (Spain)	ENEC (UAE)
Project Name	Rybnik CCPP	Palu-3 CFPP	Barakah NPP
Delivery Year	2024	2022	2014~2017



Seal Oil System



Stator Cooling Water System

[Seal Oil System, Stator Cooling Water System]

- Seal Oil System: The hydrogen used to cool the generator rotor is compressed to a certain pressure inside the generator, and to prevent this compressed hydrogen from leaking along the generator shaft, a seal oil is supplied to the rotating shaft, and a portion of the hydrogen that comes into contact with the seal oil is collected in a seal oil tank along with the seal oil, and the hydrogen collected in the seal oil tank is safely diffused and discharged to the atmosphere through the exhaust pipe.
- Stator Water Cooling System: The heat generated by the generator stator is cooled by circulating ionised water, the temperature of which is controlled by thermostatic valves and chillers according to the temperature of the circulating water.

Specification

- Design Features (Seal Oil System)
 - Maintain that the pressure of seal oil higher 8 PSID than the pressure of hydrogen inside of generator
 - Consider removal method of hydrogen gas which was contained seal oil Over 320 MW: Vacuum Type / Less 320 MW: Scavenged Type
 - Installation of Emergency Pump for leakage prevention of hydrogen when system is shut downed
 - Circuit for system operation check and alarm
- Auto-control for cooling water temperature: Maintain Inlet temperature 46℃
 - Maintain non-conductivity in cooling water: Less than 0.5 Micromho/cm
 - Back-up circuit for the prevention of cutting off cooling water
 - Circuit for prevention no liquid inside of stator winding
 - Vent Design for High dissolved oxygen
 - Install sensing system for operation and alarm circuit

Domestic Track Records			
Main Client	Doosan Enerbility	Doosan Enerbility	Doosan Enerbility
Project Name	Quang Trach I TPP STG	Samcheok TPP #1,2	Fujairah F3 CCPP
Delivery Year	2024	2022	2021

Overseas Track Records			
Client (Country)	AAEM (Russia)	Mitsubishi-T (Japan)	Toshiba (Japan)
Project Name	El-Dabaa NPP #1, 2, 3, 4	Sirdarya CCPP (ACWA Power)	Vung Ang II TPP
Delivery Year	2025~2027	2022	2023



[Radwaste Filter]

Radioactive waste is generated as a by-product of nuclear power production. Due to the limited availability of disposal sites and space, efficient waste management is essential. Sub-micron filtration technology has proven effective in controlling out-of-core radiation. JIMC's advanced filtration solutions help nuclear power plants manage radioactive waste more effectively to meet regulatory requirements, minimize radiation exposure, and reduce operational costs.

Specification

ASME Section VIII, Divisions 1 & 2

※ Types and sizes are available upon customer request

Domestic Track Records			
Main Client	KEPCO E&C	KHNP	Doosan
Project Name	ARA	Saeul NPP #3,4	Shin-Hanul NPP #1,2
Delivery Year	2025/2026	2018	2014/2015

Overseas Track Records	
Client (Country)	KEPCO (UAE)
Project Name	Barakah NPP
Delivery Year	2014~2016/2019



[Strainer]

A strainer is a device that mechanically removes contaminants from gas or steam lines using perforated plates or mesh screens. It protects equipment such as pumps, flow meters, control valves, steam traps, and regulators, thereby enhancing overall productivity. If strainers are not installed or are defective, substances such as scale, rust, bonding agents, or welding residue may damage the system and lead to unnecessary maintenance costs.

Specification

Description	Type	Rating	Size
Y-Strainer	Pipe Manufacturing	150# ~ 300#	2" ~ 24"
	Pipe Manufacturing	600# ~ 2500#	2" ~ 4"
	Casting	150# ~ 300#	½" ~ 20"
	Forge Welding	500# ~ 1500#	½" ~ 2"
Simplex Basket Strainer	Pipe Manufacturing	150# ~ 300#	2" ~ 24"
	Pipe Manufacturing	600# ~ 2500#	2" ~ 4"
	Casting	150# ~ 300#	½" ~ 20"
Duplex Basket Strainer	Pipe Manufacturing	150# ~ 300#	2" ~ 24"
	Casting	150# ~ 300#	½" ~ 20"
Tee Strainer	Pipe Manufacturing	150# ~ 300#	½" ~ 24"
	Pipe Manufacturing	600# ~ 2500#	2" ~ 4"
Temporary Strainer	Pipe Manufacturing	150# ~ 300#	2" ~ 24"
	Pipe Manufacturing	600# ~ 2500#	2" ~ 4"
Auto Strainer	Pipe Manufacturing	150# ~ 2500#	6" ~ 24"

※ Note: Other strainer types and sizes are available upon request.
Non-standard sized perforated boards and meshes may require different-sized strainers.

Domestic Track Records

Main Client	KHNP	KEPCO E&C	KHNP
Project Name	Shin-Hanul NPP #3,4	ARA	Saeul NPP #3,4
Delivery Year	2025~2028	2027~2028	2018~2019

Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	2016~2018

Website	www.jimc.co.kr
Address	253, 5Sandan-ro, Susin-myeon, Dongnam-gu, Cheonan-si, Choongchungnam-do, South Korea
Contact Information	• Name: Shawn Noh • Position: Deputy General Manager • Email: slroh@jimc.co.kr • Contact Number: +82-2-550-3510

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JINYOUNG TBX Co., Ltd.

COMPANY INTRODUCTION

- About Us**
Since 1982, JINYOUNG TBX Co. has been producing Turbine Blade that are the part of TPP. We also have been striving continuously to obtain the advanced technology which would help the company develop local industry as well. Certified with ISO9001, our company provides our customers needs by investing in the latest technology and quality at the beginning of the 21st century. We make every effort to satisfy the customers need through highest quality products and best possible services.
- Strengths**
 - Extensive experience in precision machining of Turbine Blades, Diaphragm and Rotor.
 - Customized tooling and fixturing for complex geometries.
 - Developing a qualified supply chain for special processes such as brazing, heat treatment, and welding.



Certification

- ISO 37001:2016 · ISO 45001:2018 · ISO 9001:2015
- KS Q 9100:2018 · ISO 14001:2015

PRODUCTS/SERVICES INFORMATION



[Turbine Blade, Diaphragm, Rotor]

Composed of the core components of steam turbines and gas turbines in NPP, HPP, TPP, and CCPP, steam or gas generated by boilers or other facilities passes through blades inside the turbine, and then turns the generator to generate electricity.



Specification

- Specifications are subject to change based on individual customer requirements, including drawings, materials, and order quantities.

Domestic Track Records			
Main Client	Doosan	Hyundai	Hanwha E&C
Project Name	Blade& Partition	Nozzle	Blade
Delivery Year	2025	2025	2022

Overseas Track Records			
Client (Country)	Mitsubishi (Japan)	PSM (U.S)	GE (U.S)
Project Name	Diaphragm	Vane & Assembly	Blade
Delivery Year	2025	2025	2025

Website	http://www.blade-korea.com/
Address	501 Nammyeon-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, 51528, Korea
Contact Information	• Name: Kim, Joon-Seob • Position: President • Email: blade@tbx.co.kr • Contact Number: +82-55-293-0477

KOCEN Co., Ltd.

COMPANY INTRODUCTION

KOCEN contributes to the advance of overseas NPP projects of Korean power organizations by ensuring enhanced quality and safety required by the global power generation market.

- Founded in 1998 as a spin-off from Korean state-owned company KEPCO E&C
- Top provider of Quality Surveillance, Concrete Testing, Design Engineering, and Document Control services for all NPPs in Korea, UAE Barakah NPPs and Egypt Eldaba NPPs
- Specialized in Nuclear Power Plant improvement overall design as a safety related Q class provider of KHNP
- Main Business Performance
 - All Korean NPPs: Hanul NPP #1, 2, 3, 4, 5, 6 / Wolsong NPP #2, 3, 4 / Hanbit NPP #3, 4, 5, 6 / Shin-Kori NPP #1, 2 / Saeul NPP #1, 2, 3, 4 / Shin-Wolsong NPP #1, 2 / Shin-Hanul NPP #1, 2, 3, 4
 - UAE Barakah NPP #1, 2, 3, 4 / Egypt Eldaba NPPs / New export research reactor etc.
- Main clients: KEPCO, KHNP, KEPCO E&C, KORAD, KAERI, Doosan Enerbility, KWP, KOMIPO, KOEN, KOSPO, EWP, KDHC, Samsung C&T, Daewoo E&C, Hyundai Engineering etc.



Certification · ISO 9001, ISO 19443, ISO 45001, ISO/IEC 17020, 17025

PRODUCTS/SERVICES INFORMATION



[Quality Surveillance for NPP]

- Quality surveillance of equipment materials, survey, inspection, expediting, and technical consulting at all Korean NPPs, UAE Barakah NPPs and ARA research reactor as a top 1 provider in Korea.
- Accredited to ISO 9001, ISO 19443, ISO/IEC 17020, KOCEN has a strong reputation with the extensive business experience as an independent third-party inspection body
- Operation of Quality Assurance Systems of KEPIC QAP, ASME NQA-1



Specification

- Quality surveillance of equipment and materials, release shipment, construction, installation, and startup operation
- Expediting and process control
- Preparation of quality surveillance plans and procedures
- Review and approval of supplier quality plans, etc.

Domestic Track Records	
Main Client	KHNP
Project Name	Quality surveillance for all Korean NPPs
Delivery Year	1999~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	QS & Cost Schedule for UAE Barakah NPP
Delivery Year	2010~2025



[Concrete Quality Test for NPP]

- Extensive experiences in test and quality control of concrete materials for nuclear power plants and radwaste disposal facilities in all Korean NPPs and UAE Barakah NPPs as a top 1 provider in Korea
- Internationally Authorized Testing Laboratory accredited by KOLAS in accordance with ISO/IEC 17025

Specification

- Concrete mix proportioning design
- Inspection and testing of production concrete
- Qualification testing of hardened concrete
- Testing of concrete component materials, etc.

Domestic Track Records	
Main Client	KHNP
Project Name	Concrete Test for all Korean NPPs & RW disposal
Delivery Year	1999~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Concrete Test for UAE Barakah NPP
Delivery Year	2010~2025



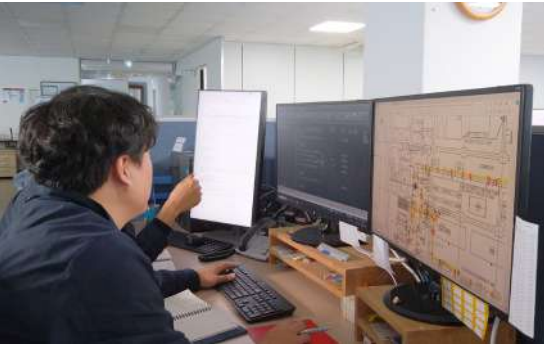


[Design Engineering for Nuclear Power Plant]

- Registered provider of Q-class overall design provider for KHNP
- Design improvements for operating NPPs and detailed design for Korean NPPs, UAE NPPs
- R&D activities for NPPs and Research reactors
- Design engineering for NPP decommissioning and core demonstration facility research

Specification

- Improvement design engineering
- Power plant design engineering
- System and equipment design engineering, etc.



Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	Detail design for Shin-Hanul NPP #1, 2 / Saeul NPP #3,4	Improvement design of operating NPPs etc.	I&C design for SMR
Delivery Year	2014~2025	2018~2025	2022

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	
Project Name	Detail design for UAE Barakah NPP	Detail design for UAE Barakah NPP
Delivery Year	2011~2025	2011~2018



[Document Control for Nuclear Power Plant]

- Document control of large-scale construction and operation data for Korean NPPs, UAE Barakah NPPs, Egypt El-Dabaa NPPs, thermal power plants, and Incheon International Airport
- KOCEN completely manages all processes of data management including formation, utilization, preservation, transfer and disposal of documents with the highest track record in Korean NPPs.

Specification

- Establishment of data management procedure manual and process
- Operations of Drawing&Document Control Center(DDCC) for preservation of Quality Records and retrieval of Technical Documents
- Consulting of document control etc.



Domestic Track Records	
Main Client	Barakah NPP (UAE)
Project Name	Document Control for most Korean NPPs
Delivery Year	1999~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Document Control for UAE Barakah NPP & Egypt El-Dabaa NPP
Delivery Year	2010~2025

Website	www.kocen.com
Address	13Fl. 388 Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-Do, 13403, Republic of Korea
Contact Information	• Name: Michelle Park • Position: Sr. Vice President • Email: mjpark@kocen.com • Contact Number: +82-31-777-8511

M&D Co., Ltd.

COMPANY INTRODUCTION

M&D Co., Ltd. considers “Creating current and future value for customers” as its top priority value for the company, and since its founding in 2,000, based on its solid technological capabilities, it has grown into a company that has built continuous cutting-edge technology research, product development, and various engineering service capabilities for plant stability and efficiency.

- **Business area**
 - Robot
 - A robot for Nuclear Power Plant maintenance, A robot Filter replacement robot on the primary side of NPP
 - AI
 - NPP startup and shutdown monitoring system, Rotating equipment precision diagnosis system
 - Engineering Service
 - NPP power-operated valve diagnosis, NPP periodic safety review, Main control room habitability test



Certification

KEPIC MN, ISO 9001, ISO 45001, ISO 19443, KOLAS Accreditation Certificate

PRODUCTS/SERVICES INFORMATION



[FilterBot (Primary System Filter Auto Replacement Robot)]

Filter Replacement Robot on the primary side of NPP



Specification

- Application
 - RCP Seal Injection Filter
 - Seal Water Return Filter
 - Boric Acid Filter
 - Reactor Coolant Filter
 - Spent Fuel Pool Filter, etc.
- Equipment Features
 - 5 DOF precision instrument
 - Multifunctional tool for handling bolts and filters
 - Stereo vision camera for filter room
 - Remote joystick/touch based user interface
 - Virtual reality simulator
- Control Function
 - Force-Torque response attitude control: 6axis F-T sensor-based attitude control
 - Tightening torque precision control: Tightening force control based on the precision torque sensor
 - Vision-based location recognition: 3D location recognition using dedicated stereo camera
 - Virtual reality appliance synchronization: Real-time synchronized virtual reality work situation

Domestic Track Records

Main Client	KHNP	KHNP	KHNP
Project Name	Hanbit NPP #1,2	Kori NPP #3,4	Saeul NPP #1,2
Delivery Year	2022	2023	2024

CHARM



- Application Task
 - NPP Radiation Waste Disposal

FD BOT



- Application Task
 - Duct & Pipe & Fire Damper Inspection

Website	www.e-mnd.com
Address	2F, 202, 4, Hyoryeong-ro 34-gil, Seocho-gu, Seoul, Republic of Korea
Contact Information	• Email: mnd@e-mnd.com • Contact Number: +82-51-723-5031



Moojin Keeyeon Co., Ltd.

COMPANY INTRODUCTION

Since its establishment in 1990, our company has dedicated itself exclusively to the nuclear power industry for over 30 years, growing into a leading nuclear solution provider in Korea. Recognized worldwide for our proven technological expertise and robust quality assurance capabilities, we have become a trusted name in the nuclear sector.

We successfully localized core nuclear equipment—such as the Single Stud Tensioner (SST) and Refueling Machine—which had previously been fully dependent on imports. This achievement demonstrated our engineering capabilities and laid the foundation for domestic and international success. We supplied six BOP(Balance of Plant) packages to the Barakah NPP in the UAE and delivered Shielded Work Stations (SWS) to the Cernavoda NPP in Romania and the Qinshan NPP in China.

Additionally, we contributed in-pool equipment to the research reactor at Delft University of Technology in the Netherlands, and we remain actively engaged in the research reactor market as well as the Small Modular Reactor (SMR) sector.

Currently, we are participating in the Jordan Research and Training Reactor (JRTR) project and facility modernization efforts in Romania. Building on the success of our SST, we recently completed the localization of the MST (Multi Stud Tensioner) and will expand our worldwide presence by participating in various overseas nuclear power projects, including in India. With these achievements, we continue to strengthen our export base and expand into global markets, striving for increased sales through international growth and overseas business development.



Certification

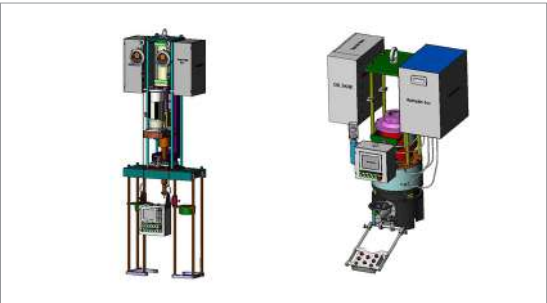
ASME N, N3, NPT, NS / KEPIC MN, EN, SN / ISO9001, ISO14001, ISO45001

PRODUCTS/SERVICES INFORMATION



[SST (Single Stud Tensioner)]

SST (Single Stud Tensioner) is equipment used for disassembling and tightening 54 stud bolts that connect the reactor head to the vessel body. It is used for opening and closing the reactor head. Moojin Keeyeon Co., Ltd. successfully

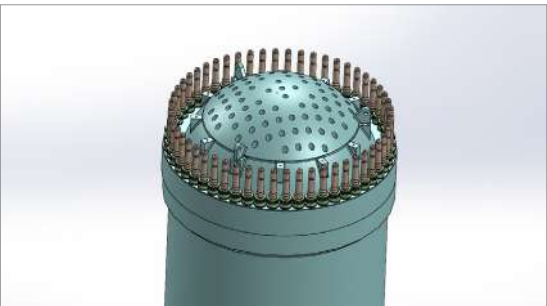


localized this equipment. The system consists of the SST main body, SDT (Stud Drive Tool), Main Control Console, Tractor & Hoist, and Cart.

Specification

- Maximum Pressure: 2,500bar
- Maximum Load per Stud: 11,080kN
- Maximum Stroke: 40mm

SST	SST System	Stud Drive Tool
Qty	3sets/unit	3sets/unit
Weight	978Kg/set	950Kg/set
Size	937.5×1,053×1,960.5mm	1,030×618×3062.5mm

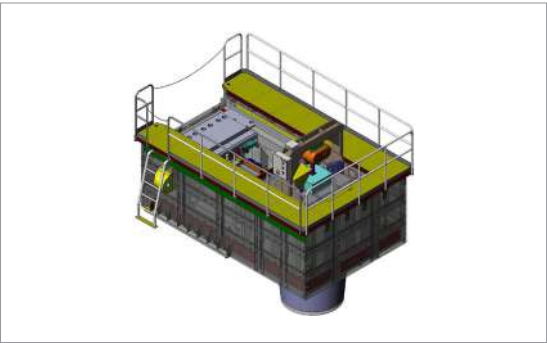


Domestic Track Records

Main Client	KHNP
Project Name	Saeul NPP #1, 2 / #3, 4
Delivery Year	2012 / 2023

Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1, 2, 3, 4
Delivery Year	2018



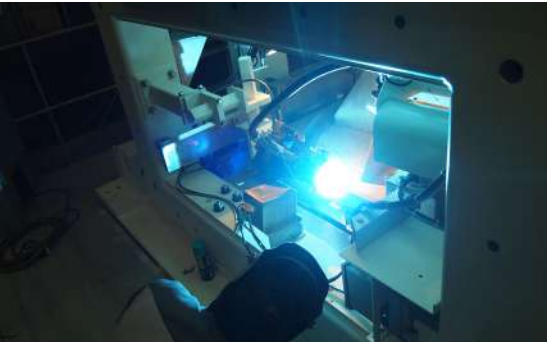
[SWS (Shielded Work Station)]

SWS (Shielded Work Station) is equipment used in CANDU-type nuclear power plants for the dry storage of spent nuclear fuel. Using an FHT (Fuel Handling Tool), spent fuel bundles are retrieved from the pool, placed into fuel baskets, transferred to the workstation, dried with hot air, and then sealed by welding. Because spent fuel is highly radioactive, operations must be carried out in a shielded environment, which is provided by the Shielded Work Station.

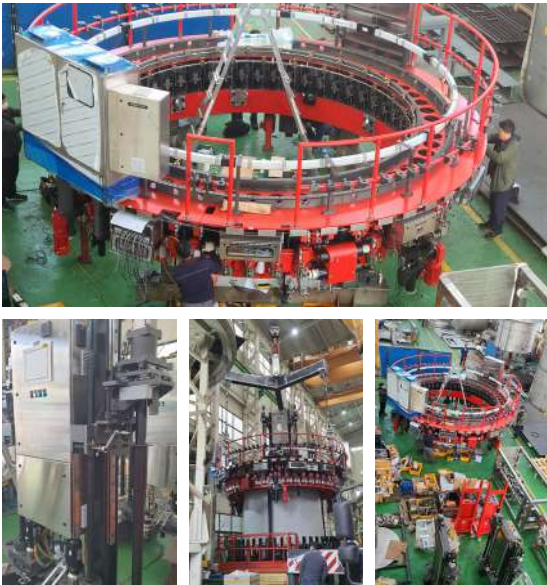
Specification

- Radiation/Neutron Shielding Technology
- High-difficulty Special Welding and Automated Welding Technology
- Automated System for Precise Control and Monitoring of Welding Processes
- 136/347(L) × 79.7/202(W) × 115.4/293(H) (in/cm)
- Net Weight: 53,000/24,040 (lb/kg)
- Welding Power Supply: Deltaweld 652





Domestic Track Records		
Main Client	KHNP	
Project Name	Wolsong NPP #3, 4	
Delivery Year	2004	
Overseas Track Records		
Client (Country)	Cernavoda(Romania)	Qinshan(China)
Project Name	Cernavoda NPP #2	Qinshan NPP Phase III #1, 2
Delivery Year	2013	2008



[MST (Multi Stud Tensioner)]

The MST (Multi Stud Tensioner) is a key piece of equipment used in nuclear power plants during fuel replacement operations. It is designed to disassemble and reassemble all 54 stud bolts that connect the reactor head to the vessel body. Unlike conventional systems such as the SST (Single Stud Tensioner), the MST features an integrated, all-in-one stud tensioning structure that pressurizes all studs simultaneously in a single operation. This fully automated system performs precise stud elongation and relaxation tasks in a single motion, streamlining the maintenance process. The equipment operates under ultra-high pressure, reaching up to 2,500 bar, ensuring secure and uniform tensioning or detensioning of all 54 studs at once.

- Configuration**
- Support Ring
 - Tensioning Unit & Reaction Nut Turning Device
 - Double Stud Turning Robot/ Lifting System
 - Measuring Device/ Control Panel

Domestic Track Records	
Main Client	KHNP
Project Name	Hanbit NPP #5,6
Delivery Year	2025

- Specifications**
- Weight: 33,250Kg
 - Length: 6,520 mm
 - Width: 6,520 mm
 - Height: 3,750 mm

Website	http://www.newmoojin.co.kr		
Address	41, Hanamsandan 9beon-ro, Gwangsan-gu, Gwangju, Korea		
Contact Information	• Name: Charlie S. Lee.	• Email: cslee@newmoojin.com	• Contact Number: +82-10-3628-4177
	• Position: Director		

NADA Co., Ltd.

COMPANY INTRODUCTION

NADA Co., Ltd. is a global leader in vibration technology, founded on the philosophy of “Communication with Machines.” We develop and provide a comprehensive range of vibration-related solutions, including online vibration monitoring and diagnostic systems, portable vibration analysis equipment, vibration sensors, and automatic sensor calibration systems. Recently, we successfully completed a pilot project to implement a wind turbine monitoring system using our proprietary “NADA Digital Twin Solution,” which is specialized for predictive maintenance based on equipment diagnostics. The success of this project has led to industry recognition and ongoing support.



Certification CE, SIL-2(VMS), NDK

PRODUCTS/SERVICES INFORMATION



[VMS (Vibration Monitoring System)]

VMS is a real-time online monitoring system for turbines and other critical rotating equipment in plants which allows users to anticipate and prevent unexpected failures. VMS enables users to perform condition-based predictive maintenance by systematizing vibration data & analysis know-how.

Specification

- Fully compliant with API 670
 - Stand-Alone Type Module
 - 4 or 8 Analog Input Channels (per module)
 - 2 Tacho Input Channels (per module)
 - Sensor Compatibility
 - Redundant Power Supply
- Hot Swap
 - LED Display - Sensor Status
 - 4~20mA Output (to DCS)
 - 16 or 8 ch Relay Out/ Buffered Out
 - Watchdog - Self-Diagnosis
 - Tested for Protection against Earthquakes, Shocks, Electromagnetic Waves

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Chuncheon & Cheongpyeong Hydroelectric Generator VMS	Cheongsong PSPP VMS	Yecheon PSPP VMS
Delivery Year	2020	2020	2022

Overseas Track Records			
Client (Country)	JEIL M&S (USA)	Doosan (Indonesia)	AAEM (Turkey)
Project Name	Indiana PD MIXER	Jawa TPP #9, 10	Akkuyu NPP
Delivery Year	2024	2023	2024



[VibLow7000]

VibLow7000 is a portable data acquisition & machinery diagnostics system equipped with the multi-purpose all-in-one diagnostic features (FFT analyzer + data recorder + oscilloscope).

Specification

- ALL-IN-ONE Multi purpose analyzer (FFT Analyzer + Data Recorder + Oscilloscope)
- Machinery Test-drive Evaluation
 - Real-time Multi-channel Synchronized Data Processing
 - Short-/Long-term Monitoring - Run-up & Run-down
- Various Parameters – Vibration + Temperature + Pressure
 - Assessment of Online Monitoring System – Parallel Processing

Domestic Track Records			
Main Client	KEPCO	Kangwoo	KEPCO KPS
Delivery Year	2022	2024	2025

Overseas Track Records			
Client (Country)	Advituro (Italy)	Lakdhanavi Limited (Sri Lanka)	MVS Acmei Technologies (India)
Delivery Year	2022	2024	2024

Website	https://nada.co.kr/
Address	#1001, Pangyo Innovation Lab, 11 Geumto-ro 80beon-gil, Sujeong-gu, Seongnam-si, Gyeonggi-do, Republic of Korea, 13453
Contact Information	• Name: Jeon Soyun • Position: Assistant Manager • Email: soyun.jeon@nada.co.kr • Contact Number: +82-10-8098-7364

Nuclear Engineering Services & Solutions Co., Ltd.

COMPANY INTRODUCTION

Nuclear Engineering Co., Ltd., established in 2012, is a nuclear engineering company. Based on its experience in nuclear safety analysis and related research, it has achieved great results in research and development and business in the fields of safety assessment, radiation safety analysis, decommissioning and dismantling, nuclear fuel cycle facility design, and nuclear engineering.

The services provided by Nuclear Engineering Co., Ltd. include safety assessments such as probabilistic safety assessment and deterministic safety assessment, radiation safety analysis such as radiation environmental impact assessment, nuclear criticality analysis and radiation source term analysis, nuclear engineering such as nuclear facility system design and thermal dynamic analysis, nuclear fuel cycle facility design such as spent nuclear fuel pyroprocessing facilities and nuclear fuel manufacturing facilities, NPP decommissioning including NPP decommissioning cost design and NPP decommissioning design, and nuclear power research and development such as development of location tracking dosimeters, development of standard processes and standard products for NPP decommissioning, and development of mobile wastewater solidification and continuous treatment systems.

In addition, it has recently been providing CANDU-related engineering services that are being phased out in Korea to maintain the technology of heavy water reactors, foster human resources, and promote exports to Europe and the Americas. This includes services such as system design, safety assessment and licensing support, and equipment supply support.



Certification ISO 9001 / KHNP's Q-Class Supplier for PSR, PSA

PRODUCTS/SERVICES INFORMATION



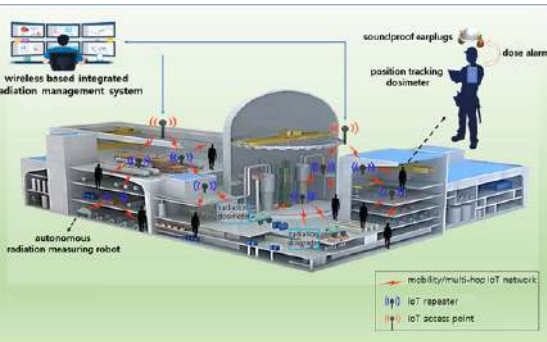
[CANDU-Type Nuclear Power Plant Design & Engineering]

Nuclear Engineering Services & Solutions provides CANDU-related engineering services. This includes services such as system design, safety assessment, licensing support, and equipment supply support.

Specification

- Design technology for nuclear reactors and fuel handling systems, process systems and piping systems
- Safety analysis and licensing support
- Periodic safety assessment and Probablistic safety assessment(PSA)
- Construction support including preparation of construction procedures
- Technical support related to continuous operation

Domestic Track Records			
Main Client	KHNP	KHNP	KEPCO E&C
Project Name	Accident analysis	PSA	SBLOCA analysis
Delivery Year	2022	2022	2016



[Safety Assessment and Radiation Safety Analysis]

Nuclear Engineering Services & Solutions has professional experience in field of safety assessment, radiation safety analysis as well as decommissioning and dismantling.

Specification

- Probablistic safety assessment and deterministic safety assessment for nuclear facilities
- Radiation source term analysis and neutron activation analysis
- Nuclear criticality analysis
- Radiation shielding and streaming analysis and radiation dose calculation
- Radiation environmental impact analysis

Domestic Track Records			
Main Client	KHNP	KEPCO E&C	KAERI
Project Name	PSA for Shin-Kori NPP #1, 2	Risk Monitoring Model Development	Radiation Environmental Impact Analysis
Delivery Year	2023	2022	2023

Website	www.ness.re.kr		
Address	Sejong Daemyung Valeon B-811, 6, Jiphyeonjungang 7-ro, Sejong-si, 30141, Republic of Korea		
Contact Information	• Name: Changmo Byun • Position: Director	• Email: changmo.byun@ness.re.kr • Contact Number: +82-70-4323-4520	

Pavetech Co., Ltd.

COMPANY INTRODUCTION

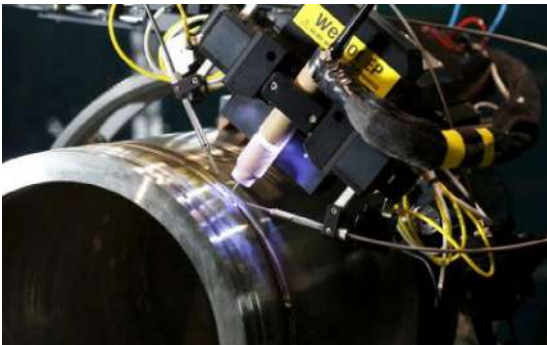
Pavetech Co., founded in 2005, specializes in designing and manufacturing industry-leading robotic welding solutions for challenging environments, including the highly radioactive zones within nuclear power facilities. Our dedicated in-house engineering experts develop advanced robotic welding systems that meet the strict standards required by industries where utmost precision and reliability are essential.

For the past 20 years, Pavetech successfully implemented various robotic welding systems to automate maintenance procedures within NPPs. With a proven track record of excellence in the nuclear field, Pavetech is now seeking to expand its business to the international market, offering cutting-edge robotic welding solutions.



Certification ISO9001, ISO14001

PRODUCTS/SERVICES INFORMATION



[TIG Welding Robots]

- Auto voltage control, oscillation, and rotation movement for high quality welding
- Remote control system (up to 100m)
- Real-time monitoring
- Welding path detection and tracking
- More than 60 welding robots have been delivered to our clients

Domestic Track Records

Main Client	Doosan Enerbility
Project Name	Multi-axis CEDM/CRDM Cladding Robot
Delivery Year	2019

Website	www.pavetech.co.kr
Address	22-5 Sugiutmalgil, Bongdam-eup, Hwaseong-si, Gyeonggi-do
Contact Information	• Name: Seokchan Yoo • Position: Director of Business Development • Email: seokchan.yoo@pavetech.co.kr • Contact Number: +82-10-3863-3454

PK Valve & Engineering Co., Ltd.

COMPANY INTRODUCTION

Our company was founded in 1946, pioneering the valve industry in South Korea. Alongside economic growth, we have manufactured and supplied valves to various plants such as petrochemical, power generation, and shipbuilding industries, contributing to import substitution and industrial development. Adapting to energy shifts, we expanded our business into nuclear and LNG markets, and continuously evolved by developing liquefied hydrogen valves, becoming the first in Korea. We believe such strides enable us to compete effectively in the international market.

Currently, we are restructuring our business towards renewable energy such as LNG, liquefied hydrogen, SMR, and GUV, transitioning from traditional petroleum/refinery plant markets. Despite experiencing revenue declines and deficits due to energy paradigm shifts, the COVID-19 pandemic, and anti-nuclear policies, we aim to discover new business opportunities within these changes.

Moreover, if independent nuclear power exports are included, we will contribute to South Korea's green growth under our vision of 'Green Energy Solutions.'



Certification

API 600, API 6D, ASME N, NPT, KEPIC MN, ISO 9001, ISO 14001, ISO 45001

PRODUCTS/SERVICES INFORMATION



[Valves for Nuclear Power]

Valve Supply Records (NSSS) (ERDV)

- Gate Valve
 - ANSI Class: 150#, 504#, 527#, 1147#, 1680#
 - Size: 3" to 20"
 - Material: CF8M
 - Wedge: Parallel Slide Type
 - Motor Operated Valve
 - Code Class: 1, 2, 3



- Check Valve
 - ANSI Class: 150#, 527#, 1204#, 1147#, 1466#, 1680#, 1767#
 - Size: 3" to 24"
 - Material: A351-CF8M
 - Swing, Stop and Spring Loaded Lift type
 - Code Class: 1, 2, 3
- Globe Valve
 - ANSI Class: 150#, 504#, 527#, 1204#, 1551#, 1147#, 1466#, 1680#, 1767#
 - Size: 1" to 10"
 - Material: CF8M
 - Motor Operated Valve
 - Code Class: 1, 2, 3
- Butterfly Valve
 - ANSI Class: 150#, 600#
 - Size: 10" to 24"
 - Material: A351-CF8M
 - Triple Offset Type
 - Code Class: 2



Valve Supply Records (BOP)

- Gate Valve
 - ANSI Class: 150#, 600#, 900#, 1500#
 - Size: 2.5" to 24"
 - Material: WCB, LCB, CF8M, WC9
 - Wedge type
 - Code Class: 2, 3
- Globe Valve
 - ANSI Class: 150#, 300#, 900#, 1500#
 - Size: 2" to 14"
 - Material: WCB, CF8M, WC9
 - Code Class: 3



- Check Valve
 - ANSI Class: 150#, 300#, 600#, 900#, 1500#
 - Size: 2.5" to 24"
 - Material: WCB, WC9, CFBM, CW12MW
 - Swing Type
 - Code Class: 2, 3

Product Description

- Gate, Globe and Check for Nuclear Power Gate, globe and check valves for nuclear power control the fluid flow in the piping system of nuclear power main equipment and auxiliary equipment.
- ERDV(Emergency Reactor De-pressurization Valve) It is a dedicated device for serious accidents installed to quickly reduce the pressure of the reactor coolant system in the event of a serious accident.

Specification

- Material:
Cast Carbon Steel, Cast Alloy Steel / Cast Low Alloy Steel, Cast Stainless Steel(Duplex, Super Duplex), Al-Bronze / Hastalloy / Incolloy / Inconel, Others
- Type:
Gate, Parallel slide, Globe, Check, Butterfly, Bellows Seal Valve, Ball
- Application:
Power Plant (Nuclear, Thermal & Combined Heat), Construction, Housing, General Piping, Cryogenic (NGL, LNG, LO, Ethylene, Propylene, LH₂), Chemical / Petrochemical / Oil Refinery, Shipping / Offshore Plant, Gas Plant / HRSG / Desalination Plant
- Size:
1 inch ~ 100 inch
- Pressure:
150LB ~ 2500LB
- Specification:
ASME / ANSI, API, KEPIC, ASTM, etc.
- Capacity:
Cast Carbon Steel Valves / 10,000 ton/year, Cast Stainless Steel Valves / 5,000 ton/year, (Total 15,000 ton/year)

Domestic Track Records		
Main Client	Doosan	KHNP
Project Name	Saeul NPP #3, 4	Saeul NPP #3, 4 (BOP)
Delivery Year	2015	

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1, 2, 3, 4
Delivery Year	2012

Website	WWW.PKVNE.COM
Address	80, Gongdan-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Republic of Korea
Contact Information	• Name: KIM DONGHYUN • Position: Manager • Email: dhkim@pkvne.com • Contact Number: +82-55-268-3777

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POWER MnC Co., Ltd.

COMPANY INTRODUCTION

"A Specialized Supplier of NPP Fuel Handling Equipment, Industrial Instrumentation and Control Devices, and Cranes"

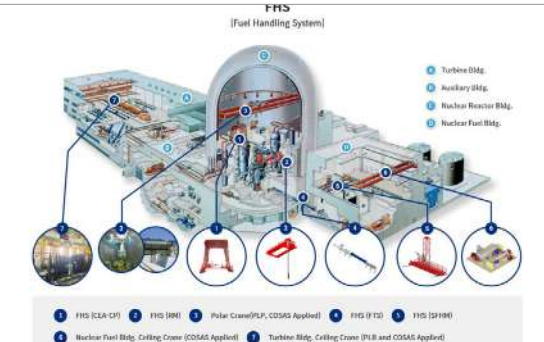
- The company participated in the development of the fuel handling equipment for the Korean-type next-generation NPP (APR-1400), achieving localization of production. It is a specialized supplier equipped with a comprehensive testing facility that enables performance verification prior to equipment delivery.
- Additionally, by supplying a comprehensive fuel handling test facility to KPS, the company contributes to reducing radiation exposure for workers through its use in training and education.
- In the field of industrial instrumentation and control devices, the company successfully localized the Roll Checker for steelmaking continuous casting equipment, which had been entirely dependent on foreign suppliers. As a result, it has achieved the No. 1 world market share by supplying not only domestic steel mills but also those in Japan and China. Furthermore, the company has been expanding its supply by developing the Shapemeter to improve the quality of cold-rolled products.



Certification

- ISO9001 for all products
- ISO14001(Environment), ISO45001(Safety and Healthcare)
- KEPIC "MN"

PRODUCTS/SERVICES INFORMATION



Specification

- Refueling Machine(RM)
- Spent Fuel Handling Machine(SFHM)
- CEA Change Platform(CEACP)
- Fuel Transfer System(FTS)

[Fuel Handling System(FHS)]

Fuel Handling System(FHS) is equipment that transfer nuclear fuel between the fuel building of a NPP and the reactor containment building, and is used to replace spent fuel and reload new fuel. (Supplied to Korea's new NPP(APR-1400) Saeul NPP #1, 2, 3, 4, Shin-Hanul NPP #1,2 Barakah NPP #1, 2, 3, 4)

Domestic Track Records

Main Client	Doosan Enerbility	
Project Name	Fuel Handling System for Shin-Hanul NPP #1, 2	Fuel Handling System for Saeul NPP #3,4
Delivery Year	2017	2022

Overseas Track Records

Client (Country)	Barakah NPP (UAE)	
Project Name	Fuel Handling System for Barakah NPP #1, 2, 3, 4	
Delivery Year	2018	



[Precision Load Positioner(PLP)]

Used for precise vertical positioning and rotation of lifted objects during the assembly or disassembly of heavy structures or equipment. Capable of controlling vertical position with high precision at a rate of 0.025 mm to 1.2 mm per second, within a maximum vertical stroke of 305 mm. Installed on the main hook of Polar Cranes and General Cranes. Designed for precision control during heavy-duty operations such as reactor handling.

Specification

- Modle: PPLP-250/300
- Total Weight: 2.5/3.5 Ton
- Working Capacity: 250/300 US Ton
- Electric Source: 480 VAC3Ph, 60Hz

Domestic Track Records

Main Client	Doosan Enerbility	KHNP
Project Name	PLP for Shin-Hanul NPP #2 Polar Crane	PLP for Shin-Wolsong NPP #2 Polar Crane
Delivery Year	2014	2015



[Crane Operation Safety Assurance System(COSAS)]

Prevents crane component damage and dropped loads in the event of an issue during heavy lifting operations (single-failure protection)

- Mechanical Encoder: Monitors input values from the hoist drum and motor to prevent mechanical failures and potential load drops
- Emergency Brake System: Automatically activates to stop the hoist in emergencies through a trigger-based release mechanism

- Energy Absorbing Torque Limiter: Interrupts power transmission when over-torque occurs on the motor drive shaft due to excessive load
- Wire Rope Spooling Monitor: Prevents rope misalignment and double winding on the drum
- Mechanical Over Speed Switch: Prevents load drops caused by shaft failure in the power transmission system

- Specification**
- Working Capacity: Applicable up to 1400MW
 - Functions of COSAS complying with requirement of NUREG-0554, "Single Failure Proof Crane System"

Domestic Track Records		
Main Client	Doosan Enerbility	
Project Name	COSAS for Shin-Hanul NPP #1, 2 Polar Crane	COSAS for Saeul NPP #1,2 Polar Crane
Delivery Year	2014	2012

Website	www.powermnc.com
Address	8, Cheyongsaneop 5-gil, Cheongnyang-eup, Ulju-gun, Ulsan, Republic of Korea
Contact Information	• Name: JEON, Jae-young • Position: CEO • Email: pw@powermnc.com • Contact Number: +82-070-8889-5300

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REALGAIN Co., Ltd.

COMPANY INTRODUCTION

REALGAIN, established in 1999, has been dedicated to localizing systems and equipment in the field of Instrumentation & Control (I&C) and communication for the nuclear power sector, leveraging advanced IT and control measurement technologies. Through these efforts, we have steadily expanded our market share in nuclear power plants domestically and supplied auxiliary equipment and spare parts for Units 1-4 of the Barakah Nuclear Power Plant (Barakah NPP) in the UAE. In 2022, we further strengthened our global presence by delivering products to the Cernavodă NPP in Romania, in collaboration with KHNP. Building on these achievements, REALGAIN continues to pursue new opportunities and diversify its export markets, reinforcing its position as a trusted global partner in the nuclear industry.

As a reliable provider of advanced I&C solutions, REALGAIN is committed to delivering innovative, eco-friendly, and highly stable services through continuous investment in research and development. Guided by ESG principles, we strive to provide the highest quality products while maintaining a strong commitment to sustainability and environmental responsibility. With outstanding technological expertise, we offer tailored solutions that create lasting value for our customers and contribute to a safer and more sustainable future.



Certification

ISO9001:2015, ISO45001:2018, KEPIC-EN, UAE NAWAH NASL, CNCAN NMC-07,12

PRODUCTS/SERVICES INFORMATION



Gas PERMS

[Radiation Monitoring System(RMS)]

This Radiation Monitoring System (RMS) continuously monitors radiation levels of a major system or a particular area in a nuclear power plant, thereby preventing radiation leakage and limiting worker exposure to radiation. Gas, liquid, and area radiation monitors have been integrated into one system.

Specification

• Gas PERMS

- 1) Detector type/Collector type
 - Particulate: Beta Scintillation/Moving Filter
 - Iodine: Gamma Scintillation/Charcoal Cartridge
 - Gas: Beta Scintillation/Chamber
- 2) Radiation Range(Range Selectable)
 - Particulate: 3.7E-7~3.7E+1[Bq/cc]
 - Iodine: 3.7E-6~3.7E+1[Bq/cc]
 - Gas: 3.7E-2~3.7E+9[Bq/cc]

3) Energy Range

- Particulate: 50KeV ~3MeV
- Iodine: 70KeV ~3MeV
- Gas: 50KeV ~3MeV

4) Equipment Qualification

- Environment[IEEE-323]
- Seismic[IEEE-344]
- EMI/RFI[Reg.1.180]



Liquid PERMS

• Liquid PERMS

- 1) Detector type/Collector type
 - Liquid Gross Gamma / Chamber
- 2) Radiation Range
 - 3.7E-3 ~ 3.7E+3 [Bq/cc]
- 3) Energy Range
 - Liquid Gross Gamma: 70 KeV ~ 3 MeV
- 4) Background Rad. Level
 - Level: 10μSv/hr
- 5) Equipment Qualification
 - Environment[IEEE-323]
 - Seismic[IEEE-344]
 - EMI/RFI[Reg.1.180]



Area Monitor

• Area Monitor

- 1) Detector type/Collector type
 - Ion Chamber or GM Tube / None
- 2) Radiation Range
 - 1.0E-3 ~ 1.0E+2 (mSv/hr) [GM Tube]
- 3) Energy Range
 - Area Gamma: 80 KeV ~ 1.5 MeV [GM Tube]
- 4) Equipment Qualification
 - Environment[IEEE-323]
 - Seismic[IEEE-344]
 - EMI/RFI[Reg.1.180]

Domestic Track Records

Main Client	KHNP			
Project Name	Hanul NPP #1,2	Hanul NPP #3~6	Kori NPP #1,2	Wolsong NPP #1,2
Delivery Year	2005	2012	2012	2016
Main Client	KHNP			
Project Name	Hanbit NPP #3,4	Hanbit NPP #1,2	Kori NPP #3,4	Hanul NPP #3,4
Delivery Year	2017	2021	2023	2024

Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	2016 ~ 2019



[Radiation Tolerant Camera System(RTCS)]

This Radiation Tolerant Camera System offers real time monitoring of high radiation areas in nuclear power plants. Being highly resistant to radiation, the display of this tolerant camera includes a high-resolution color screen, thereby enabling efficient monitoring and stable operation in the long term.

Specification

Model	KR17090ZWC	KP10
Accu. radiation dose [Co-60][Gy]	1 x 10 ⁵	6.85 x 10 ⁴
Accu. radiation dose per hour(max)[Gy]	1 x 10 ³	1.13 x 10 ³
Operating temp.[℃]	50	50
Image pickup device	CMOS APS	Color CMOS
Resolution	512 x 512p	720 x 480p
Video output	CVBS	CVBS
SNR[dB]	40	40
Zoom ratio	x 6	x 10
Dimensions[mm]	Φ118 x 462	Φ152 x 512
Weight[kg]	Approx. 12	Approx. 19

Domestic Track Records

Main Client	KHNP			
Project Name	Shin-Wolsong NPP #1,2	Hanbit NPP #3~6	Hanul NPP #3~6	Saeul NPP #3,4
Delivery Year	2013	2017, 2022	2017, 2022	2018
Main Client	KHNP			
Project Name	Shin-Hanul NPP #1,2	Hanbit NPP #1,2	Wolsong NPP #1~4	Kori NPP #1~4
Delivery Year	2018	2020	2020, 2024	2021
Main Client	KHNP			
Project Name	Shin-Kori NPP #1,2		Saeul NPP #1,2	
Delivery Year	2021, 2024		2022, 2023	

Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	2016 ~ 2019



[NISS Integrity Monitoring System (NIMS)]

NIMS is a system that monitors the structural integrity of the Nuclear Steam Supply System (NISS), consisting of four subsystems: IVMS, LPMS, ALMS, and RCPVMS. We have developed an integrated NIMS, which is a more advanced version compared to the existing systems.

Specification

Subject	Description
Size	2200 × 1219 × 912 mm
Power	120VAC ±10%, Single Phase, 60±10%, Non-Class 1E
Load	Typical 1.2kVA, Max 3kVA
Input Signals	- Input Power: 120VAC, 60Hz(Main Power), 24VDC(Smoke Detector Module 1, 2 Power) - Input Signals: LPMS Preamp Signal (18CH), IVMS Ex-core Signal (Fiber Optic,12CH), ALMS PSV Preamp Signal (3CH), ALMS NON-PSV Preamp Signal (20CH), RCPVMS Vibration Preamp Signal (12CH), RCPVMS Displacement Preamp Signal(12CH)
Output Signals	- Output Signals: LPMS Preamp Test Signal (18CH) LPMS Alarm Signal (19CH), ALMS Preamp Test Signal (16CH), ALMS PSV Alarm Signal (12CH), ALMS PSV Alarm Signal to MCR (9CH), ALMS NON-PSV Alarm Signal (40CH), RCPVMS Alarm Signal (16CH), RCPVMS Spare Alarm Signal(16CH)
Equipment Qualification	- IEEE-323 (EQ) - IEEE-344 (SQ) - Regulatory Guide 1.180 (EMI/EMS), IEC 61000-4-2 (ESD)

Domestic Track Records

Main Client	KHNP		
Project Name	Hanbit NPP #1	Hanbit NPP #6	Hanul NPP #6
Delivery Year	2024	2024	2024
Main Client	KHNP		
Project Name	Hanbit NPP #2	Hanbit NPP #5	
Delivery Year	2025	2025	



[Digital Rod Position Indication System (DRPIS)]

Digital Rod Position Indication system receives position current signals from the control rod position detector, digitizes them, and processes the position and alarms to provide information to the operator. The control rod position and events are recorded and stored, and the data can be accessed through the EWS (Engineering Workstation) provided with the product.

Specification

Subject	Description
Part No.	RG-3601
Input Power	120 Vac, 60 Hz
Enclosure Specifications	· Data Cabinet A/B: 762(W) × 2319(H) × 762(D) mm · Control Cabinet: 908(W) × 324(H) × 457(D) mm
Data Cabinet	· Reception of control rod (33 channels) position signals · One D/E Card allocated per control rod · Digital conversion of control rod position signals (5-bit Gray Code) · Transmission of control rod position signals and Data Cabinet power status data to the Control Cabinet via RS-422
Control Cabinet	· Computation of control rod position data · Generation of control rod alarm data and control of alarm contact outputs · Indication of control rod position and alarms · Transmission of control rod position data to the plant computer · Components related to control rod position computation and indication are configured in a Master/Slave redundant system, where the Slave takes over automatically in the event of a Master failure
Equipment Qualification	· IEEE-323 (EQ) · IEEE-344 (SQ) · Regulatory Guide 1.180 (EMC)

Domestic Track Records

Main Client	KHNP		
Project Name	Kori NPP #3, 4	Hanbit NPP #1, 2	Kori NPP #2
Delivery Year	2015	2017	2024

Website	http://www.realgain.co.kr/
Address	B-13F, IS BIZ TOWER CENTRAL, 25, Deokcheon-ro 152beon-gil, Manan-gu, Anyang-si,Gyeonggi-do, Republic of Korea
Contact Information	• Name: Suk Sung Yong • Position: Overseas Business Team Manager • Email: roddysuk@realgain.co.kr • Contact Number: +82-70-5161-9686

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SAE-AN ENGINEERING CORPORATION

COMPANY INTRODUCTION

SAE-AN Engineering Corporation (SAE-AN) was established in February 1997 to serve the inspection and maintenance services market for NPPs in the Republic of Korea.

Since its foundation, SAE-AN has specialized in providing comprehensive Nuclear Power Engineering Services, including Pre-Service Inspection (PSI) and In-Service Inspection (ISI) for major components and systems, such as Reactor Pressure Vessels and Steam Generator Tube Sheets. The company's expertise further extends to Steam Generator Tube Lancing and Foreign Object Search and Retrieval (FOSAR), as well as wastewater treatment solutions.

SAE-AN has consistently dedicated its efforts to supporting the safe and reliable operation of nuclear power plants. Through decades of accumulated experience and technical know-how, the company has achieved significant progress and recognition in the Nuclear Power Engineering market, not only in the Republic of Korea but also in the United States and the United Arab Emirates. As part of "Team Korea," SAE-AN successfully executed PSI services for Units 1 through 4 of the Barakah Nuclear Power Plant between 2016 and 2023.



Certification ISO 9001:2015, ISO 45001:2018

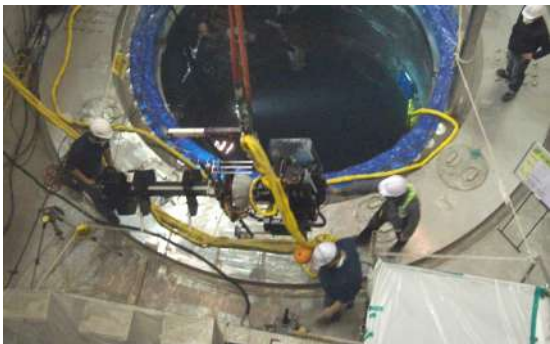
PRODUCTS/SERVICES INFORMATION



Conventional & Advanced NDT for Piping, Components and Structures



Eddy Current Test for SG Tubes



MUT for Reactor Pressure Vessel

[PSI (Pre-Service Inspection) and ISI (In-Service Inspection) Services]

ISI (In-Service Inspection) Services of the major components and system of NPP are performed to ensure 1. Improve safety and reliability, 2. Increase productivity and profitability, 3. Optimize maintenance schedules, 4. To meet regulatory requirements, 4. Avoid incidents that impact life, property, and the environment.

Specification

- Pipping, Components and Structures [UT/AUT/MT/PT/VT]
- Reactor Pressure Vessel [MUT/RVT]
- Reactor Vessel Head Penetration (RVHP) [UT]
- Steam Generator Tubes [ECT]
- Flow Accelerated Corrosion (FAC) [UT(Thickness Measurement)]

Domestic Track Records			
Main Client	Doosan Enerbility	KHNP	KPS
Project Name	NDE	ISI, PSI	ISI
Delivery Year	1997~	1999~	2002~

Overseas Track Records			
Client (Country)	KHNP (UAE)	ZETEC / ANATEC	Westinghouse
Project Name	Barakah NPP PSI	ECT Data Analysis	ECT Data Analysis
Delivery Year	2016~2023	2005/2009~	2021~

Website	www.sae-an.co.kr
Address	#910, 184(Byucksan Digital Vally II), Gasan digital 2-ro, Geumcheon-gu, Seoul, Rep. of Korea
Contact Information	• Name: JANG SOON-HYOUNG • Position: General Manager • Email: shjang@sae-an.co.kr • Contact Number: +82-2-2102-2821

SAMSHIN LIMITED

COMPANY INTRODUCTION

Established in 1966, Samshin has supplied reliable products for more than 700 TPP projects and more than 60 NPP projects in the world. Samshin provides total valve services including design, manufacturing, testing, and on-site services for NPPs and TPPs. All key processes—including casting, forging, machining, NDE, assembly, painting, and packaging—are performed in-house, ensuring full control over quality and delivery.



Certification

ASME "N", "NPT", "NV", "KEPIC-MN", "KEPIC-EN", ISO 9001, ISO 14001, ISO 45001, National Board "NR", PED Module H & PESR Module H & MM, HAF604, API 6D, API 602, API 609, etc.

PRODUCTS/SERVICES INFORMATION



[Gate Valve]

- Gate Valves are used for on-off service.
- Gate valves are straight-through flow valves which provide positive shutoff with minimal pressure drop (low flow resistance coefficient) and flow turbulence.

- Large size valves with short end to end are available.
- Overcome the thermal expansion problems due to the increased temperature with applying the flexible wedge disk or parallel slidedisk for high temperature conditions.

Specification

- Applicable Code: ASME B16.34, EtoE Dimension: ASME B16.10, End Connection: ASME B16.25
- Forged Steel Valve: 150LB ~ 4500LB, 0.5inch ~ 38inch
- Cast Steel Valve: 150LB ~ 4500LB, 2inch ~ 80inch
- Valve Type: Solid Wedge, Flexible Wedge, Parallel Slide Disk, Double Disk

Domestic Track Records			
Main Client	KHNP	Doosan	Hyundai
Project Name	Saeul NPP #1,2	Shin-Hanul NPP #3, 4	Oumache III CCPP
Delivery Year	2020	2025	2024

Overseas Track Records			
Client (Country)	Westinghouse	Barakah NPP (UAE)	CNPEC
Project Name	Kori NPP #2	Barakah NPP #3, 4 BOP	Fangchenggang NPP #3, 4
Delivery Year	2025	2017	2019



[Globe Valve]

- Offered precise throttling and control.
- Excellent capabilities to control the fluids with applying the needle disk.
- Applying the Y-pattern globe valve to decrease the flow resistance.
- Minimization of the seat damages due to the cavitation.
- Minimization of the vibration problems applying the disk guide.

Specification

- Applicable Code: ASME B16.34, EtoE Dimension: ASME B16.10, End Connection: ASME B16.25
- Forged Steel Valve: 150LB ~ 4500LB, 0.5inch ~ 38inch
- Cast Steel Valve: 150LB ~ 4500LB, 2inch ~ 80inch
- Valve Type: T or Y Pattern, Bellows Seal, Metal Diaphragm, Angle, Needle
- Quick Maintenance

Domestic Track Records			
Main Client	KHNP	Doosan	Hyundai
Project Name	Saeul NPP #1,2	Shin-Hanul NPP #3, 4	Oumache III CCPP
Delivery Year	2020	2025	2024

Overseas Track Records			
Client (Country)	Westinghouse	Barakah NPP (UAE)	CNPEC
Project Name	Kori NPP #2	Barakah NPP #3, 4 BOP	Fangchenggang NPP #3, 4
Delivery Year	2025	2017	2019

Website	http://www.samshinvalve.co.kr/EN/MAIN		
Address	1138-11, Seongjin-Ro, Ipjang-myeon, Cheonan-si, Chungcheongnam-do, S. Korea		
Contact Information	• Name: Lee, Junhyeok • Position: Assistant manager • Email: leejh@ssv.co.kr • Contact Number: +82-41-590-6126		

SENTECH ENG Co., Ltd.

COMPANY INTRODUCTION

SENTECH ENG Co., Ltd. is Korea's leading manufacturer of precision temperature sensors, recognized for its technological excellence and long-standing industrial experience. As a technology-driven venture company, SENTECH ENG specializes in the design, development, and production of industrial temperature sensors used in various demanding environments such as power plants, steel mills, chemical plants, and defense systems.

The company operates a corporate-affiliated research center, continuously innovating to meet diverse customer needs. Its production system is certified under ISO 9001 and other international standards, ensuring reliable quality and performance.

With over 10 domestic patents related to sensor structures, connector systems, and heat/vibration-resistant designs, SENTECH ENG provides customized solutions that improve accuracy, durability, and installation efficiency. Notably, the gas and steam turbine temperature sensors developed by SENTECH feature enhanced heat dissipation, fast response time, and vibration resistance—addressing key issues found in imported products.

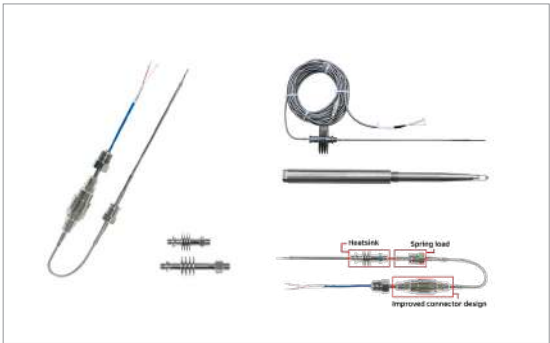
• **Strengths of Our Products:**

- Wide Temperature Range: From -254°C to +2300°C
- Field-Proven Durability: Suitable for high-vibration, high-temperature industrial sites
- Certified Quality: KCs, ATEX, IECEx, CE, ISO 9001, 3-A, SIL3
- Patent-Backed Innovation: 10+ patents for sensor rod structures, protective tubes, and connector modules
- Successful Supply Record: Supplied to major power plants, EPC companies, and OEMs across Asia and beyond
- Localization Advantage: Replacing high-cost foreign sensors with more affordable and equally reliable local alternatives



Certification KCs, ATEX, IECEx, CE, 3-A, SIL3, ISO9001, ISO14001, ISO45001

PRODUCTS/SERVICES INFORMATION



[Turbine Temperature Sensor]

- Gas Turbine Temperature Sensor for power plant
- Innovative Products Featuring Three Patents
- Incorporates Anti-Vibration, Heat-Resistant, and Spring Rod Technology
- Boasts a History of Deliveries to Major Power Plants in Korea, Currently in Operation

*Please be advised that prices may vary according to product specifications.

Specification

The turbine temperature sensor developed by SENTECH ENG is designed for high-temperature environments such as gas and steam turbines. It operates reliably even at temperatures exceeding 600°C and has been successfully installed in major power plants including Shin-Incheon CCPP, Pyeongtaek TPP, Busan CCPP, and CGN Yulchon CCPP, where it has replaced imported GE sensors and operated stably for more than five years.

This sensor incorporates three key technological improvements:

First, a heatsink structure is applied to reduce internal heat by approximately 100°C, preventing overheating of the connector. This innovation is covered under Korean Patent No. 10-2141894.

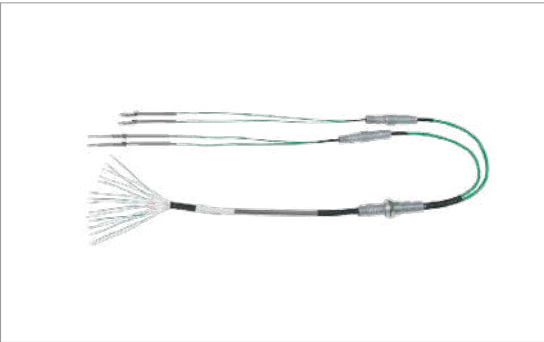
Second, the product features an improved connector design with double shielded tubes that enhances durability under high-temperature and high-vibration conditions. This prevents deformation of the insulator and fracture at the joints. This design is protected under Patent No. 10-2156252.

Third, a spring-loaded structure is integrated into the sensor rod to absorb vibration and maintain tight contact with the thermowell, thereby preventing gas leakage and ensuring stable signal transmission. This technology is protected by Patent No. 10-2400351.

Together, these innovations significantly improve the performance, safety, and lifespan of the sensor in extreme turbine operating environments, providing a localized, cost-effective alternative to imported products.

Domestic Track Records			
Main Client	KOSPO	WP	CGN
Delivery Year	2023	2018	2019

Overseas Track Records	
Client (Country)	QAPCO (Jordan)
Project Name	Al Qatrana CCPP
Delivery Year	2023



[Bearing T/C in Nuclear Power Plant]

SENTECH ENG’s bearing-type thermocouple (T/C) and RTD sensors are highly reliable temperature sensors specifically designed for turbine and compressor bearings. Unlike conventional integral-type sensors such as those from MAN TURBO (which are 5 to 36 meters long and difficult to install or dismantle), SENTECH’s product features a modular design, allowing users to replace only the damaged sections, significantly reducing maintenance time and cost.

The sensors incorporate double shielding and enhanced connector design to minimize the risk of short circuits and electrical noise caused by vibration or heat exposure. They are capable of operating in environments up to 600°C, and the cable length and connector types can be customized to meet specific site conditions.

These sensors have already been successfully delivered and installed at major industrial sites, including the Yeosu TPP in April 2023, and Sammam Petrochemical and Hyundai Chemical in June 2023. A special version has also been developed for a 36M booster compressor RTD application, showcasing the flexibility and engineering capability of SENTECH ENG.

Overall, this product offers a robust, customizable, and cost-effective solution for precise temperature measurement in high-temperature rotating machinery environments.

Domestic Track Records			
Main Client	KOSPO	Sammam Petrochemical	Hyundai Chemical
Project Name	Shin-Incheon CCPP		
Delivery Year	2020		

Overseas Track Records		
Client (Country)	ENEC (UAE)	MIPCO (UAE)
Project Name	Barakah NPP	Mirfa CCPP 1600MW
Delivery Year	2020	2020

Website	https://www.sentecheng.com
Address	15, Bucheon-ro 425beon-gil, Ojeong-gu, Bucheon-si, Gyeonggi-do, Republic of Korea
Contact Information	• Name: Daniel Jun • Position: Sales Assistant Manager • Email: sales@sentecheng.com • Contact Number: +82-10-8811-6429

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Seojin Instech Co., Ltd.

COMPANY INTRODUCTION

Seojin Instech is a specialized company in the field of instrumentation, such as level sensors and flowmeters, and has been playing an important role across a wide range of industries—from building automation and factory automation to hydro, TPPs, and NPPs—for the past 40 years, under the management philosophies of customer satisfaction, professionalism, and responsible management.

We are proud that we have been consistently developing and manufacturing high-quality products based on our technologies and experience, enabling us to provide our customers with exceptional service.



Certification ISO 9001, ISO 14001, ISO 18001 KEPIC-MN/EN/SN

PRODUCTS/SERVICES INFORMATION



[Displacement Type Level Transmitter (Model: SDT-420)]

The displacement-type transmitter is a SMART-level transmitter that displays liquid levels on the unit and transmits current signals and HART communication via two wires.

In this device, liquid levels are measured by converting pressure changes detected by the load cell into linear movements of the fine torsion values in the torque tube. These fine torsion values correspond to the submerged depth of the displacer, which is made of a material with a specific gravity of 2.0.

Specification

- Range: 300 ~ 5,000 mm
- Process Temperature: -40 ~ 450 °C
- Resolution: - Analog: 0.01mA
- Process Pressure: 200 kg/cm²
- LCD Display: Bar graph, mm, Inch, %, mA
- Power Supply: 15 ~ 30 V DC
- Certificate: ATEX, KC, CE, KOSHA
- Output / Std: 4 ~ 20mA DC HART Communication

Domestic Track Records			
Main Client	KHNP	KOEN	Hyundai
Project Name	Saeul NPP #3,4	Yeongdong BPP	Ulsan CHPP
Delivery Year	2023	2024	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Vietnam
Project Name	Barakah NPP #1, 2, 3, 4	Thai Binh NPP #2
Delivery Year	2023	2024



[Magnetic Float Level Switch (Model: SMC-7)]

The SMC-7 Series level switch operates on the principle that a magnetic field can pass through stainless steel, a nonmagnetic material. In this case, a magnetic core connected to the float moves vertically in the stem and the core actuates the switch using magnetic force as the float rises up.

Specification

- Range: 150 ~ 300 mm
- Output / Std.: 1 SPDT, Option: 1 DPDT
- Process Temperature: - 40 ~ 450 °C
- Process Pressure: SMC-73: Max. 46 Bar, SMC-75: Max. 70 Bar
- Material: C.S, 304 SS, 316 SS
- Contact Rating: 10 A 250 V AC / 0.6 A 125 V DC, 5 A 250 V AC / 0.5 A 125 V DC 15 A 250 V AC / 1 A 125 V DC

Domestic Track Records			
Main Client	KHNP	Daewoo E&C	Hyundai
Project Name	Saeul NPP #3,4	Shin-Sejong CCPP	Ulsan CHPP
Delivery Year	2022	2024	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Saudi Arabia
Project Name	Barakah NPP #1, 2, 3, 4	Jafurah CCPP
Delivery Year	2023	2024



[Electromagnetic Flowmeter (Model: SMF)]

The electromagnetic flowmeter has coils wound around the sensor body to generate a magnetic field. The commercial frequency excitation method, which applies voltage to the coils, was conventionally used, whereas the low-frequency square wave excitation method is more commonly used today. In this low-frequency square wave excitation method, high accuracy of ± 0.5% or better can be achieved, as it does not generate induced noise.

Specification

- Turn-down Ratio: 1500: 1
- Body Material: C.S 304 SS, 316 SS
- Process Temperature / PTFE: -10 ~ 160 °C
- Hard Rubber: -10 ~ 80 °C
- Velocity: 0.1 ~ 10 m/s
- Conductivity: 5μS/cm
- Accuracy: ±0.5% F.S (±0.2% of rate, 0.1m/s-option)
- Communication: HART, RS-485, TMS, USB

Domestic Track Records		
Main Client	SK Chemicals	EWP
Project Name		Dangjin TPP
Delivery Year	2024	2024



[Averaging Pitot Tube Flowmeter(SAP-810)]

This Averaging Pitot Tube developed by Seojin Instech with the support of KEPCO is a highly efficient, reliable, and repeatable head-type flowmeter. Fluid passing around a Pitot tube generates a pressure difference between the front and rear of the tube that is proportional to the flow velocity. The holes placed on the front and rear of the tube are used to sense the difference, which is then used to calculate the flow rate.

Specification

- Sensor Configuration: Modified Rate
- Body Material: 304 SS, 316 SS, Monel
- Accuracy: ±1.0% of Rate
- Mounting Parts Material: C.S, 304 SS, 316 SS,
- Repeatability: ±0.1% of Rate
- Process Fluid: Liquid, Gas, Steam
- Turn down Ratio: 5: 1

Domestic Track Records	
Main Client	KHNP
Project Name	Shin-Hanul NPP #5, 6
Delivery Year	2023

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #3, 4
Delivery Year	2023



[Venturi (Model: SVT)]

The Venturi tube is characterized by its tapered inlet and diverging outlet. The design greatly reduces head loss in the system when compared to an orifice plate. It can handle 25% to 50% more flow than an orifice for a comparable larger line size.

Specification

- Venturi tube:
 - Can be used on slurries and dirty fluids.
 - Short upstream piping required.
 - Low installation cost, Lower susceptibility to erosion.
 - High pressure recovery.
 - Low permanent pressure loss.
- Standards: ISO 5167, ASME

Domestic Track Records		
Main Client	KHNP	KSTAR
Project Name	Saeul NPP #3,4	Nuclear Fusion
Delivery Year	2024	2020



[Orifice Assembly(SOP)]

Orifice plates are widely used for measurement as they provide the simplest and most economical means of flow detection. Concentric, quarter-circle, eccentric, and segmental orifice plates are available.

Specification

- Orifice Bore Type: welding neck, slip-on, socket-weld, ring-joint welding neck
- Nominal Diameters: 25mm to 500mm
- Flange Material: A105, A182-F304, A182-F316, A182-F11
- Flange Rating JIS 10, 20, 30; ANSI 150, 300, 600

Domestic Track Records		
Main Client	KHNP	Doosan
Project Name	Saeul NPP #3,4	Saeul NPP #3,4
Delivery Year	2024	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Jordan
Project Name	Barakah NPP #3, 4	JRTR
Delivery Year	2018	2016



[Ultrasonic Flow Meter]

An ultrasonic flow meter (AceSonic) is designed to measure the flow rate of a fluid in a pipe. The sensor is a clamp-on type and easy to install and use. It performs two functions: an ultrasonic transmitter and receiver. The sensor is fixed to the outer wall of the pipe at a specific distance.

Domestic Track Records	
Main Client	Posco
Project Name	Pohang Factory
Delivery Year	2022

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #3, 4
Delivery Year	2024

Specification

- Measurement Principle: Transit-time or Doppler method.
- Flow Range: From low to high flow rates, typically from 0.1 m/s to 10 m/s.
- Accuracy: ±1% (for flow rates over 0.5 m/s)
- Temperature: Std.: -30 ~ 90 °C
Max.: -30 ~ 160 °C
- Fluid Compatibility: Suitable for liquids, gases, and slurries
- Output: 4-20mA, RS-485 Modbus communication.



[Radar Type Level Transmitter(SR-100)]

The Radar-Type Level Transmitter is a high-precision, non-contact level measurement device that uses radar technology to detect and monitor the level of liquids or solids inside tanks or silos. It emits microwave signals that reflect off the material's surface and calculates the level based on the time delay of the return signal.

Specification

- Accuracy: ±1 mm
 - Measuring Range: 0 ~ 10m
 - Frequency: 80 GHz[76.2 ~ 80.2 GHz]
- Beam Angle: 5°
 - Input Voltage: 16 ~ 40V/DC, 2 Wire System
 - Output: 4-20mA, HART 7.0

Website	https://www.seojin.biz	
Address	14, Dunchon-daero 457 beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea	
Contact Information	• Name: Ji-Wook, Kang • Position: General Manager	• Email: jwkang@seojin.biz • Contact Number: +82-31-627-9037

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Seonghwa Industrial Co., Ltd.

COMPANY INTRODUCTION

SEONGHWA Industrial Co., Ltd. is located in Jinju, South Korea and has provided domestic and overseas customers with its quality product and service, including pipe hanger and support, prefabricated piping, and skids & Modules. Since its foundation in year 1983, SH has been striving to become a global leading piping technology company. SH is uniquely positioned as the most trusted piping solution provider covering various scopes such as engineering, procurement, fabrication, site erection and maintenance service (reliability assessment & improvement services for power plant, refineries, process and petrochemical plants, LNG terminals, offshore plant, etc.)

One of the most appreciated strengths of SH as a piping solution provider is to carry out engineering of pipe support and piping simultaneously by utilizing engineering tools, which integrate both commercial and in-house engineering software programs. SH also procures other piping materials (e.g. pipe, fitting, valve, flange, and fitting) efficiently and effectively so that customers can utilize SH as one-stop solution provider for all the varying purpose, role, process, scope, and stage of the project.



Certification

ISO9001, ISO14001, OHSAS 18001, PED H1, KEPIC-MN, ASME "S" & "PP", EN1090, EN3834

PRODUCTS/SERVICES INFORMATION



[Pipe Hangers & Supports]

Pipe Hangers & Supports refer to the devices installed to support or protect the piping system in power plants, petrochemical complexes, LNG terminals, and offshore plants. They allow for displacement due to the weight and thermal expansion

of the pipes, and they support or protect the piping system from fluid vibrations, earthquakes, and external shocks. All Pipe Hangers & Supports are independently developed by SEONGHWA.

Specification

- Full Absorption: Constant Hanger, Snubber
- Partial Absorption: Variable Hanger, Bracing, Damper Complete Restraint: Rigid Hanger, Rigid Strut

Domestic Track Records			
Main Client	DL E&C	SGC eTEC E&C	Xi C&A
Project Name	LG ABS	Nexlene 2nd	Daesan P4
Delivery Year	2024	2024	2023

Overseas Track Records			
Client (Country)	Mitsubishi Power (Singapore)	GE Vernova (Taiwan)	Nooter Eriksen (Uzbekistan)
Project Name	Meranti	Chung Chia	Sirdarya
Delivery Year	2024	2024	2022



[Prefabricated Piping]

Prefabricated piping refers to piping products manufactured in a shop by connecting pipes and fittings (such as elbows, tees, reducers, bosses, etc.) according to the project specifications and customer requests. This process minimizes installation at the construction site and reduces both the construction period and costs.

Specification

- Carbon Steel: SA/A106-B, SA/A106-C, SA/A333-6, SA/A53-B, SA/A672, API 5L, P265GH, L245NB
- Low Alloy Steel: SA/A335-P11, SA/A335-P12, SA/A335-P22, SA/A335-P5, SA/A691, 16Mo3, 13CrMo4-5, etc.
- Stainless Steel: SA/A312-TP304(L), SA/A312-TP316(L), SA/A312-TP317, SA/A312-TP321, UNS31803, etc.
- Production Capcaity: 12,000 Tons/Year, 120,000 Dia./Month

Domestic Track Records			
Main Client	Siemens Energy	Lotte E&C	Daewoo E&C
Project Name	Ulsan CHPP	Cheongju	Shin-Sejong CCPP
Delivery Year	2024	2023~2024	2022~2023

Overseas Track Records			
Client (Country)	GE Vernova (Greece)	ATM Piping & Fittings (Turkiye)	Babcock Power (Israel)
Project Name	Alexandroupolis	Akkuyu NPP	Rutenberg TPP #3, 4
Delivery Year	2024	2023~2026	2023~2024

Website	www.seonghwa.co.kr		
Address	34-2, Jinma-Daero 2498Beon-Gil, Ibanseong-Myeon, Jinju-Si, Gyeongsangnam-Do, 52615, Republic of Korea		
Contact Information	• Name: Hyunsoo Ahn • Position: Sales Manager	• Email: hyunsoo.ahn@seonghwa.co.kr • Contact Number: +82-55-970-0123	

SPACE SOLUTIONS Co., Ltd.

COMPANY INTRODUCTION

Spacesolutions Co., Ltd. is specialized in developing/manufacturing/supplying vacuum sealing bellows & valve for all-around industries. Bellows is manufactured through precise welding between Outer diameter (OD) & Inner diameter (ID) after forming thin metal plate into the shape of a wave. Key technologies of bellows manufacturing are mold designing, precision machining & welding. Products implemented with bellows are able to perform multi-directional movement while maintaining vacuum status. Hence it is used as a key liquid control component for many business area such as Aero/Space/Defense/High-vacuum equipment/Industrial special valve/Nuclear power.

Based on the accumulated technological know-how to date, Spacesolutions Co., Ltd. is developing and commercializing a variety of valves (including high-purity/pressure and cryogenic glove type) which are processed through acidic and alkaline chemical cleaning. Also, we are currently undergoing development and mass production of products for local & overseas market-leading class customers through large investment in Gunsan factory(located in southern province ROK).



Certification

- ISO 9001 & 14001 (Design, Development and Production of Welded Metal Bellows, Valva, Fluid Control Components)
- AS 9100 (Design and Manufacture of Bellows, Valve and Pneumatic System Components for Aviation, Space and Defence)

PRODUCTS/SERVICES INFORMATION



[Metal Bellows]

Parts for fluid control used in various industries such as defense, aerospace, semiconductor equipment, FPD, OLED, LCD, high vacuum equipment, valves, etc.

Specification

- Excellent Airtightness: U.H.V condition as low as 1×10⁻¹¹ atm-cc He/sec
- Excellent Durability: Capable of more than 1, 000, 000 cycles
- Excellent Corrosion Resistance: Use highly anti-corrosive materials such as Stainless Steel, Inconel, Haynes, Hastelloy
- Excellent Thermostability: Used at a wide range of temperatures [-260~1200°C] as different materials

Domestic Track Records

Main Client	Magnex	Advansys	AK Tech
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Overseas Track Records

Client (Country)	King Lai International (Taiwan)	JSTC (China)	Pfeiffer Vacuum+Fab Solutions Vietnam (Vietnam)
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[High-pressure Globe Valve]

High-pressure Globe Valves are valves with a metal bellows seal structure that completely prevent external leakage of high-pressure fluids and provide stable flow control. They are core components mainly used in semiconductor manufacturing equipment and nuclear power facilities.

Specification

- Max. Working Pressure: Max. 100/bar (1.5"~2": Max. 30/bar)
- Temperature Range: - 40 ~ 80°C(PCTFE) / 150°C(PI)
- Flow Capacity(Cv): 2.0±10%gpm ~ 38.7±10%gpm
- Orifice Size(mm): Φ12 ~ Φ50
- Body Material: SUS316L

Domestic Track Records

Main Client	Luztech
Delivery Year	2023

Website

<http://www.spacesolutions.co.kr>

Address

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Contact Information

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SUNG IL Co., Ltd.(SIM)

COMPANY INTRODUCTION

Since 2003, SUNG IL SIM has supplied Shop Fabricated Piping for 16 Nuclear Power plants. Through supplying safety related shop fabricated piping for the Barakah NPP #1,2,3,4 Units, we proved our product's safety and Quality to the overseas market. In case of other Power Plant Experiences, we participated in 213 CCPP Projects and 90 TPP Projects, and more than 450 On/Off shore plant project. Furthermore, we operate the largest spool fabrication shop in Korea and are currently building an even larger facility to expand our capacity. Based on this strong production capability, our business continues to grow steadily. With our expanding global sales network, international certifications, and strong partnerships with leading global EPC companies, we are proudly taking the lead in the global market. However, we are not resting on our current achievements. We are continuously investing in technology development and training skilled professionals. Through these ongoing efforts, we aim to expand our direct exports of NPP components and seize more opportunities in the global market.



Certification

KEPIC MN, KHNP Certificate of Registration (P202A,P202B,P202C, P202D,101Q,104Q,108Q,EP101A,EP101B,ME-CP1,ME-PF1) KEPCO Certificate of Registration, Certification of a Qualified Supplier (KOSPO, EWP, KOMIPO, WP, KOEN), ASME 'S','PP','NA','NPT', PED MODULE-H, ISO 19443, National Board, EN ISO 3834-2, EN ISO 1090-2, DNV, ISO 9001, ISO 14001, ISO 45001

PRODUCTS/SERVICES INFORMATION



[Shop Fabricated Piping]

Shop-fabricated piping consists of semi-finished products to minimize the installaion and fabrication of pipes at sites and shorten the construction period. Through our facilities and technology, we can carry out procurement, welding, and all processes of piping fabrication in our shop.

Specification

- Size: Min 0.25"(inch) ~ Max 130"(inch)
- Material: CS/ AS / SS / Inconel/ Titanium/Duplex



- Capacity: Month 4,250 Tons / Year 51,000 Tons
- By using our Capacity, we can provide all of the Fabrication Process in one-stop solution
- New fabrication plant is under construction to increase fabrication capacity and shorten inland transportation in Busan.

Domestic Track Records			
Main Client	KHNP	BHI	Samsung
Project Name	Shin-Hanul NPP #3, 4	CGN Daesan	Meghnaghat
Delivery Year	Ongoing	2024	2022

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	GE Vernova (USA)	Mitsubishi Heavy Industries (Japan)
Project Name	Barakah NPP #1, 2, 3, 4	Hsinta CCPP	Lamma CCPP
Delivery Year	2018	2025	Ongoing



[Induction Bend]

Induction bends are used for nuclear power plants and various kinds of power plants. Through pipe bending, induction bends could replace fittings. As a result, we could reduce welding joints and improve productivity.

Specification

- Thickness: Min 6T ~ Max 130T
- Diameter: 1"(inch) ~ 80"(inch)
- DR: Min 1.3DR
- Material: CS / AS / SS / TMCP
- Capacity: 32,000 ton/year



Domestic Track Records			
Main Client	KHNP	KOGAS	SK E&C
Project Name	Saeul NPP #3, 4	LNG Transmission	Ulsan GPS CCPP
Delivery Year	2022	2023	2022

Overseas Track Records			
Client (Country)	BORSIG (Germany)	Barakah NPP (UAE)	GE Vernova (USA)
Project Name	Ras Laffan	Barakah NPP #1, 2, 3, 4	Ostroleka CCPP
Delivery Year	2025	2018	2023

Website	www.sungilsim.com		
Address	17F,BUSAN VENTURE TOWER, 22 Mora-ro, Sasang-gu, Busan, Rep of Korea		
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	• Position: Deputy General Manager	• Contact Number: +82-51-950-8854	

Taewoong Co., Ltd

COMPANY INTRODUCTION

TAEWOONG has been a forge master since 1981 and kept developing its technologies through investment in facilities. We have started supplying for Nuclear Power industry since 2020 worldwide. Our courage and passion led us to where we stand right now, and we are keeping strong relationship with different companies until now. Not only staying in one position, we never stopped improving ourselves to develop further technologies. We are revamping our Ring-Rolling Mill from 9.5m outer diameter to 11m outer diameter. The main objective for this revamping is to step forward as a leader in SMR (Small Modular Reactor) industries by upgrading our manufacturing capacity.



Certification ISO 9001, ISO 14001, ISO 45001, ASME MO, etc

PRODUCTS/SERVICES INFORMATION



[Closure Lid For Nuclear Waste]

The closure lid for nuclear waste is an essential component that seals the upper part of a storage container designed for the safe containment of high-level radioactive waste. It serves to completely isolate the waste

from the external environment and prevent the release of radioactive materials from inside. Since it must withstand extreme conditions such as high radiation, elevated temperatures, and long-term storage, it is manufactured using high-strength, corrosion-resistant metal materials.

Specification

- Outside Diameter: Max.6,500mm
- Weight: Max.120Ton

Overseas Track Records		
Client (Country)	Holtec (USA)	Kanadevia Power (India)
Delivery Year	2024	2023



[Nuclear Shell]

The shell for nuclear waste is the main body of a storage container designed to safely contain high-level radioactive waste. It serves as a physical barrier that provides structural protection for the waste and ensures complete isolation from the external environment. To guarantee long-term safety, the shell is constructed from materials with high mechanical strength, thermal resistance, and corrosion resistance.

Specification

- Outside Diameter: Max.9,500mm(by Ring Rolling Mill), Max.6.700mm(by Press)
- Weight: Max.65Ton(by Ring Rolling Mill), Max.120Ton(by Press)

Overseas Track Records		
Client (Country)	Holtec (USA)	Petersen Machinery (Canada)
Delivery Year	2024	2024

Website

www.taewoong.com

Address

67 Noksansandan 27-ro, Gangseo-gu, Busan, South Korea 46751

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UnisonHKR Co., Ltd.

COMPANY INTRODUCTION

We, UnisonHKR, are the leading equipment manufacturer, located in South Korea, in the plant and construction industry with over 40 years of experience. Our ultimate goal is to satisfy all of our customers with good quality and minimized cost. Our headquarters are located in Cheonan Factory in Korea and the BinhDuong factory in Vietnam. We serves major domestic EPC contractors such as Samsung E&A, Doosan Enerbility, and Hanwha E&C, as well as global clients including Aramco, GE, and MHI, maintaining a reliable supply to projects worldwide.



Certification

ISO 9001, ISO 14001, ISO 45001, ISO EN 3834-2, EN 1090-1, PED Module H, ASME U,PP,S,U2, NA, NPT, NS, KEPIC MN-148, MN-152, SN-727, KS · CE · EJMA

PRODUCTS/SERVICES INFORMATION



[Spring Support]

Hanger and support are safety equipment installed to support and protect a piping system from internal and external shocks that are caused by deformity due to self-weight and heat expansion, vibration of fluids, and other seismic causes that occur when

fluids such as water, steam, and gas flow in the pipes depending on various plant systems.

Specification

- **Variable Spring Hangers** provide economical support for piping systems with vertical thermal expansion. This product is typically used where variation between the operating and installed loads can be tolerated.
- **Constant Spring Hangers** assure perfectly constant support through the entire deflection of the pipe load. This counter-balancing of the load and spring moments about the main pivot is obtained by the use of carefully designed compression-type load springs. lever, and spring tension rods.
- **Hydraulic Snubbers** restrain undesirable displacement of piping system or its components when they are about to oscillate due to seismic or other types of dynamic loading, while allowing their free movement during the thermal displacement mode.
- **A Cold Shoe** is a pipe support used for cryogenic applications where heat transferred to the surface is not desirable. A pipe anchor is a support used to anchor cryogenic pipes for axial, lateral, and rotational loads. These supports can be used for temperatures down to -196°C.



[Expansion Joint]

An expansion joint is a flexible connector designed to effectively absorb movements caused by external factors such as thermal expansion, contraction, vibration, installation misalignment, and seismic activity, while safely containing the fluid within a piping system. It is manufactured in various types and sizes according to design conditions, including pressure, temperature, fluid type, service life, and installation environment.

Specification

- **Metal Expansion Joint** is a flexible connector made with metal bellows, designed to perform reliably in high-temperature and high-pressure environments. It is widely used in various industries such as power plants, petrochemical facilities, shipbuilding, and steel manufacturing.
- **Non-metal Expansion Joint** is a flexible connector made from non-metallic materials such as fabric, fiber, plastic, or rubber. It is used to absorb thermal expansion, vibration, and installation misalignments in low-temperature and low-pressure environments. Compared to metal types, it is lighter and more flexible.
- **Rubber Expansion Joint** is a flexible connector made of rubber. Due to the elasticity of rubber, it provides excellent shock absorption and vibration reduction, and is primarily used in low to medium pressure environments. It is commonly used in HVAC systems, drainage systems, and water treatment facilities.

Domestic Track Records

Main Client	Doosan	KHNP	Hyundai
Project Name	Saeul NPP #3,4, Shin-Hanul NPP #3, 4	Saeul NPP #3,4, Hanbit NPP #1, 2, 3	Saeul NPP #3,4
Delivery Year	2020~2021, 2024	2020~2022, 2024	2020~2021

Overseas Track Records

Client (Country)	Barakah NPP (UAE)	Jordan
Project Name	Barakah NPP (Spring Support), Barakah NPP (Expansion Joint)	JRTR
Delivery Year	2014~2020, 2014~2018	2016

Website	www.unisonhkr.co.kr		
Address	53, Ugakgol-gil, Susin-myeon, Dongnam-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea.		
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	• Position: Manager	• Contact Number: +82-41-620-3333	

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USERS Inc.

COMPANY INTRODUCTION

USERS Inc. specializes in the design and custom manufacturing of advanced neutron measurement and analysis systems, utilizing technologies developed by leading nuclear research institutions. Our core expertise lies in providing tailored solutions for neutron flux monitoring within nuclear reactor cores, as well as delivering technical services related to R&D projects, technology transfer, and commercialization.

With a strong foundation built on years of successful collaboration with public institutions and research organizations, USERS has become a trusted partner in the domestic nuclear energy sector. Now, we are actively extending our capabilities to support international nuclear projects, leveraging our proven technologies and engineering excellence.

At USERS, we are committed to continuous innovation and R&D, aiming to deliver world-class products that meet the evolving needs of the global nuclear industry. Backed by deep technical know-how and a reputation for reliability, we strive to be a global leader in neutron instrumentation and nuclear measurement solutions.

• Key Supplied Systems

- DRCS (Digital Reactivity Computer System)
- Reactivity monitoring system for Low Power Physics Test (LPPT)
- ONICE (On-line Neutron Inverse Count Rate Ratio):
- Real-time neutron behavior analysis using ex-core detectors
- TNMS (Temporary Neutron Monitoring System):
- Portable neutron monitoring equipment for flexible deployment
- CoSi (Core Simulator):
- High-fidelity simulation tool for reactor core behavior analysis
- AENFMS (Auxiliary Ex-core Neutron Flux Monitoring System):
- Backup monitoring system to support primary neutron flux instrumentation

• Successfully Localized Technologies (R&D Achievements)

- We have independently developed systems that were previously reliant on overseas technology. These systems are currently undergoing verification for future supply to domestic Nuclear Power Plants:
- ENFMS (Ex-core Neutron Flux Monitoring System)
- FIDAS Card (Fixed In-core Data Acquisition System)
- Burn-up Measurement System
- Boronometer (Boron Concentration Measurement Equipment)



Certification

Holds a total of 11 related patents

PRODUCTS/SERVICES INFORMATION



[DRCS (Digital Reactivity Computer System)]

DRCS is a mandatory system for conducting Low Power Physics Tests (LPPT) in Korean Pressurized Water Reactors (PWR), in accordance with ANS/ANSI 19.6.1 standards. Core operating variables such as reactivity, neutron flux, and RCS temperature must be continuously monitored in real time.

Specification

- Digital reactivity calculator for Low Power Physics Test using an excore detector signal (Fission Chamber)
It is widely used in various industries such as power plants, petrochemical facilities, shipbuilding, and steel manufacturing.
- Measurement error is reduced by measuring signals of a total of 24 channels provided by ENFMS signals and analyzing reactivity (MSV: 12Ch/24bit resolution, Pulse C/T: 12Ch/50ns)
- Data acquisition/processing using FPGA-based real-time system

Domestic Track Records	
Main Client	KHNP
Project Name	Supply of DRCS
Delivery Year	2005~2024



[CoSi (Core Simulator)]

CoSi is an educational simulator for LPPT, providing realistic training by accurately replicating the actual Main Control Room (MCR) panel and the characteristics of the reactor's low power section. CoSi maximizes realism by accurately modeling core characteristics using the proven RAST-K code.

Specification

- It is a core-only simulator that provides realistic education and training effects by providing screen composition and reactivity control functions similar to those of the nuclear reactor main control room.
It is widely used in various industries such as power plants, petrochemical facilities, shipbuilding, and steel manufacturing.
- 3D real-time analysis of neutron behavior in the reactor core is possible.
- Unlike the existing full scope simulator, by modeling the nuclear reactor as the main target, the nuclear/thermal hydraulic phenomena of the actual nuclear reactor are accurately simulated.

Domestic Track Records	
Main Client	KHNP
Project Name	Supply of CoSi
Delivery Year	2020~2022



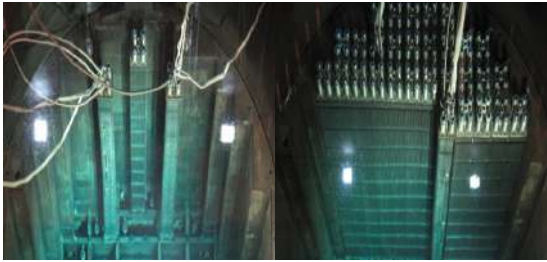
[ONICE (On-line Neutron Inverse Count Rate Ratio Using Excore Detector)]

ONICE monitors sub-critical conditions of the reactor core and provides alarms when approaching initial criticality. It also enables continuous real-time monitoring of core behavior. ONICE improves user convenience with software automation of fuel loading and initial criticality approach processes.

Specification

- ONICE is capable of monitoring the sub-critical conditions fo the core and raising an alarm when approaching to initial critical fo core.
- ONICE has improved user convenience by software(automating) the loading of fuel and the initial critical approach procedure.
- ONICE is used for the fuel loading and the initial critical access test of the reactor, and is used for real-time monitoring of the sub-critical conditions of the core.

Domestic Track Records	
Main Client	KHNP
Project Name	Supply of ONICE
Delivery Year	2008~2024

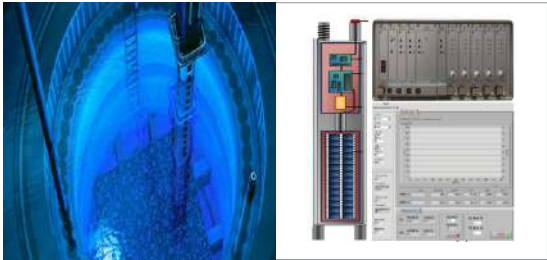


[TNMS (Temporary Neutron Monitoring System)]

During initial core fuel loading in PWRs, neutron leakage is minimal and cannot be detected by ENFMS alone. TNMS offers enhanced sensitivity to monitor sub-critical multiplication effectively. TNMS, a dunker built-in the neutron detector, monitors the subcritical conditions of the core in real time during fuel loading.

Specification

- Detectors: BF3 Proportional Counter (2Ch, 1ea each Ch)
- Neutron Sensitivity: 4.7cps/nv per Ch
- Preamplifier: Charge Sensitivity Preamplifier
- Monitoring data: Count rate, RT ICRR, Audible Counter



Domestic Track Records	
Main Client	KHNP
Project Name	Supply of TNMS
Delivery Year	2011/2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Supply of TFLC
Delivery Year	2016

Website	https://users-e.com/
Address	HanshinS-MECA 422Room, 65, Techno 3-ro, Yuseong-Gu, 34016, South Korea
Contact Information	• Name: CHOI JUNGHOOON • Position: General Manager • Email: junghoon@users.co.kr • Contact Number: +82-10-6627-5738

VITZRO ELECTRIC

COMPANY INTRODUCTION

We, VITZRO Group started business in 1955 as “Kwang-Myung Electric Manufacturing”. 70 years of history of VITZRO Group itself is the history of Korean electricity and infrastructure system industry since our group was incorporated at the early stage of the industry of our country. And we have introduced and have led the growth of the industry with propagating advanced technology into the country whose technology was uncultivated at that time.

VITZRO Group consists of 7(seven) subsidiaries including 2(two) KOSDAQ listed companies such as VITZROTECH, VITZROCELL. Our total revenue is USD 400 Mil and our business is growing constantly.

Based on 70 years of technical and commercial experiences and know-how in electric power industry, we would like to provide and expand our know-how to the world where it is required advanced reliable technologies and solutions for their infrastructure system due to their rapid economic growth.

Win-Win with world’s prospective companies is our core strategy to participate in overseas business. Therefore, we are seeking reliable partner companies who are capable of businesses with our technologies and know-how in a proper way.



Certification ISO 9001, ISO 14001, KEPIC-ENUL, IEC

PRODUCTS/SERVICES INFORMATION



MV SWITCHGEAR

[Switchgear]

VITZRO ELECTRIC provides optimized switchgear solutions for primary and secondary distributions in the industrial, commercial, and residential sectors. We ensure the highest reliability, safety, and convenience for all customers and applications with a full line-up of products that is designed to meet international standards.



LV SWITCHGEAR

Specification (MV SWITCHGEAR)

- Rated Voltage(kV): 4.76kV ~ 38kV
- Rated Current(A): 400A ~ 3150A
- Rated Frequency(Hz): 50Hz, 60Hz
- Rated Breaking Current(kA): Upto 50kA
- Applicable Standard: IEC 62271-200, ANSI C37.55

Specification (LV SWITCHGEAR)

- Rated Voltage(kV): upto 690V
- Rated Current(A): upto 4000A, High Capacity 6300A
- Rated Frequency(Hz): 50Hz, 60Hz
- Rated Breaking Current(kA): Upto 65kA
- Applicable Standard: C37.20.1, IEC 61439-2

Domestic Track Records

Main Client	KHNP	KHNP	KHNP
Project Name	Saeul NPP #1,2 E208(LC)	Saeul NPP #3,4 E208(LC)	Shin-Hanul NPP #3,4 E208
Delivery Year	2008~2014	2021~2025	2025~



[VCB(Vacuum Circuit Breaker)]

- Breaker and switching devices where the track voltage is applied between AC 1 kV and 170 kV
- Electrical safety device designed to protect an electrical circuit from damage caused by overcurrent
- Application of power plants and substations, building facilities, rail vehicles, plants, chemicals, etc.

Specification

- Rated Voltage(kV): 4.76kV ~ 38kV
- Rated Current(A): 400A ~ 3150A
- Rated Frequency(Hz): 50Hz, 60Hz
- Rated Breaking Current(kA): 8~50kA
- Applicable Standard: IEC 62271-100, ANSI C37.09

Domestic Track Records

Main Client	KHNP	KHNP	KHNP
Project Name	Saeul NPP #1,2 E207	Shin-Hanul NPP #1,2 E207	Saeul NPP #3,4 E207
Delivery Year	2010~2012	2014~2018	2021~2024

Overseas Track Records

Client (Country)	FUJI Electric (Japan)	Innovative Power Technology (USA)	Ines (Indonesia)
Delivery Year	2013~	2019~	2013~



[ACB(Air Circuit Breaker)]

- Breaker and switching devices where the track voltage is applied to AC 1 kV and below
- Electrical safety device designed to protect an electrical circuit from damage caused by overcurrent
- Application of power plants and factories, large buildings, government ordered construction, equipment industry, etc.

Specification

- Rated Voltage(kV): upto 690V
- Rated Current(A): upto 4000A, High Capacity 5000A, 6300A
- Rated Frequency(Hz): 50Hz, 60Hz
- Rated Breaking Current(kA): 100kA, High Capacity 130kA
- Applicable Standard: IEC60947-2, KS C 4620, ANSI C37.13, ANSI C37.50

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Saeul NPP #1,2 E208	Saeul NPP #3,4 E208	Shin-Hanul NPP #3,4 E208
Delivery Year	2008~2014	2021~2025	2025~

Overseas Track Records			
Client (Country)	KEAZ (Russia)	Trentech Enterprise (Taiwan)	AST-Elektra (Kazakhstan)
Delivery Year	2013~	2004~	2018~

Website	www.vitzroem.com
Address	327, Byeolmang-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Korea
Contact Information	• Name: Shim yeon woo • Position: General manager • Email: ywshim@vitzrotech.com • Contact Number: +82-10-2783-0749

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WOORI TECHNOLOGY INC.

COMPANY INTRODUCTION

Woori Technology is a GLOBAL LEADER of Nuclear Power I&C. For 32 years, we have developed and supplied 100% our own technologies for surveillance, alarm and control system of NPPs. Particularly, we succeeded in localization of MMIS (Man Machine Interface System), which is the core technology of nuclear power, for the fourth time globally. Additionally, we have the quality assurance ability that demands the highest safety records and provide the clearest and most reliable solution proven with accumulated experience and technology. Woori Technology has realized customer-oriented production, quality, and delivery with our high-technology, high-quality, and high-reliability product innovation that has never stopped. Since founded in 1993, we are developing and supplying the monitoring, alarm and control system of NPP with 100% our own technology. In particular, we have developed the "Man Machine Interface System (MMIS)" which is one of the three core technologies of NPP, and supplied it to Shin-Hanul NPP #1, 2 and Saeul NPP #3, 4, thereby becoming the fourth company in the world that secures the core technology of NPP.



Certification

- ISO 9001:2015 (Design, servicing of · Communication apparatus and controller)
- ISO 14001:2015 (Design, service for communication&control devices)
- ISO 19443:2018 (Design, maintenance for instrumentation and control equipment)
- ISO/TS 22163:2017 (Activities of Design, manufacturing for Communication, monitoring and safety equipment)
- KEPIC EN-207 (Manufacture of Class 1E system(control))

PRODUCTS/SERVICES INFORMATION



[Operasystem™-1400 (DCS, Distributed Control System)]

OPERASYSTEM™-1400, Woori technology's flagship product, adopts the hardware based on the industry standard VME-BUS and has a high-speed CPU, and it is a highly reliable controller with high-speed control task execution up to

10msec and duplication of major parts. It is a versatile, multi-functional, and open system that can be freely configured according to the size of the plant and takes into account a flexible interface with heterogeneous systems.

Specification

- FCS: Max. 288 FCS / System
- I/O Card: Max. 16 Cards/FCS
- Point: Max. 512 Point/FCS (Digital Input)
- System Point: Max. 140,000 Point
- OIS: Max. 64 OIS/System

Domestic Track Records

Main Client	KHNP	Doosan Enerbility
Project Name	Saeul NPP #3,4 DCS Diagnostic Equipment	Shin-Hanul NPP #3, 4 DCS
Delivery Year	2023	2027 (expected)



[Field Programmable Gate Arrays Diverse Protection System]

It stably protects the power plant by stopping the reactor and the turbine, and by activating the auxiliary water supply system, when the protection system of the plant stops working. After implementing the design with basic logic elements such as AND/OR Gate and Flip-Flop disconnected, the elements are connected to perform logic. In addition, the simple structure makes it easy to develop hardware equipment.

Specification

- Size: (W)482.8mm x (H)177mm x (D)342mm
- Operation Environment: 0 ~50°C
- Rated input power: 120VAC / Rated output power: 48VDC / 24VDC
- Input Power range: 108VAC ~ 132VAC
- Maximum output capacity: 1200Watt

Domestic Track Records

Main Client	KHNP
Project Name	Hanbit NPP #5, 6 DPS
Delivery Year	2025

Website

<https://www.wooritg.com>

Address

Woori Technology Building 4th floor, 9, World Cup buk-ro 56-gil, Mapo-gu, Seoul, Republic of Korea

Contact Information

- Name: Ma Yun Hee
- Position: Associate
- Email: yuni01@wooritg.com
- Contact Number: +82-10-7303-1192

Young Poong IND. Co

COMPANY INTRODUCTION

Young Poong Industry has built its technical capabilities and manufacturing expertise by focusing on power plant equipment and industrial components. The company has earned credibility by meeting stringent quality standards through the supply of systems and equipment to nuclear power plants. With numerous successful deliveries to major nuclear facilities in Korea, Young Poong maintains a stable supply system through consistent quality improvement and field-oriented responsiveness. Its proprietary underwater robot technology has been deployed in various underwater environments, including nuclear cooling water tanks, and has proven to operate reliably even under radiation exposure. Leveraging its trusted technologies in the nuclear sector and scalable integration capabilities, Young Poong is a competitive leader bridging conventional energy industries and advanced underwater technologies.

Young Poong Industry specializes in power plant equipment and industrial components, with a strong track record of supplying nuclear facilities in Korea. The company is recognized for its underwater robot technology, proven to perform reliably in radioactive environments such as nuclear cooling tanks. Leveraging its expertise in nuclear systems and scalable integration, Young Poong is a competitive leader in both conventional energy and advanced underwater technology sectors.



Certification

- IOct 2000 Registered as a supplier of nuclear power plant
- Oct 2006 Venture Business Certification
- Nov 2015 Company affiliated research institute certification
- Oct 2017 Patent registration: Underwater drone(ROV)
- Jun 2018 Development of Automatic Surface Vehicle(ASV)
- Jan 2023 Acquired KEPIC MN certification
- May 2024 ISO 9001:2015 and ISO 45001:2018 certification

PRODUCTS/SERVICES INFORMATION



[ROVINS-V1]

Underwater unmanned mobile robot specialized for underwater exploration and underwater inspection. Precision inspection in the water using PTZ Camera. This robot is actually applied in IRWST (In-containment Refueling Water Storage Tank) of APR1400.



Specification

- Camera: Inspection camera with 30× optical zoom PTZ
- Functions: Real-time inspection video recording and playback, automatic attitude control
- Operating Depth: Up to 30 meters
- Dimensions / Weight: Ø680 mm × H1160 mm / 32 kg

Domestic Track Records

Main Client	KHNP
Project Name	Saeul NPP #1, 2 IRWST Filter Inspection Robot
Delivery Year	2025



[ROVINS-V2]

The 2D imaging sonar sensor mounted on the underwater robot measures the height of the seafloor mud at the intake. 2D sonar data is combined with location information through its own software to provide real-time three-dimensional visualization (point cloud) information.

Specification

- Sensor: High-resolution 2D Imaging Sonar
- Functions: Scans underwater terrain and generates 3D maps
- Max Scanning Range: Up to 100 meters
- Dimensions / Weight: Ø680 mm × H780 mm / 32 kg

Domestic Track Records

Main Client	KHNP
Project Name	Hanbit NPP ESWP SWP Sediment Measurement in Intake
Delivery Year	2018~2022

Website

<http://www.iyp.co.kr>

Address

21, Hwajeonsandan 6-ro 102beon-gil, Gangseo-gu, Busan, Korea

Contact Information

- Name: Geun Hu, Sim
- Position: Senior Researcher
- Email: sales@iyp.co.kr
- Contact Number: +82-10-9325-0089

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YPP Corporation

COMPANY INTRODUCTION

Founded in 1982, YPP is a leading power system solutions provider specializing in nuclear, thermal, and transmission facilities. The company offers comprehensive services including control and monitoring systems, protection relays, I&C systems, and custom-engineered valves. Recently, YPP has expanded into non-nuclear EPC projects, continuing to diversify its energy solutions portfolio.

The main systems and equipment we can supply are as follows:

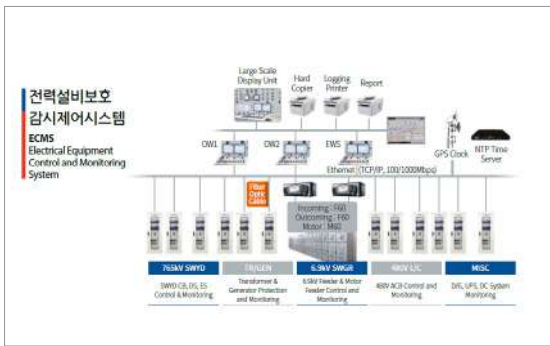
- Electrical Equipment Control and Monitoring System(ECMS)
- Developed a Triple Digital Protection Relay(TRIUMP)
- Intelligent General Diagnosis System
- Detailed System Design for Electric and I&C of NPP
- Supplying I&C System
- Maintenance
- Commercial-Grade Item Dedication
- Safety-focused control valves for nuclear power plants and process facilities
- Turbine bypass and auxiliary steam system valves
- Custom-engineered valves for ultra-high temperature and high-pressure conditions



Certification

KEPIC-EN, ISO-9001, ISO-45001, ISO-14001, ISO-19443,
NDK(Nuclear Regulatory Authority by Turkish regulation)

PRODUCTS/SERVICES INFORMATION



[ECMS (Electrical Equipment Control and Monitoring System)]

An automated system that provides convenience in operation, maintenance and inspection of electrical equipment in power plants and other plants based on cutting-edge digital

protection relays and network technology, protects, monitors, and controls the power grid. It enables accident prevention and safe failure recovery in electrical facilities.

Specification

- Easy operation and maintenance
- Statistical data acquisition
- Shortened construction period
- Improved reliability of protective device
- Accident prevention and rapid recovery
- Equipment integration and simplification
- Remote monitoring and operation

Domestic Track Records

Main Client	KHNP	KHNP
Project Name	Samrangjin PSPP ECMS	Saeul NPP #3,4 Control&Protection Relay Panel
Delivery Year	2019	2019

Overseas Track Records

Client (Country)	KEPCO (UAE)
Project Name	Barakah NPP E231
Delivery Year	2016



[Local/Aux Control Panel]

HVAC and various Aux process control system allows the system to stay in its optimal condition based on its ergonomic concepts. YPP can supply the following control panels.

- HVAC Control Panel
- Aux/Local control panel
- DCS, PLC
- Environment & Seismic Qualification [Qualifying Class 1E Equipment]
- EMS Test

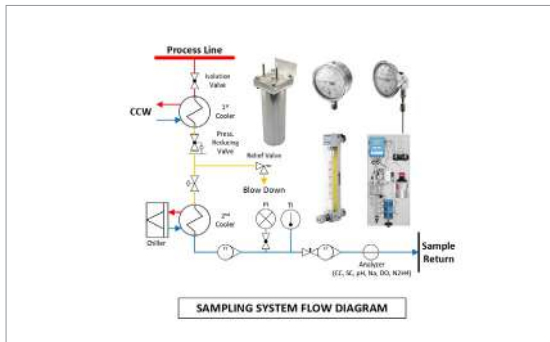
Specification

- Enclosure panel for the system
- Control system either PLC or Convention type Technology
- Field Controller with M/A station
- Annunciator system
- Indicator, Control S/W module
- Field Instrumentation such as Transmitter, T/C and RTD in Local Control System

Domestic Track Records

Main Client	KHNP	KHNP
Project Name	Hanul NPP Control Console HVAC & Other	Hanbit NPP #3, 4 Local Control Station 125Vdc, Control Console HVA
Delivery Year	2024	2024

PRODUCTS/SERVICES INFORMATION



[Sampling System]

The sampling system allows efficient operation, monitoring and control of samples by analyzing and providing necessary inputs that are necessary to maintain a good condition of a power plant during its life cycle.

Specification

- Primary Sampling System
- Secondary Sampling System
- Radwaste Sampling System
- Pump Skid, Chiller, Radiation Shielding



Specification

- Fluid: All
- Size: 1" ~ 24" (25A ~ 600A)
- Pressure: ANSI Class #150 ~ #4500
- Temperature: -160 ~ +565°C
- Leakage Class: Metal Seal: ANSI Class IV ~ V / Soft Seal: ANSI Class IV

[Control Valve]

- Major Technologies
- Prevention of internal leakage (passing), anti-cavitation, Low noise and vibration, corrosion resistance
 - Three-dimensional flow path trim effective for precise high differential pressure control
 - Fluid-induced vibration stress distribution plug with improved durability
 - Seat ring with gap flow reduction to prevent erosion

Domestic Track Records			
Main Client	KEPCO (KOWEPO)	KHNP	KOEN (KEPCO)
Project Name	HP Turbine Bypass Control valve	Control Globe Valve	PCV 4500LB
Delivery Year	2018-2023	2012-2022	2015

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Non-safety Control Valve & Spare Parts
Delivery Year	2015-2024

Website	www.ypp.co.kr		
Address	20F, 24, Gasan digital 2-ro, Geumcheon-gu, Seoul		
Contact Information	• Name: Sung-eun Bae	• Email: sebae@ypp.co.kr	
	• Position: Manager	• Contact Number: +82-2-2104-8738	

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MECHANICAL

Bearing



Housing of Journal Bearing

Product Description:

- Material: Spheroidal Graphite Cast Iron (EN-GJS-400-15, etc.)

Specification:

- External Diameter: Φ1,000 ~ 2,000mm

Domestic Track Records			
Main Client	Doosan		
Delivery Year	1996~		

Overseas Track Records			
Client (Country)	GE Vernova	Arabelle Solutions	GE Energy Parts
Delivery Year	2022~	2017~	2022~

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-10-2284-3369
- E-Mail: project@krse.co.kr



Tilting Pad Bearing

Product Description:

Turbolink offers a variety of pad pivot types, enabling different levels of alignment capability, hydrostatic jacking, double tilting, and electrical insulation. Turbolink can provide key bearing characteristics such as load capacity, minimum film thickness, maximum bearing metal temperature, as well as stiffness and damping coefficients, which help ensure the bearing is optimally designed for your rotating machinery.

Specification:

- Pivot Type: Point Pivot, Ball socket Pivot
- Direction of Load: LOP (Load On Pads), LBP(Load Between Pads)
- Self-Equalizing
- Direct Lubrication

Domestic Track Records			
Main Client	Hanwha Power System	Hyosung	Doosan-Enerbility

Overseas Track Records			
Client (Country)	Siemens Energy (Germany)	KOBELCO (Japan)	Torishima Pump(Japan)

Supplier Information

- Turbolink Co., Ltd.
- www.turbolink.co.kr
- TEL: +82-55-310-2838
- E-Mail: yr.choi@turbolink.co.kr

Bearing



Vertical Guide & Thrust Bearing

Product Description:

Vertical bearings are durable, lightweight, and self-lubricating, with optional temperature sensors for oil or pad monitoring. They are typically equipped with integrated water coolers and can be adapted for air cooling or oil circulation with minimal casing modifications.

Specification:

- Guide & Thrust Combined Bearings
- Tilting Pad Guide Bearing + Tilting Pad Thrust Bearing
- Cooling type: Air Cooling, Fan Cooling, Water Cooling

Domestic Track Records			
Main Client	HD Hyundai Electric	Hyosung	Korea Power Plants

Overseas Track Records			
Client (Country)	KSB (Germany)	Siemens Gamesa (Spain)	Ebara (Japan)

Supplier Information

- Turbolink Co., Ltd.
- www.turbolink.co.kr
- TEL: +82-55-310-2838
- E-Mail: yr.choi@turbolink.co.kr

Bolt, Nut, Coupling



A193 B7 Stud Set (Xylan Coating(Blue))

Product Description:

A193 B7 studs and hex bolts, along with A194 nuts, are specifically designed for use in nuclear mechanical structures, petrochemical facilities, and the energy and chemical industries. Typical application areas include flange and pipe connections, high-pressure pipeline systems, pressure vessels and heat exchangers, equipment requiring structural strength at high temperatures, valve and pump components, and chemical process equipment.

Specification:

- A193 B7 Stud Set
- Stud: A193 B7, 7/8" - 9UNC x 8"
- Nut: A194 2H, 7/8" -9UNC

Overseas Track Records	
Client (Country)	USA
Delivery Year	2024

Supplier Information

- Daewoo Bolt Co., Ltd.
- www.dwbolt.com
- TEL: +82-10-3252-9777
- E-Mail: ghlee@dwbolt.com

Bolt, Nut, Coupling



A193 B7 Stud Set (Xylan Coating(Green))

Product Description:
A193 B7 studs and hex bolts, along with A194 nuts, are specifically designed for use in nuclear mechanical structures, petrochemical plants, and the energy and chemical industries.
Typical applications include flange and pipe connections, high-pressure pipeline systems, pressure vessels and heat exchangers, equipment that requires structural strength at high temperatures, valve and pump components, and chemical process equipment.

- Specification:**
- A193 B7 Stud Set (XYLAN COATING(GREEN))
 - Stud: A193 B7, 3 1/2" - 8UN x 28"
 - Nut: A194 2H, 3 1/2" - 8UN

Overseas Track Records	
Client (Country)	USA
Delivery Year	2025

Supplier Information

- Daewoo Bolt Co., Ltd.
- www.dwbolt.com
- TEL: +82-10-3252-9777
- E-Mail: ghlee@dwbolt.com



BMS Bar Coupler

Product Description:
BMS Bar Coupler (Normal-temperature swaged bar coupler) is a method of swaging joints and ribs at the end of the reinforcement at normal temperature and connecting the reinforcement using a coupler with a female thread formed by rolling. The outer diameter and length of the coupler are small, offering ease of handling and installation.
In addition, even if the joint location is the same, the coupler can sufficiently satisfy gap and cover criteria to obtain a high-quality concrete structure.

- Specification:**
- BMS Coupler D10, D12, D13, D16, D19
 - BMS Coupler D20, D22, D24, D25, D28
 - BMS Coupler D32, D35, D36, D38, D41
 - BMS Coupler D43, D51, D57

Domestic Track Records			
Main Client	Hyundai, Doosan	Daewoo, Samsung	Hyundai
Project Name	Saeul NPP #1,2	Shin-Wolsong NPP #1,2	Shin-Hanul NPP #1,2
Delivery Year	2009	2008	2011

Overseas Track Records			
Client (Country)	Hyundai, Samsung (UAE)	Samsung, UEM (Malaysia)	Hyundai (Chile)
Project Name	Barakah NPP	KL 118	Chacao Bridge
Delivery Year	2012	2015	2017~on going

Supplier Information

- Boowon B.M.S Co., Ltd.
- http://ibms.co.kr/
- TEL: +82-10-9369-9401
- E-Mail: bmsbar@ibms.co.kr

Bolt, Nut, Coupling



BMS Terminator

Product Description:
BMS Terminator is a construction method that can be applied in various ways, such as beam-column joints of buildings, shear reinforcement of walls, main parts of nuclear power plant structures, mat slab-retaining wall joints, and bridge pier shear reinforcement, as well as main reinforcement anchorage.

- Specification:**
- BMS Terminator D10, D12, D13, D16
 - BMS Terminator D19, D20, D22, D24
 - BMS Terminator D25, D28, D32, D35
 - BMS Terminator D36, D38, D41, D43
 - BMS Terminator D51, D57

Domestic Track Records			
Main Client	Hyundai, Doosan	Daewoo, Samsung	Hyundai
Project Name	Saeul NPP #1,2	Shin-Wolsong NPP #1, 2	Shin-Hanul NPP #1, 2
Delivery Year	2009	2008	2011

Overseas Track Records			
Client (Country)	Hyundai, Samsung (UAE)	Samsung, UEM (Malaysia)	Hyundai (Chile)
Project Name	Barakah Nuclear Power	KL 118	Chacao Bridge
Delivery Year	2012	2015	2017~on going

Supplier Information

- Boowon B.M.S Co., Ltd.
- http://ibms.co.kr/
- TEL: +82-10-9369-9401
- E-Mail: bmsbar@ibms.co.kr

Bolt, Nut, Coupling



Bolt & Nut

Product Description:

Yujinco Metal is a promising small and medium-sized enterprise (SME) that manufactures and sells precision-machined parts such as bolts and nuts, including those used in nuclear, thermal, and wind power generation. The company's annual sales are steadily increasing, its technology is recognized within the industry, and it holds numerous patents and utility models through continuous technological development.

Specification:

- KEPIC MN/SN
- ASME / ASTM
- ISO / DIN / JIS
- DAST-Ri

Domestic Track Records			
Main Client	Doosan	KHNP	KHNP
Project Name	Qassim 1 STG/Taiba 1 STG	Saeul NPP #3,4 Cap Screw	Shin-Hanul NPP #1,2 Parallel Pin
Delivery Year	2025	2024	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Nuscale (USA)
Project Name	Barakah NPP #3,4 NSSS_Stud Bolt	NuScale Engineering Services_Set Screw
Delivery Year	2024	2024

Supplier Information

- Yujinco Metal Co.,Ltd.
- www.yujincometal.com
- TEL: +82-51-314-0757
- E-Mail: yujinco@yujincometal.com



Gear Coupling

Product Description:

Gear Coupling can handle heavy loads even with small and lighter size and capacity. During high-speed rotation, there's little vibration and noise. Thanks to crowned tooth shape, it can absorb axial misalignment.

Specification:

- KS, JIS, AGMA

Domestic Track Records			
Main Client	POSCO	HJSC	Hyundai
Project Name	Gwangyang 3-1RCL ROLL	The Phase 2-6	1000 Ton Press Crane
Delivery Year	2021	2025	2021

Overseas Track Records			
Client (Country)	SMS Group (Germany)	POSCO E&C	SPCO(Japan)
Project Name	SMS-SDI Buffalo	HBIS-POSCO No.1 CGL	HDL(Hot Driving Line)
Delivery Year	2020	2022	2025

Supplier Information

- JAC Coupling Co., Ltd.
- http://www.jacoup.co.kr
- TEL: +82-51-317-0822
- E-Mail: first@jacoup.co.kr

Bolt, Nut, Coupling



MDF A193 B7 Stud Set

Product Description:

A193 B7 studs and hex bolts, along with A194 nuts, are specifically designed for use in nuclear mechanical structures, petrochemical facilities, and the energy and chemical industries. These components are typically applied in flange and pipe connections, high-pressure pipeline systems, pressure vessels and heat exchangers, equipment requiring structural integrity at high temperatures, valve and pump components, and chemical process equipment.

Specification:

- MDF A193 B7 Stud Set
- Stud: MDF A193 B7, 3" - 8UN x 15"
- Nut: MDF A194 2H, 3" - 8UN

Supplier Information

- Daewoo Bolt Co., Ltd.
- www.dwbolt.com
- TEL: +82-10-3252-9777
- E-Mail: ghlee@dwbolt.com



Wind Turbine Coupling

Product Description:

By using composite material (GFRP), it is possible to insulate between the generator and gearbox. When overloaded, it can block power transmission and prevent damage in advance. Between gearbox and generator, it transfers the rotational power of the blades.

Specification:

- DNV GL

Domestic Track Records			
Main Client	Doosan	Unison	Hyundai
Project Name	5.5MW Offshore	4MW Onshore	2MW Onshore
Delivery Year	2024	2024	2025

Overseas Track Records		
Client (Country)	Pioneer Wincon (India)	Mignyang
Project Name	Coupling P57	Coupling for 3MW
Delivery Year	2025	2019

Supplier Information

- JAC Coupling Co., Ltd.
- http://www.jacoup.co.kr
- TEL: +82-51-317-0822
- E-Mail: first@jacoup.co.kr

Compressor



Air/Gas Compressor

Product Description:

Based on reliable products in various fields such as chemical plants and combined power plants, we provide a wide range of compressed fluids (air, fuel gas, N₂, etc.) and manufacture safer and more precise products. HHI makes various efforts to supply our customers with a wide range of excellent products, including barrel-type compressors and geared-type compressors.

Specification:

- Gas Compressor
- Integrally Geared Centrifugal for API 617
 - Flow: ~ 17,600Am³/h, Discharge Pressure: Max 100 barA
- Vertical Split Centrifugal for API 617
 - Flow: ~ 48,000Am³/h, Discharge Pressure: ~150 barA
- Air Compressor (Industrial Standard & API 672)
 - Flow: 3,000~23,500Am³/h, Discharge Pressure: 3.5~25.0barG

Domestic Track Records			
Main Client	Hyundai E&C	S-OIL Corporation	Samsung C&T (UAE)
Project Name	Amiral Package 4 - Utilities, Flare & Interconnecting System	Shaheen (Package-1)	Al-Dhafra
Delivery Year	2025	2025	2025
Overseas Track Records			
Client (Country)	Mitsubishi Power (Japan)	Mitsubishi Power (USA)	
Project Name	Qatar / Facility E IWPP	Canada Napanee Generation	Delta Blues Advanced Power Station
Delivery Year	2026/2027	2026	2026

Supplier Information

- Hyundai Heavy Industries Turbomachinery Co., Ltd.
- <https://www.hhitmc.com>
- TEL: +82-10-9095-0453
- E-Mail: kwanghyun.jung@hhitmc.com

Compressor



AL2 Series

Product Description:

The AL2 air compressor is a trusted solution for industrial plants, power facilities, and even nuclear energy institutions, including KHNP (Korea Hydro & Nuclear Power) and national research centers. Engineered and manufactured under strict quality control, the AL2 features a two-stage oil-free rotary screw system, ensuring 100% clean, oil-free air for critical applications. With patented rotor profiles in both stages, the AL2 delivers exceptional efficiency, maintaining the lowest specific power consumption per unit of air output in its class.

Domestic Track Records			
Main Client	Hanwha E&C	SKMU	KC Cottrell
Project Name	Hanju CCPP	SKMU CHPP	Hyundai Steel Dangjin Plant
Delivery Year	2022	20223	2023

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	Bangladesh	Bangladesh
Project Name	Barakah NPP	Meghnaghat	JAWA
Delivery Year	2017	2020	2022

Supplier Information

- Hanshin Machinery Co.,Ltd.
- <http://www.hanshin.co.kr/index.html>
- TEL: +82-10-8211-4673
- E-Mail: SYOH510@hanshin.co.kr

CDH2 Series

Product Description:

The CDH2 Series is an oil-free screw air compressor built with over 60 years of GHH-RAND technology and Hanshin's packaging expertise. It delivers stable performance even in high-temperature and high-humidity environments. Featuring ultra-coated rotors and stainless steel HP rotors, it ensures high efficiency and durability. The system is designed for easy maintenance, low noise, and energy-saving operation in models up to 800 HP.

Domestic Track Records			
Main Client	Posco E&C	Everone E&T	GS E&C
Project Name	Posco Future M	Dangjin TPP #3 ,4	Pocheon CHPP
Delivery Year	2024	2024	2017

Overseas Track Records			
Client (Country)	Indonesia	Uzbekistan	Saudi Arabia
Project Name	Kalselteng 2	Takhiatash CCPP	Tanajib
Delivery Year	2018	2022	2022

Supplier Information

- Hanshin Machinery Co.,Ltd.
- <http://www.hanshin.co.kr/index.html>
- TEL: +82-10-8211-4673
- E-Mail: SYOH510@hanshin.co.kr

Compressor



Compressor for High Voltage GIS (Gas Insulated Switchgear), GCB (Gas Circuit Breaker) in Substation

- Product Description:**
- All-in-one package (Compressor, Receiver, Air dryer, Pressure valve, Canopy, etc.)
 - Approved model for KEPCO
 - Compact design and direct-driven compressor
 - Field-proven ruggedness and reliability

- Specification:**
- Working Pressure: up to 36 bar
 - Compressor Capacity: up to 38 m³/h
 - Air Receiver Capacity: 300 L, 1000 L, 2200 L

Domestic Track Records		
Main Client	KEPCO	Hyosung
Project Name	Most of GIS and GCB	Most of GIS and GCB
Delivery Year	1996~	1995~

Overseas Track Records	
Client (Country)	Saudi Electricity Company (Saudi Arabia)
ProjectName	GIS
DeliveryYear	2004~

Supplier Information

- Bumhan Industries Co., Ltd.
- www.bumhan.com
- TEL: +82-10-74668-8377
- E-Mail: sales@bumhan.com

Compressor



Customized Nuclear Solutions Emergency Diesel Generator for Starting Air Unit

- Product Description:**
- All-in-one package (Compressor, Receiver, Air dryer, Pressure valve, Canopy, etc.)
 - Easy installation, simple construction and field-proven ruggedness and reliability
 - Cooling air circuit for optimum cooling of the air compressor
 - Low running costs due to long maintenance intervals
 - Low vibration and noise levels

- Specification:**
- Air Compressor for Emergency Diesel Generator(EDG) and Alternate Alternating Current (AAC)
 - Working Pressure: 7~40bar
 - Capacity: 10~400 m³/h

Domestic Track Records			
Main Client	Hanwha Engine	KHNP	Hyundai
Project Name	Hanul NPP	Kori NPP	Saeul NPP Kori NPP
	Kori NPP		
	Shin-Kori NPP		
	Saeul NPP		
	Wolsong NPP		
	Hanbit NPP		
Delivery Year	2006~	2011	2021

Overseas Track Records		
Client (Country)	Hanwha Engine(UAE)	Hyundai(UAE)
ProjectName	Barakah NPP	Barakah NPP
DeliveryYear	2018	2015~2016

Supplier Information

- Bumhan Industries Co., Ltd.
- www.bumhan.com
- TEL: +82-10-74668-8377
- E-Mail: sales@bumhan.com

Condenser, Deaerator



Condenser

Product Description:

An essential auxiliary device in power plants that recovers the steam discharged from the steam turbine after operation by cooling it into condensate. It is used in thermal, combined-cycle, and nuclear power plants.

Specification:

- Shell Type: Rectangular
- Number of Shells: Single, Twin, Triple Shell
- Number of CW Passes: One or Two Passes
- Number of Pressure Zones: Single, Dual or Triple
- Type of Tubes: Titanium, Copper Alloy, SS, Alloy, etc.
- Down Flow, Axial Flow, Lateral & Double Lateral Flow Design

Domestic Track Records	
Main Client	KHNP
Project Name	Shin-Hanul NPP
Delivery Year	2013

Overseas Track Records		
Client (Country)	SEC (Saudi Arabia)	Pagbilao Energy (Philippines)
Project Name	Jeddah South TPP	Pagbilao 420 MW CFPP
Delivery Year	2013	2015

Supplier Information

- SNT Energy Co.,Ltd.
- <https://www.hisnt.com/eng/main/main.html>
- TEL: +82-10-8226-0780
- E-Mail: parkjs@hisnt.com

Crane



Coal Handling and Unloading Cranes for Thermal Power Plants, Cogeneration Plants, and Steel Mills

Product Description:

- Dismantling and installation of CSU cranes, ST/RE cranes, and conveyor systems at power plants and steel mills
- Crane operation and maintenance (O&M) services
- Procurement of maintenance materials and technical service provision

Specification:

- Continuous Ship Unloader Crane
- Stacker / Reclaimer Crane
- Coal Handling System Installation

Domestic Track Records			
Main Client	Korea Midland Power	Hyundai Samho	POSCO
Project Name	Maintenance of TPP		

Supplier Information

- JM motors Pump Co.,Ltd.
- TEL: +82-10-5899-5325
- E-Mail: shsloved@jmmotors-qfire.com

Crane



Industrial Crane (Overhead Type, Gantry Type)

Product Description:

Kumoh Heavy Industries provides customized crane manufacturing and material handling solutions tailored to customer needs, utilizing advanced technology and high quality standards for large cranes used in industries such as automotive, shipbuilding, and general manufacturing.

Specification:

- Overhead Crane: A type of overhead crane that installs a running rail on the inner wall or steel column of a building, places a single or double girder on it, and installs a hoist or grab.
- Gantry Crane: A crane that can be installed outdoors or indoors, primarily used outdoors where there are no building columns.

Domestic Track Records			
Main Client	Hanwha Engine	Hyundai Heavy Industries	Posco
Project Name	650/60 ton Gantry Crane	350/60 ton Overhead Crane	120/40 ton Slag Pot Crane
Delivery Year	2024.08.26	2024.01.31	2024.03.20

Overseas Track Records			
Client (Country)	SeAH Wind(UK)	SeAH Wind(UK)	SeAH Wind(UK)
ProjectName	400 ton Auto Lifter Crane	300 ton Overhead Crane	200 ton Overhead Crane
Delivery Year	2023.10.31	2023.01.31	2023.01.31

Supplier Information

- Kumoh Heavy Industries Co.,Ltd.
- www.kumohheavy.com
- TEL: +82-10-3575-7853
- E-Mail: kumoh@kumohheavy.com

Crane



Overhead Cranes for Nuclear Power Plants

Product Description:

- Manufacture and supply of polar cranes for nuclear power plants
- Technical maintenance of polar crane panel systems and X-SAM systems
- Procurement of maintenance materials and provision of technical services

Specification:

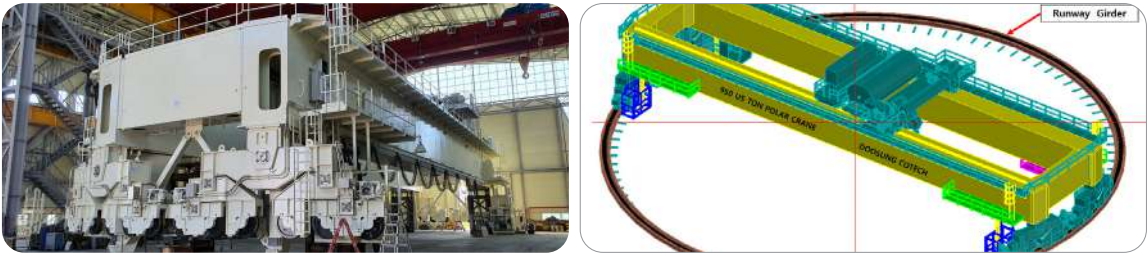
- 950/90 ton Polar Crane
- 310/70 ton TGB Main Crane, 150/10 ton F.H.A Crane
- 30/10 ton TGB Aux Crane, 50/10 ton Gantry Crane
- Overhead cranes with capacities under 15 tons, SRS automated cranes

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul, Hanbit, Wolsong, Hanul NPP
Delivery Year	2018~
Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP
Delivery Year	2020~

Supplier Information

- JM motors Pump Co.,Ltd.
- TEL: +82-10-5899-5325
- E-Mail: shsloved@jmmotors-qfire.com

Crane



Reactor Containment Building Polar Crane and Hoist

Product Description:

Polar cranes are used for sensitive fueling and fuel assembly purposes, as well as reactor head removal and replacement. Used to handle multipurpose lifting needs, polar cranes are comprised of a main hoist, auxiliary hoist, and containment inspection man lift.

Specification:

- Overall Dimensions
 - Length: 1,752 / 4,450 (in/cm), Width: 607 / 1,540 (in/cm), Height: 591 / 1,500 (in/cm)
 - Span (minum center-to-center of wheels): 143 ft ~ 0 in
- Capacity (Main hoist and Construction hoist linked together): 950 / 862 (US tons/metric tons)
 - Main Hoist: 475 / 431 (US tons/M tons), Construction Hoist: 475 / 431 (US tons/metric tons)

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2021

Supplier Information

- Doosung Cotech
- www.doosungct.com
- TEL: +82-10-3477-0230
- E-Mail: yi.jeon@doosungct.co.kr

Crane



RMQC & ARMQC

Product Description:

The control panels installed in the RMQC (Rail Mounted Quay Crane), which is used as a port crane. If the equipment is outdated, proceed with the project to upgrade it to ARMQC (Auto Rail Mounted Quay Crane).

Specification:

- The RMQC (Rail Mounted Quay Crane), installed on the quay of the container terminal, consists of the hoist, trolley, gantry, and boom. Each motion is driven by vector inverters, and power for these drives is supplied through an ALM (DC converter). The control system is based on a Siemens S7-1500 PLC, along with various auxiliary devices and components.
 - Rated Load: Single spreader: 50 tons, Twin spreader: 65 tons
 - Speed: Hoist 90 m/min (with load), 180 m/min (without load), Trolley 300 m/min, Gantry 45 m/min, Boom: 5 min
 - Motor inverter and PLC maker: Siemens, ABB
- To upgrade the automation of the RMQC, hardware components such as the PLC system, main drive system, operator cabin, and other control panels will be modernized. Additionally, control technologies related to crane safety—such as normal stop, emergency stop, brake control, and output regulation—will be upgraded to meet the latest standards.
- Operator Console: The crane’s local operator cabin and wireless remote controllers will be upgraded. Recently, to improve the working environment for crane operators, reduce fatigue, and prevent safety incidents, remote operator consoles have been installed in remote operation rooms. These systems utilize ultra-high-speed, high-definition cameras and 5G communications technology to enable remote crane operation.
- Automatic Operation: In automatic operation, job instructions are issued from the Terminal Operation System (TOS) and received by the Remote Manager. The Remote Manager then relays these commands to the designated crane. The instructions include details such as crane ID, operation type (loading or unloading), target position, and container information. Upon completion of the task, the crane reports the completion status to the Remote Manager, who then updates the TOS and awaits the next job.
- Crane Specification Requirements for Automatic Operation: To enable automatic operation, the system incorporates technologies such as position-detecting encoders, 3D laser scanners, GPS, and cameras. These devices work together to support precise and efficient crane automation.
 - APIS (Automatic Position Indication System)
 - SPSS (Stack Profile Scanning System)
 - SPCS (Spreader Position Control System)
 - CNRS (Container Number Recognition System)
 - CAS (Chassis Alignment System)
 - CLPS (Chassis Lift Prevention System)
 - LCMS, RCMS (Crang Monitoring System)
 - TOS, Remote Manager

Domestic Track Records			
Main Client	HMM	PCTC	Sunkwang

Overseas Track Records		
Client (Country)	Singapore	Hyosung

Supplier Information

- SEAH S.A.
- <http://www.seahsa.co.kr/>
- TEL: +82-31-8084-0014 / +82-2-10-2512-0453
- E-Mail: hsjeong@seahsa.co.kr

Crane



Turbine Generator Building Crane and Hoist

Product Description:

Turbine building cranes in NPP are large, typically in the capacity range of 200 tons or more, often with long spans. They are frequently used to handle outage support equipment in addition to turbine and generator maintenance.

Specification:

- Overall Dimensions
 - Length: 1,690 / 4,292 (in/cm), Width: 443 / 1125 (in/cm), Height: 320 / 813 (in/cm)
 - Span (center-to-center of rails): 138 ft 6 in
- Capacity
 - Main Hoist: 310 / 281 (US tons/metric tons), Auxiliary Hoist: 70 / 64 (US tons/metric tons)

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2021

Supplier Information

- Doosung Cotech
- www.doosungct.com
- TEL: +82-10-3477-0230
- E-Mail: yi.jeon@doosungct.co.kr

Cylinder, Container



Radioisotope Container

Product Description:

- Services: For transport and storage of radioactive substances or isotopes
- Characteristics: For transport and storage of LLW, ILW or radiopharmaceuticals

Specification:

- A Type Container
- B Type Container
- L Type Container
- IP-1/IP-2/IP-3 Type Container

Domestic Track Records			
Main Client	KHNP	KAERI	AMC
Project Name	A Type Container	RI Container	A Type Container
Delivery Year	2011	2022	2019

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-10-2284-3369
- E-Mail: project@krse.co.kr

Damper



Control Damper

Product Description:

HI AIR KOREA (HAK) Control Dampers for nuclear power plants can be installed in HVAC systems provided for various buildings of nuclear power plants. HAK Control Dampers are used to regulate the airflow rates automatically to ensure the required conditions of the plant. These dampers are available as safety-related (SR) and non-safety-related (NSR) items. Safety-related dampers are fabricated with Q-class components and dedicated commercial-grade items, and are verified for seismic qualification (SQ). They can also be verified for environmental qualification (EQ).

Specification:

- Design Base
 - DA of ASME AG-1 (KEPIC MH)
 - IEEE 323
 - IEEE 344 (KEPIC END 2000)
 - IEEE 382 (KEPIC END 3700)
 - AMCA 500-D
- Design Pressure: 10 in. W.G.
- Leakage Classification in accordance with ASME AG-1, Appendix DA-1
 - Blade(Seat): Leakage class 0 (BY Type only) or II
 - Frame: Leakage class A or B
- Damper Actuator Type
 - Pneumatic actuator, spring return (PSR)
 - Electro hydraulic actuator, spring return (ESR)
- Function: Isolation/Modulation
- Damper Blade Type
 - Opposed blade (OB)
 - Parallel blade (PB)
 - Butterfly blade (BY)
- Standard Construction
 - Frame: Carbon steel + Hot dip galvanized
 - Blade (Seat): Carbon steel + Hot dip galvanized
 - Blade Seal: EPDM and silicon gasket
 - Shaft: Carbon steel + Electro galvanized
 - Actuator Support: Carbon steel + Hot dip galvanized

Domestic Track Records		
Main Client	KHNP	KHNP
Project Name	Shin-Hanul NPP #1,2 M254	Saeul NPP #3,4 M254
Delivery Year	2011~2018	2016~

Supplier Information

- Hi Air Korea Co., Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

Damper



Control Damper

Product Description:

Control Damper is used to regulate airflow within HVAC systems for precise ventilation control. It can be manually or automatically operated, allowing integration with building management systems (BMS). Designed for durability and efficiency, it ensures optimal air distribution and energy savings.

Specification:

The Control Damper is constructed from high-strength galvanized or stainless steel for corrosion resistance and long-term durability. Blade types include airfoil or flat blades, with parallel or opposed blade operation, depending on airflow requirements. It is available in various sizes and configurations, suitable for low to high-pressure systems. The damper can be equipped with electric or pneumatic actuators, and offers options for leakage class ratings, low-pressure drop, and seamless integration with HVAC automation systems.

Domestic Track Records		
Main Client	KHNP	Saeil Industry
Project Name	Hanbit NPP #1,2	Shin-Hanul NPP #1,2
Delivery Year	2021	2020

Overseas Track Records			
Client (Country)	Hanbo Eng	Hyundai E&C	TECO
Project Name	Barakah NPP #3,4	Barakah NPP #1,2,3,4	Lungmen NPP #1,2
Delivery Year	2020	2020	2010

Supplier Information

- TS Nexgen Co., Ltd.
- <http://www.tsnexgen.com/>
- TEL: +82-10-9652-8628
- E-Mail: sales@tsnexgen.co.kr

Fire Damper

Product Description:

This damper is activated by heat during a fire event. When the temperature rises and reaches the melting point of the fusible link (UL Listed 165°F), the damper blade drops like a curtain due to the force of a stainless steel spring and the blade's self-weight. This design enables rapid fire compartmentalization in air duct systems. The damper is tested and certified in accordance with UL 555, the standard for fire dampers, which evaluates closure reliability, operation during elevated temperatures, dynamic airflow conditions, up to 3 hours of fire resistance. The FD-EL series provides dependable protection in both static and dynamic systems.

Specification:

The FD-EL and SD-EL series dampers are UL 555 and UL 555S certified, with 3-hour fire resistance and low smoke leakage performance. Frames and blades are made of galvanized or stainless steel, and are closed using a stainless steel spring and gravity drop. FD-EL uses a 165°F UL-listed fusible link, and SD-EL includes an electric thermal link activated by smoke or heat. Installation is possible both horizontally and vertically, and smoke dampers include a manual reset handle. All models comply with NFPA 90A, 80, and 105 standards.

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Hanul NPP #3	Kori NPP #3	Wolsong NPP
Delivery Year	2025	2022	2021

Supplier Information

- TS Nexgen Co., Ltd.
- <http://www.tsnexgen.com/>
- TEL: +82-10-9652-8628
- E-Mail: sales@tsnexgen.co.kr

Damper



Fire Damper

Product Description:

HI AIR KOREA (HAK) Fire Dampers for nuclear power plants can be installed in HVAC systems provided for various buildings of nuclear power plants. HAK Fire Dampers are used to prevent the spread of fire inside the ductwork through fire-resistance rated walls and floors. These dampers are available as safety-related (SR) and non-safety-related (NSR) items. Safety-related dampers are fabricated with Q-class components and dedicated commercial-grade items, and are verified for seismic qualification (SQ). They can also be verified for environmental qualification (EQ).

Specification:

- Design Base
 - DA of ASME AG-1 (KEPIC MH)
 - IEEE 323
 - IEEE 344 (KEPIC END 2000)
 - UL 555
 - Static System, Curtain Type, 3-hour rated and UL listed
 - Dynamic System, Curtain Type, rated 2000 fpm/4.0 in. w.g.
 - Function Type
 - Fusible Link / 165°F (74°C) / 350°F (176°C)
 - Electro-thermal Link (ETL) / 165°F (74°C)
 - Size
 - Single section maximum: 36" x 36"
 - Multi- section (Module type) maximum: 108" x 108"
- Installed in sleeves furnished by buyer
 - UL-listed test
 - Fire endurance test and hose stream test
 - Salt spray exposure test
 - Spring closing force test
 - Cycling test
 - Dynamic closure test
 - Standard Construction
 - Frame: Carbon Steel + Hot-dip Galvanized
 - Blade(Seat): Carbon Steel + Hot-dip Galvanized
 - Fusible Link: Fusible or ETL (Electro-thermal Link)
- ※ Note: UL-listed fire damper shall be installed with 165 °F ETL or 165 °F fusible link.

Domestic Track Records		
Main Client	KHNP	
Project Name	Saeul NPP #3,4	Shin-Hanul NPP #1,2
Delivery Year	2016~	2011~2018

Overseas Track Records	
Client (Country)	KEPCO
ProjectName	Barakah NPP #1~4
DeliveryYear	2013~2018

Supplier Information

- Hi Air Korea Co., Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

Damper



Manual Damper

Product Description:

HI AIR KOREA(HAK) Manual Dampers for nuclear power plants can be installed in HVAC systems provided for various buildings of nuclear power plants. HAK Manual Dampers are used to regulate the airflow rates manually to ensure the required conditions of the HVAC system. These dampers are available as safety-related (SR) and non-safety-related (NSR) items. Safety-related dampers are fabricated with Q-class components and dedicated commercial-grade items, and verified for seismic qualification (SQ). They can also be verified for environmental qualification (EQ).

Specification:

- Design Base
 - DA of ASME AG-1 (KEPIC MH)
 - IEEE 382 (KEPIC END 3700)
 - ASME N509
- Design Pressure: 10 in. w.g.
- Leakage Classification in accordance with ASME AG-1, Appendix DA-1
 - Blade (Seat): Leakage class - Frame: Leakage class B
- Damper Blade Type
 - Opposed blade (OB) - Parallel blade (PB)
 - Butterfly blade (BY) - Check blade (CK)
- Standard Construction
 - Frame: Carbon steel + Hot Dip Galvanized
 - Blade(Seat): Carbon steel + Hot Dip Galvanized
 - Blade Seal: EPDM and Silicone Gasket
 - Shaft: Carbon steel + Electro-galvanized

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4 / Shin-Hanul NPP #1,2
Delivery Year	2016-2021 / 2011-2018

Supplier Information

- Hi Air Korea Co., Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

Damper



Smoke Damper

Product Description:

HI AIR KOREA (HAK) Smoke Dampers for nuclear power plants can be installed in HVAC systems provided for various buildings of nuclear power plants. HAK Smoke Dampers are used to prevent the spread of smoke from the space of fire origin to other spaces in the same building. These dampers are available as safety-related (SR) and non-safety-related (NSR) items. Safety related dampers are fabricated with Q-class components and dedicated commercial-grade items, and verified for seismic qualification (SQ). They can also be verified for environmental qualification (EQ).

Specification:

- Design Base
 - DA of ASME AG-1 (KEPIC MH)
 - IEEE 323
 - IEEE 382 (KEPIC END 3700)
 - UL 555S
 - AMCA 500-D
- Closes automatically using an Electro-Thermal Link (ETL)
- Power Supply to Electro-Thermal Link (ETL shall be 120VAC or 24VDC)
 - Standard Construction
 - Frame: Carbon Steel + Hot-Dip Galvanized
 - Blade (Seat): Carbon Steel + Hot-Dip Galvanized
 - Fusible Link: ETL (Electro-thermal link)
 - Blade Seal: Silicone Foam Gasket
 - Shaft: Carbon Steel + Electro Galvanized
- Leakage Classification Class I in accordance with UL 555S

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4 / Shin-Hanul NPP #1,2
Delivery Year	2016-2021 / 2011-2018

Supplier Information

- Hi Air Korea Co., Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

Fan, Filter



Charcoal Filter (Type IV)

Product Description:

- Removal of radioactive gas
- Charcoal Filling: TEDA/AC (NT816)
- V-shaped perforated plate arrangement structure
- Perform Qualification tests every 5 years (KEPIC-MHB FH 5300, ASME AG-1 FH 5300)

Specification:

- Filter Size: 610 x 610 x 292, 305 x 305 x 292 (mm)
- Air Volume: 16 CMM, 4 CMM
- Material: Mild Steel or Stainless Steel

Domestic Track Records			
Main Client	KHNP	Kaeri	IBS
Project Name	Charcoal Filter	Charcoal Filter	RAON
Delivery Year	2023	2025	2020

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	JRTR(Jordan)	Fukushima (Japan)
Project Name	Charcoal Filter	Charcoal Filter	Charcoal Filter
Delivery Year	2020	2015	2012

Supplier Information

- NAC Co., Ltd.
- <http://www.i-nac.co.kr/>
- TEL: +82-10-5321-3253
- E-Mail: wg2525@naver.com



HEPA Filter

Product Description:

This filter is used to remove radioactive dust generated within NPPs. It is applicable to NPP HVAC facilities and air and gas treatment systems related to nuclear safety.

Specification:

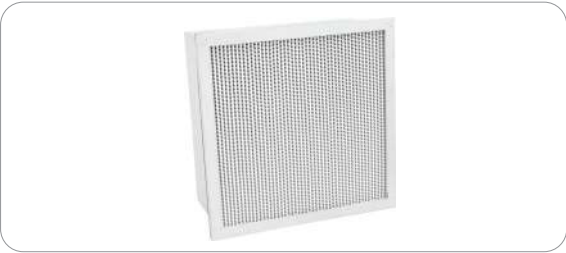
- Size: 610 x 610 x 292 mm
- Air Volume: 1500CFM (42CMM), 2000CFM (56CMM)
- Frame: SUS304, MEDIA: Glass Fiber, Gasket: ASTM D1056, Neoprene, Separator: Al 40 μm,
- Sealer: Polyurethane, ASME AG-1, ASME- NQA-1
- Efficiency: 99.97%(0.3μm, By DOP Test)
- Pressure: 1.0 in w.g. (33mmAq)

Domestic Track Records	
Main Client	KHNP

Supplier Information

- Cambridge Filter Korea Co.,Ltd.
- <https://www.cambridgefilter.co.kr/>
- TEL: +82-10-6317-6121, +82-10-7455-4280
- E-Mail: orbok@cambridgefilter.co.kr
kwyoona@cambridgefilter.co.kr

Fan, Filter



Medium Filter

Product Description:
This filter reduces particle load on HEPA filters used in NPPs. It is applicable to NPP HVAC facilities and air and gas treatment systems related to nuclear safety.

Specification:

- Size: 594.594.292
- Air Volume: 1500CFM (42CMM), 2000CFM (56CMM)
- Frame: Galvanized Steel, MEDIA: Glass Fiber, Gasket: ASTM D1056, Neoprene, Separator: AL 40μm,
- Sealer: Polyurethane, ASME AG-1, ASME- NQA-1
- Efficiency: ASHRAE 52.1, 90~95%
- Pressure: 14.7mmAq or 16.0mmAq

Domestic Track Records	
Main Client	KHNP

Supplier Information

- Cambridge Filter Korea Co.,Ltd.
- <https://www.cambridgefilter.co.kr/>
- TEL: +82-10-6317-6121, +82-10-7455-4280
- E-Mail: orbok@cambridgefilter.co.kr
kwoyon@cambridgefilter.co.kr



Moisture Separator

Product Description:
This filter is used to remove moisture contained in air or gas. It is applicable to air and gas treatment systems related to safety, such as NPPs.

Specification:

- Size: 610 x 610 x 140 mm
- Air Volume: 1500CFM (42CMM), 2000CFM (56CMM)
- Frame: SUS304, Pad: SUS304(0.15mm), Gasket: ASTM D1056, Silicone Rubber
- Efficiency: Min 99%(5~10μm)
- Pressure: Dry conditions - 1.0 in w.g(25.4mmAq), Humid conditions - 2.0 in W.G. (50.8mmAq)

Domestic Track Records	
Main Client	KHNP

Supplier Information

- Cambridge Filter Korea Co.,Ltd.
- <https://www.cambridgefilter.co.kr/>
- TEL: +82-10-6317-6121, +82-10-7455-4280
- E-Mail: orbok@cambridgefilter.co.kr
kwoyon@cambridgefilter.co.kr

Fan, Filter



Portable Air Cleaning Unit

Product Description:

- Convenience of movement and minimization of volume and weight
- ASME N509 and ASME AG-1
- Side-access Type

Specification:

- Material: Stainless Steel
- Design based on air volume and site conditions

Domestic Track Records			
Main Client	KIRAMS	CNC Protec	Daerim
Project Name	Portable ACU	Hanul NPP	Hanul NPP
Delivery Year	2015	2011	2011

Supplier Information

- NAC Co., Ltd.
- <http://www.i-nac.co.kr/>
- TEL: +82-10-5321-3253
- E-Mail: wg2525@naver.com



RI Filter Unit

Product Description:

- Removal of radioactive dust and gases
- Available in various designs such as Side-Access Type, Bag-in/Bag-out Type, and Container Type

Specification:

- Material: Stainless Steel
- Design based on air volume and site conditions

Domestic Track Records			
Main Client	KHNP	KINS	IBS
Project Name	EOF	EOF	RAON
Delivery Year	2018	2017	2020

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	JRTR(Jordan)
Project Name	Filter Unit	Filter Unit
Delivery Year	2020	2015

Supplier Information

- NAC Co., Ltd.
- <http://www.i-nac.co.kr/>
- TEL: +82-10-5321-3253
- E-Mail: wg2525@naver.com

Fitting, Flange



Adapter

Product Description:

Adapter connects pipes of varying sizes, ensuring precise fit, corrosion resistance, and stable performance.

Domestic Track Records	
Main Client	Doosan
Delivery Year	2024

Supplier Information

- Tae Sung Industrial Systems Co., Ltd.
- www.bestcu.kr
- TEL: +82-10-2822-180
- E-Mail: tssj8324@daum.net



APR1400 Type: RVI(Reactor Vessel Internals) Lower Guide Tube Assembly

Product Description:

- Intercept Valve: A protective device used in steam turbine systems, playing a critical role in large-capacity power generation turbines.
- Valve Disc: A core component that regulates or blocks the flow of steam. The disc contacts the valve seat to control the steam's flow rate or pressure.
- Pressure Seal Head: A key component that maintains sealing between the valve stem and the valve body in turbine valves. It prevents steam leakage in high-temperature, high-pressure environments and ensures stable valve operation.

Specification:

- Material: Carbon Steel, Stainless Steel, Alloy Steel
- Dimension (L*W*H): Size: 1/2" ~ 56"

Domestic Track Records	
Main Client	Doosan
Project Name	Saeul NPP #3,4
Delivery Year	2016

Supplier Information

- U-chang Industries Co., Ltd.
- www.uchang21.com
- TEL: +82-10-3854-0292
- E-Mail: uchang9001@hanmail.net

Fitting, Flange



Cable Cleats

Product Description:

Dong-A Bestech's cable cleats are designed to secure of cables when installed at intervals along the length of cables, DSCS-A and DSCS-S have been tested in line with the European Standard of IEC 61914: 2015: (Cable Cleats for Electrical Installations)

Specification:

- Application: For fixing, fastening, retaining and supporting in single core or multi-core cables at any area
- Standard: IEC61914
- Certification: DNV.GL, ABS, UL, LR, BV, GOST
- Materials: Stainless Steel 316L or Aluminum
- Resistance to Impact: 220kA/0.1sec (peak), 110kA (RMS)

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com



Cable Glands (Explosion Proof & Industrial)

Product Description:

Dong-A Bestech's cable gland provide a solution for connecting cables in hazardous (explosion-proof) and non-hazardous areas. Design complies with IEC62444, EN62444, Ingress Protection grade is IP66/67. Our products are made from Nickel Plated Brass or Stainless Steel 316L, with optional exclusive accessories available.

Specification:

- Application: Industrial and hazardous areas
- Standard: EN/IEC 60079-0, 60079-7, 60079-11, 60079-31
- Certification: ATEX, IECEx, DNV GL, CE, UL, KCS
- Materials: Brass, Nickel Plated Brass, Stainless Steel 316L, Aluminum
- Temperature: T4, T5, T6

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com

Fitting, Flange



Forged Fittings

Product Description:

BMT Forged Fittings are engineered for performance in the most demanding industrial environments. Manufactured with premium-grade stainless and alloy steel under strict quality control, they meet international standards such as ASME and ASTM. Renowned for their superior strength and corrosion resistance, BMT fittings ensure safe, leak-free operation in critical high-pressure systems, delivering reliability.

Specification:

- Size: up to 4 in.
- Working Pressure: up to 9000 lbs
- Temperature: up to 538°C (1000°F)

Domestic Track Records			
Main Client	KHNP	Samsung C&T	HSD Engine
Project Name	Wolsong NPP	Saeul NPP #3,4	KEPIC
Delivery Year	2021	2020	2019

Overseas Track Records	
Client (Country)	ENEC (UAE)
Project Name	Barakah NPP
Delivery Year	2016

Supplier Information

- BMT Co., Ltd.
- <https://superlok.com/kr/>
- TEL: +82-51-780-5131
- E-Mail: solee@superlok.com



Forged Fittings

Specification:

- Designed as per ASTM, ASME, BS, JIS, ANSI, MSS, etc.
- Material: Stainless steel, Carbon steel, Alloy steel & other Non-ferrous metal
- HS Code: 730792

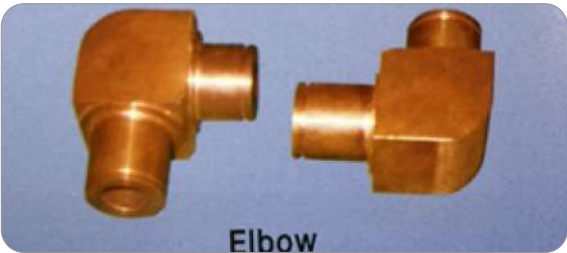
Domestic Track Records	
Main Client	SHI, DSME,HHI,SK Energy, GS E&C, S-OIL, Hyundai Oil Bank
Project Name	KING'S QUAY FPS, IRPC Propylene plan, Barakah NPP

Overseas Track Records	
Client (Country)	GERAB NATIONAL ENTERPRISES,Linde, Ferrofab, Kubota
Project Name	Sweeny, Convent, GC-32 New Gethering Centre for SEK

Supplier Information

- Samyoung Fitting Co.,Ltd.
- <https://syf30.co.kr/product>
- TEL: +82-504-0667-2608
- E-Mail: syf@syf30.co.kr

Fitting, Flange



Special Elbow

Product Description:

Special elbow redirects piping flow and is designed for high temperature and pressure with excellent durability and conductivity.

Specification:

- GE B50A402B, 90°
- Size: 88.9mm x 88.9mm SW
- Referemce Document: G155B3518P0002 B50A402B

Domestic Track Records	
Main Client	Doosan
Delivery Year	2024

Supplier Information

- Tae Sung Industrial Systems Co.,Ltd.
- www.bestcu.kr
- TEL: +82-10-2822-180
- E-Mail: tssj8324@daum.net



Strainer

Product Description:

- Device that prevents foreign substances from entering into equipment by removing solids contained in fluid

Specification:

- Material: Carbon Steel, Stainless Steel, Alloy Steel
- Dimension (L*W*H): Size: 1/2" ~ 56"
- Design Features: ASME

Supplier Information

- Smart Valve Company(SVC Inc.)
- <https://www.smartervalves.com/ko>
- TEL: +82-31-996-8101
- E-Mail: sales@smartvalve.com

Fitting, Flange



SUPERLOK Tube Fitting

Product Description:

BMT's tube fittings (trademark: SUPERLOK) offer leak-free, reliable connections for high-pressure systems. Designed for easy installation and maintenance, these fittings provide excellent resistance to vibration and thermal expansion. Made from high-quality materials such as stainless steel, they ensure long-lasting performance and corrosion resistance in demanding environments.

Specification:

- Single and double-ferrule compression type
- Size: 1/16 to 2 in. 2 to 38 mm
- Working Pressure: Governed by the pressure rating of tubing
- Temperature: Up to 649°C (1200°F)

Domestic Track Records			
Main Client	Samsung C&T	JS Plant	Daewoo E&C
Project Name	Samyong Fitting	Wolsong NPP	Hanbit NPP
Delivery Year	2023	2021	2019

Overseas Track Records			
Client (Country)	Hyundai E&C (UAE)	CNNC (China)	Saudi Electricity Company (Saudi Arabia)
Project Name	Barakah NPP	China AP-1000	Rabigh CCPP
Delivery Year	2018	2016	2015

Supplier Information

- BMT Co., Ltd.
- <https://superlok.com/kr/>
- TEL: +82-51-780-5131
- E-Mail: hsjeon@superlok.com

Fitting, Flange



Wrought and Forged Fitting

Product Description:

Wrought fittings are metal components shaped through forming processes, used to connect pipes in piping systems. They offer high strength, durability, and corrosion resistance, and are primarily used in oil, gas and offshore industries for high-pressure and high-temperature applications. Common types include elbows, tees, and couplings, typically made from carbon steel, stainless steel, duplex stainless steel, or non-ferrous metals.

Specification:

- Fitting: ASME B16.9, ASME B16.11, MSS SP-75, MSS SP-97
- Wrought Material: ASTM A234, ASTM A420, ASTM A860, ASTM A403, ASTM A815, ASTM B366
- Forged Material: ASTM A105, ASTM A182, ASTM A694

Domestic Track Records			
Main Client	Lotte	Posco E&C	GS Caltex
Project Name	K1	Dangjin TPP	Maintenance
Delivery Year	2024	2024	2024

Overseas Track Records			
Client (Country)	ARAMCO (Saudi Arabia)	Enterprise Products	ADNOC Gas
ProjectName	Riyas NGL	Bahia Pipeline	Habshan Gas
DeliveryYear	2024	2024	2024

Supplier Information

- TK Corporation
- <https://tkbend.co.kr/eng/>
- TEL: +82-10-8912-3770
- E-Mail: jsyoon@tkbend.co.kr

Heat Exchanger



Plate Type Heat Exchanger

Product Description:

A plate heat exchanger (PHE) is a device that transfers heat between two fluids using a series of thin, corrugated plates. These plates are held together by a frame and create channels for the fluids to flow through, allowing heat to transfer from the hot fluid to the cold fluid. PHEs are known for their compact design and high heat transfer efficiency, making them popular in various industries.

Specification:

- HT/CCW Heat Exchanger, LO/LT Water Heat Exchanger, LT/CCW Heat Exchanger
- FO/CCW Heat Exchanger, LO/Pre-Heating Water Heat Exchanger, DO Cooler, etc

Domestic Track Records			
Main Client	Hanwha Engine	HD Hyundai Heavy Industry	Hanwha Engine
Project Name	Saeul NPP #3,4 AACDG	Saeul NPP #3,4 EDG	Shin- Hanul NPP #1,2 EDG
Delivery Year	2022	2022	2017

Overseas Track Records		
Client (Country)	HD Hyundai Heavy Industry (UAE)	Hanwha Engine (UAE)
Project Name	Barakah NPP # 1,2,3,4	Barakah NPP AACDG
Delivery Year	2015	2017

Supplier Information

- MYTEC
- www.imytec.com
- TEL: +82-51-831-7474
- E-Mail: gordon@imytec.com

Heat Exchanger



Shell & Tube Heat Exchanger

Product Description:

A shell and tube heat exchanger is a device that transfers heat between two fluids by circulating them through a shell and tube arrangement. It is commonly utilized in industrial applications such as oil refineries and chemical processing facilities.

Specification:

- Pre-heating Water Electric Heater, HT Water Electric Heater, LO Pre-heater, JW Pre-heater, HT Water Electric Heater with Panel, CCW Heat Exchanger

Domestic Track Records			
Main Client	Hanwha Engine	HD Hyundai Heavy Ind	Hanwha Engine
Project Name	Saeul NPP #3,4 AACDG	Saeul NPP #3,4 EDG	Shin-Hanul NPP #1,2 EDG
Delivery Year	2022	2022	2017

Overseas Track Records			
Client (Country)	HD Hyundai Heavy Industry	Hanwha Engine	KHNP (Slovenia)
Project Name	Barakah NPP #1~4 EDG	Barakah NPP AACDG	Krsko
Delivery Year	2015	2017	2022

Supplier Information

- MYTEC
- www.imytec.com
- TEL: +82-51-831-7474
- E-Mail: gordon@imytec.com

HVAC(Heating, Ventilation, and Air Conditioning)



Air Cleaning Unit

Product Description:

HI AIR KOREA (HAK) Air Cleaning Unit is designed to operate optimally in the harsh environment of nuclear power plants. HAK Air Cleaning Unit is specially constructed to provide clean air by removing radioactive dust in NPPs considering size, efficiency, reliability, and maintainability. The unit is composed of a moisture separator, heating coil, pre-filter, HEPA filter, adsorber, post-filter and fan/motor. The unit is developed in close cooperation with major customers and is able to meet the most demanding requirements.

Specification:

- Casing
 - Housings are made of painted carbon steel of minimum 7-gauge thickness
 - Each section shall have enough strength to meet the specified design loading including seismic acceleration
- Base frame
 - The base frame is made of carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
 - Spaces between the frame are also considered for installation of drain piping
- Moisture seperator
 - Moisture separators are designed, constructed, and tested in accordance with Section FA of ASME AG-1 and ASME N509, Paragraph 5.4
 - Removing at least 99 % by weight of the entrained moisture in an airstream containing approximately 1.5 to 2 lb of entrained water per 1,000 cu ft and by a count of 5 of 10 μm diameter droplets
- Electric heating coil
 - Electric air heaters are designed, constructed, and tested in accordance with Section CA of ASME AG-1 and ASME N509, Paragraph 5.5
 - Elements have 80 % nickel and 20 % chromium resistance wire centered in a metal sheath and insulated from the sheath by magnesium-oxide refractory
 - Heating coils are rated for operating at 480Vac, 60Hz, 3-phase
- Pre-filter
 - The pre-filters are designed, constructed, and tested in accordance with Section FB of ASME AG-1 and ASME N509, Paragraph 5.3
 - The pre-filters average atmospheric dust spot efficiency of at least 90 %, when tested in accordance with ASHRAE 52.1 or ASHRAE 52.2
- The filter is replaceable, extended media, dry-type
- Pre-filter is UL 900 classified
- HEPA Filter and post-filter
 - The HEPA filters and post filters are of the same construction and designed, constructed, and tested in accordance with Section FC of ASME AG-1 and ASME N509, Paragraph 5.3
 - HEPA filters and post filters shall satisfy the requirements of UL-586
 - HEPA filters and post filters are 24 x 24 x 11 1/2(nominal size) inches with a minimum rated airflow of 1,500 scfm(2,000 scfm recommended) and clean pressure drop of less than 1.3 in. WG
- Adsorber
 - Adsorber is designed, constructed and tested in accordance with Section FE of ASME AG-1, Paragraph 5.2
 - Adsorber banks are arranged in accordance with Section HA of ASME AG-1 and Section 5.0 of ASME N509
 - Adsorber cells are Type III and meet the requirements of Section FE of ASME AG-1, ASME N509, Paragraph 5.2
 - Adsorber cells meet the requirements of U.S. NRC RG 1.140
 - Adsorbent is made of activated carbon and is qualified in accordance with Section FF of ASME AG-1
- Fan
 - Centrifugal type
 - Double width double inlet
 - V-belt driven, complete with fan belt guard
- Motor
 - Premium efficiency
 - Cast iron casing
 - IP 54/55 protection
 - Power supply: 480VAC, 60Hz, 3-phase

Domestic Track Records			
Main Client	Daewoo E&C	KHNP	Daewoo E&C
Project Name	Research Reactor Export	Hanul NPP Maintenance Working Shop HVAC Equipments	New PWR Fuel Plant
Delivery Year	2024~	2022~2023	2019~2023

Overseas Track Records		
Main Client	KEPCO	Daewoo E&C
Project Name	Barakah NPP M252 #1,2,3,4	Jordan Research & Training Reactor
Delivery Year	2012~2019	2013~2014

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

HVAC(Heating, Ventilation, and Air Conditioning)



Air Cooled Condensing Unit

Product Description:

HI AIR KOREA offers a wide range of Air Cooled condensing units that are specifically designed and built for outdoor use suitable for a highly corrosive environment, especially in nuclear power plants. Available options for unit construction are countless. They include customized design, using copper tubes with aluminum fins. HAK Air Cooled condensing unit is designed for use in combination with an Air Handling Unit or Package Air Conditioning Unit for NPPs. It offers remarkable versatility, making it suitable for any environment in which it may be installed.

Specification:

- Casing
 - Single-skinned panels made of 1.6 mm thick painted carbon steel
 - Removable panels are provided for condensing coil, compressor and fan maintenance
 - Pressure gauges provided for monitoring the operating condition
- Base Frame
 - The base frame made of painted carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
- Fan
 - Vane-axial type with safety guard
 - Direct-driven type
 - All fans shall be dynamically balanced at the factory
 - Fan blade material: Painted Steel (KS D3506-SGCC)
- Motor
 - Premium efficiency
 - Cast iron casing
 - IP55 protection
 - Power supply: 480 VAC, 60 Hz, 3-phase
 - Service factor: 1.0
 - Enclosure: TEAO type(IC417)
 - NEMA design letter: B
- Condensing Coil
 - Tube material: Copper(KS D5301-C1220T)
 - Fin material: Aluminum(KS D5101-C3771BE)
- Compressor
 - Hermetic (PACU-ACCU): IP55 Protection
 - Semi-hermetic (AHU-ACCU): IP54 Protection
 - Refrigerant: R-407C
 - Power supply: 480 VAC, 60Hz, 3-phase

Domestic Track Records			
Main Client	KHNP		Daewoo E&C
Project Name	Saeul NPP #3,4 M253	Shin-Hanul NPP #1,2 M253	Research Reactor Export
Delivery Year	2016~	2011~2018	2024~

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

HVAC(Heating, Ventilation, and Air Conditioning)



Air Handling Unit

Product Description:

HI AIR KOREA (HAK) Air Handling Unit is designed to optimally operate in the harsh conditions of nuclear power plants. HAK Air Handling Unit is specifically constructed to operate in NPPs considering size, efficiency, reliability, and maintainability. The unit is developed in close cooperation with major customers to meet the most demanding requirements.

Specification:

- Casing
 - Double-skinned panels made of 0.8 mm thickness galvanized steel internal wall and 3.2~4.5 mm thickness SS400 external wall with 25 mm thick glass wool insulation
 - Each section shall have sufficient strength to meet the specified design loading including seismic acceleration, and access panels are provided where required for assembly or maintenance
 - Casing design pressure is at least 1.25 times the fan shutoff pressure per the requirements of ASME N509
- Base Frame
 - The base frame is made of carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
 - Spaces between the frame are also considered for installation of drain pipe
- Fan
 - Both centrifugal & vane-axial type fans are designed, constructed and tested in accordance with ASME AG-1
 - Centrifugal type
 - Material of casing and impeller is SS400
 - The centrifugal fan shall be of double-width double-inlet(DWDI) and non-overloading type
 - V-belt driven, complete with fan belt guard
 - The blade of the centrifugal fan shall be of backward-inclined airfoil or backward-curved type
 - Vane-axial type
 - Casing material is SS400 and blades material is aluminum alloy
 - Each Vane-axial fan rotor blade shall be manually adjustable type, fixed in position
- Motor
 - Premium efficiency
 - Cast iron casing
 - IP54/55 protection
 - Power supply: 480 VAC, 60Hz, 3-phase
 - Service factor: 1.15(for TEFC), 1.0(for TEAO)
 - Enclosure: TEFC type(IC 411) for centrifugal fans and TEAO type(IC 417) for vane-axial fans
 - NEMA design letter: B
- Damper
 - Damper is designed, fabricated, and tested in accordance with ASME AG-1 and AMCA 500D
 - Dampers are manual isolation dampers with parallel blades
- Cooling Coil
 - Chilled water coils are designed, constructed and tested in accordance with ASME AG-1
 - Copper tube with aluminum fins
 - Cooling medium: HFC refrigerant(R-407C) or chilled water
 - AHRI certified(Only chilled water coil)
- Heating Coil
 - Stainless steel tube and fins
 - Heating medium: Electric
- Filter
 - Standard of width 24 inches x height 24 inches x depth 11-1/2 inches, and rated for a minimum 2,000 cfm airflow per filter with a clean pressure drop not to exceed 0.65 inches of water for 90~95 % efficiency
 - Frames are designed to withstand the operating pressure
 - A temporary filter (at least 80~89 % dust spot efficiency on atmospheric dust with 2,000 cfm when tested in accordance with ASHRAE 52.1) is provided
 - Filters are UL 900 classified

Domestic Track Records			
Main Client	KHNP		
Project Name	Shin-Hanul NPP #3,4 M253	Saeul NPP #3,4 M253	Shin-Hanul NPP #1,2 M253
Delivery Year	2024~	2016~2025	2011~2018

Overseas Track Records	
Main Client	Daewoo E&C
Project Name	Jordan Research & Training Reactor
Delivery Year	2013

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

HVAC(Heating, Ventilation, and Air Conditioning)



Cubicle Cooler

Product Description:

HI AIR KOREA (HAK) has developed various types of customizable CCs (Cubicle Cooler) in response to the highly demanding room air requirements for use in nuclear power plants. HAK CC is composed of a filter, fan, and cooling coil in a compact casing. When used with other HAK air conditioning equipment, this CC serves as a useful device to complete a high-quality air conditioning system. The air conditioning system in nuclear power plants can be completed in the best way with HAK’s reliable CC.

Specification:

- Casing
 - Double-skinned panels made of 0.8 mm thick galvanized steel internal wall and 3.2~4.5 mm thickness SS400 external wall with 25 mm thickness glass wool insulation
 - Each section shall have sufficient strength to meet the specified design loading including seismic acceleration, and access panels are provided where required for assembly or maintenance
 - Casing design pressure is at least 1.25 times of fan shut off pressure per the requirements of ASME N509
- Base Frame
 - The base frame is made of carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
 - Spaces within the frame are designed to allow installation of drain pipe
- Fan
 - Centrifugal type fan designed, constructed and tested in accordance with ASME AG-1
 - Material of casing and impeller is SS400
 - The centrifugal fan shall be of double-width double-inlet(DWDI) and non-overloading type
 - V-belt driven, complete with fan belt guard
 - The blade of the centrifugal fan shall be backward-inclined airfoil or backward-curved type

- Motor
 - Premium efficiency
 - Cast iron casing
 - IP54 / 55 protection
 - Power supply: 480 VAC, 60 Hz, 3-phase
 - Service factor: 1.15 (for TEFC), 1.0 (for TEAO)
 - Enclosure: TEFC type (IC 411)
 - NEMA design letter: B
- Cooling Coil
 - Chilled water coils are designed, constructed and tested in accordance with ASME AG-1
 - Copper tubes with aluminum fins
 - Cooling medium: Chilled water
 - AHRI-certified
- Filter
 - Frames are designed to withstand the operating pressure
 - Filters are UL 900 classified

The unit features double-skinned casing with galvanized steel inside and SS400 outside, insulated with 25 mm glass wool. It includes a carbon steel base frame, a centrifugal fan (DWDI, SS400, V-belt driven), and a premium efficiency motor (TEFC, IP54/55, NEMA B). The cooling coil is made of copper tubes with aluminum fins, uses chilled water, and is AHRI certified. Filters are pressure-resistant and UL 900 classified.

Domestic Track Records			
Main Client	KHNP		
Project Name	Shin-Hanul NPP #1,2 M253	Saeul NPP #1,2 M253	Saeul NPP #3,4 M253
Delivery Year	2011~2018	2010~2012	2016~

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>

- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

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HVAC(Heating, Ventilation, and Air Conditioning)



Humidifier

Product Description:

HI AIR KOREA (HAK) Humidifier is designed to supply steam to the duct system in order to maintain a comfortable level of humidity in control rooms for NPPs. HAK Humidifier is specifically constructed to operate in NPPs considering size, efficiency, reliability, and maintainability. The humidifier is an electric steam heater and shall be UL listed. It is a customizable unit that can be manufactured based on customer requirements.

Specification:

- Casing
 - The chamber is made of ASTM A240 type 304 plate with welded joints
 - The chamber is insulated with 20 mm thick rigid foam with reinforced aluminum foil cladding
 - A maintenance cover is provided on top of the chamber for heating element removal and cleaning inside of the chamber.
- Level Gauge
 - Sight-glass type level gauge is provided
- Base Frame
 - The base frame is made of carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
 - Two drain pipes are installed for water overflow and complete drainage of the water for maintenance
- Safety Devices
 - Electric float-type level switch is provided to cut-off the power to heating element at low water level
 - High temperature sensor (set point at 150 °C) is provided inside the chamber to prevent overheating
- Heating Element
 - Heating elements contain nickel and chromium resistance wire centered in a metal sheath and insulated from the sheath by magnesium-oxide refractory
 - Heating elements are rated for operation at 480VAC, 60Hz, 3-phase
- Heater J/B
 - Heater J/B is the connection point for the power of heating element and level switch
- Control Panel
 - Casing material: Carbon Steel KS D3512 SPCC
 - Power source: 480VAC, 60Hz, 3-phase
 - Control source: 120VAC, 60Hz, 1-phase
 - Ingress Protection: NEMA type 12(Dust-tight type)
 - Control panel is supplied loose

Domestic Track Records			
Main Client	Daewoo E&C	KHNP	KHNP
Project Name	Research Reactor Export	Saeul NPP #3,4 M254	Shin-Hanul NPP #1,2 M254
Delivery Year	2024~	2016~	2011~2018

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

HVAC(Heating, Ventilation, and Air Conditioning)



Packaged Air Conditioning Unit

Product Description:

For medium-sized cooling capacity requirements, HI AIR KOREA (HAK) Packaged Air Conditioning Unit (PACU) for NPPs offers highly reliable performance backed by experience. The PACU is combined with an air-cooled condenser. The refrigerant circuit includes a stop valve for liquid inlet, a fusible plug, a strainer, a liquid line sight glass, a thermostatic expansion valve, a cooling coil, a compressor and a stop valve for the gas outlet. With its simple and compact in design, the PACU is convenient for control rooms, workshops, and kitchens where local cooling/heating is required apart from the main A/C system. With its high-quality components, HAK PACU provides a complete air conditioning solution with outstanding performance.

Specification:

- Casing
 - Single-skinned panels made of 1.6 mm thick carbon steel external wall with 25 mm thick polyurethane insulation
 - Filter section includes removable panel for filter replacement
 - Front doors are provided for cooling coil, humidifier and fan maintenance
 - The louvers at plenum chamber can be removed for maintenance
- Base Frame
 - The base frame is made of carbon steel
 - Rigid enough to support all components during shipping, lifting and operation
 - Drain pipe is installed through the skid
- Filter
 - Pre-filter
 - Thickness: 25 mm
 - Filter efficiency: 80 %
- DX Cooling Coil
 - Tube material: Copper (KS D5301-C1220T)
 - Fin material: Aluminum (KS D5101-C3771BE)
 - Cooling medium: HFC refrigerant (R-407C)
- Electric Heating Coil
 - Heating coil is electric type and installed downstream of the cooling coil
 - Coil shall meet the applicable requirements of NEC and be provided with over-temperature protection
- Steam Humidifier
 - The humidifier shall be certified in accordance with UL 998(as applicable), a self contained electrically heated type
 - Stainless steel vaporizing chamber with electric immersion heating elements
 - Self-contained automatic control system with moisture-sensing element indicator/transmitter, controller and switches
- Fan
 - Sirocco type
 - V-belt-driven
 - Casing material: Galvanized steel
 - Impeller material: Painted steel
- Motor
 - Premium efficiency motor
 - Cast iron casing
 - IP44 protection
 - Power supply: 480VAC, 60Hz, 3-phase
 - Service factor: 1.15
 - Enclosure: TEFC type(IC411)
 - NEMA design letter: B
- Control Panel
 - Casing material: Carbon steel
 - Power source: 480 VAC, 60 Hz, 3-phase
 - Control source: 120 VAC, 60 Hz, 1-phase
 - Indoor: NEMA type 12(Dust-tight type)

Domestic Track Records			
Main Client	Daewoo E&C	KHNP	KHNP
Project Name	Research Reactor Export	Saeul NPP #3,4 M253	Shin-Hanul NPP #1,2 M253
Delivery Year	2024~	2016~	2011~2018

Overseas Track Records	
Main Client	Daewoo E&C
Project Name	Jordan Research & Training Reactor
Delivery Year	2013~2014

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiairkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiairkorea.co.kr

O-Ring, Gasket, Seal



Die-Formed Bonnet Gasket

Product Description:

- Graphite tape with a high purity of 99.8% or more is wound, and graphite yarn—with excellent lubricity on both the upper and lower sides—is compression-molded together with braided reinforcement, providing excellent durability.
- New Excellent Product Certification: By increasing the contact area, the surface pressure of the internal fluid is reduced. The circumferentially expanded gasket provides high airtightness due to strong surface contact, and the reinforced yarn effectively suppresses extrusion phenomena.

A graphite tape with 99.8% purity and graphite yarn is compression-molded with braided reinforcement to ensure excellent durability. The circumferentially expanded gasket, certified as a New Excellent Product, provides high airtightness by reducing surface pressure and preventing extrusion through strong surface contact.

Specification:

- Application: Using in high pressure, high temperature steam valve bonnet
- Customizable depending on service conditions

Domestic Track Records			
Main Client	Goseong TPP	Samcheonpo TPP	KHNP-KNP
Delivery Year	2025	2025	2025

Overseas Track Records		
Client (Country)	Bang Pakong TPP(Thailand)	South Bangkok CCPP (Thailand)
Delivery Year	2025	2025

Supplier Information

- Dongsuh Industry Co.,Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com

Die-Formed Packing

Product Description:

- Graphite tape packing is compressed and molded into a specific dimension for easy installation.
- Graphite's self-lubricating property and low coefficient of friction allow it to be used over a wide range without damaging reciprocating and rotary shafts.
- If you want to disassemble only the gland without removing the pump or valve, you can simply cut and install it.
- Better sealing performance can be achieved when used with ALS910C, ALS900G, or ALS955W, depending on the intended application.

Specification:

- Application: High temperature and pressure valve stem, pumps
- Customizable depending on use condition

Domestic Track Records			
Main Client	Yeosu TPP	Yeongheung TPP	KHNP-KNP
Delivery Year	2025	2024	2025

Overseas Track Records			
Client (Country)	Chana (Thailand)	South Bangkok CCPP (Thailand)	Nghi Son Refineries (Vietnam)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co.,Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com

O-Ring, Gasket, Seal



Gate Seals and Rubber Products for Heavy Industry, Shipbuilding, and Offshore Plants

Product Description:

- Sluice Gate Seal: Packing seals for hydroelectric dams
 - Proven track record in supplying sluice gate seals to both domestic and overseas hydroelectric dam projects.
- Shipbuilding Equipment: LPG tank expansion seals, O-rings, and rubber gaskets
 - Experienced in participating in major shipbuilding and offshore plant projects for heavy industries.
 - Proven capability to develop materials and products tailored to customer specifications.

Specification:

- Proven record in manufacturing and installing 52-type low-temperature gaskets and LPG tank expansion seals.
- Capability to design and manufacture molds and products customized to sluice gate structures

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	Kori NPP	Saeul NPP	Gasket, Offshore

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Gasket

Supplier Information

- MJ TSR
- TEL: +82-10.8523.9653
- E-Mail: saint@mjtsr.com



Mechanical Packing

Product Description:

A sealing device with square cross-section is placed in the stuffing box, which prevents leakage from the valve and pump by tightening the gland part. The structure is simple, and attachment and replacement operations are convenient. There is no need to prepare packing materials for every size and shape, as it resembles plastic packing and can be cut to size from just a few standard types.

Specification:

- Application:
 - High temp. and high pressure valve for TPP
 - High temp. and high pressure valve for NPP
 - Various types of valves (Water Supply, Condensate Pump, Turbine, Water Circulation Pump, etc.)
 - All types of pumps and valves handling the most liquids
- Customizable depending on service conditions

Domestic Track Records			
Main Client	Ulsan TPP	Samcheok TPP	Hanul NPP
Delivery Year	2025	2024	2024

Overseas Track Records			
Client (Country)	North Bangkok CCPP (Thailand)	Power Plants (Vietnam)	Bang Pakong TPP (Thailand)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co., Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com

O-Ring, Gasket, Seal



Mechanical Seal for RCP (Reactor Coolant Pump)

Product Description:

Reactor Coolant Pumps (RCPs) are used to pump primary coolant around the primary circuit of PWR. The purpose of the reactor coolant pump is to provide forced primary coolant flow to remove and transfer the amount of heat generated in the reactor core. A mechanical seal is used to prevent any water from leaking up the shaft of RCP into the containment.

Specification:

- Applicable Reactor Types:
 - PWR
 - PHWR CANDU-6
- Maintains functionality for 150 hours under ELAP conditions at a Nuclear Power Plant;
 - Pressure Max. 176 kg/cm²g, Temp. Max. 309°C, Allowable Leakage: Less than 1gpm, 0RPM

Domestic Track Records			
Main Client	KHNP		
Project Name	Kori NPP	Saeul NPP	Wolsung NPP
Delivery Year	2022	2023	2024

Supplier Information

- Flowserve KSM Co., Ltd.
- www.ksm.co.kr
- TEL: +82-31-980-0308
- E-Mail: sangjunkim@flowserveksm.co.kr



Non-asbestos Joint Sheet & Gasket

Product Description:

This product is manufactured by the hot calendering process using high-quality non-asbestos fibers and oil-resistant synthetic rubber. Especially, this sheet has superior oil sealability with excellent oil resistance.

Specification:

- ASME, JIS

Domestic Track Records			
Main Client	Samsung	KHNP	Hanhwa
Delivery Year	2024	2024	2024

Overseas Track Records		
Client (Country)	Hudong (China)	Shitanoe (Japan)
Delivery Year	2024	2024

Supplier Information

- Taehwa Kalpa Seal Co., Ltd.
- http://www.taehwa1.com/
- TEL: +82-10-5383-1925
- E-Mail: syshin@taehwa1.com

O-Ring, Gasket, Seal



O-Ring

Product Description:

Dongsuh offers various types of rubber packings. O-rings are primarily used to prevent the leakage of fluids or gases. However, they can also serve as dust seals, drive belts, or be used on rotating shafts. Most O-ring seals can be classified into one of the three arrangements shown below:

Specification:

- Customizable depending on service conditions
- Application: Valve Actuator, Pump
- Materials: Choose appropriate material according to NBR, HNBR, EPDM, Silicone, FPM (Viton), Kalrez, CR rubber, temp. and other working materials.

Domestic Track Records			
Main Client	GS Donghae TPP	Wolsung NPP	Taeon TPP
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	North Bangkok CCPP (Thailand)	Thai Binh TPP (Vietnam)	MMB (Mexico)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co., Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com



PTFE V-Packing

Product Description:

Each lip of a V-packing set independently reacts to pressure and automatically forms a seal. The multiple-lip configuration evenly distributes pressure and maintains an effective seal along the shaft.

- Elimination of costly seal failures or blowouts
- Reduced installation costs
- Reduced equipment downtime with precise seal specifications
- Lower inventory costs
- Lower friction – Friction, a measurement of the resistance to sliding between a seal and hardware surfaces, is directly related to the seal material's coefficient of friction and the total load.

Each lip in a V-packing set independently responds to pressure to form a tight seal, with the multi-lip design ensuring even pressure distribution along the shaft. This design reduces friction, installation costs, and downtime, while extending service life by up to 50% compared to braided styles. It also minimizes inventory costs and prevents costly seal failures or blowouts.

Specification:

- Application: Control Valve, Piston Rod
- Customizable depending on service conditions

Domestic Track Records			
Main Client	Doosan	Samcheok TPP	Busan CCPP
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	North Bangkok CCPP (Thailand)	Nghi Son Refinerys (Vietnam)	Bang Pakong TPP (Thailand)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co., Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com

O-Ring, Gasket, Seal



Spiral Wound Gasket

Product Description:

Dongsuh offers a wide variety of metal gaskets. Among semi-metallic gaskets, the spiral wound gasket is the most reliable type, offering the flexibility and recovery essential for high-temperature and high-pressure applications. It is spirally wound using a V-shaped thin metallic hoop and a non-ferrous filler material. The starting and ending points of the winding are reinforced by multiple wraps of the hoop, and both edges are spot-welded to complete the gasket.

Specification:

- Application: Valve Bonnet, Cage, Flange, etc.
- Customizable depending on service conditions

Domestic Track Records			
Main Client	Hadong TPP	Yeonghung TPP	Dangjin TPP
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	Mae moh TPP (Thailand)	Thai Binh TPP (Vietnam)	POSCO E&C (Panama)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co., Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psg@dongsuhco.com



Spiral Wound Gasket

Product Description:

A spiral-type gasket is a reliable type among other semi-metal gaskets. The V-shaped metal plate and non-metallic fillers are overlapping, and they are wrapped into the spiral pattern and the two ridges are soldered together. It can be used for both high pressure and high temperature and it automatically adjusts to the changes in pressure, temperature and vibration.

Specification:

- ASME, JIS

Domestic Track Records		
Main Client	Lotte Chemical	S-Oil
Delivery Year	2024	2024

Overseas Track Records		
Client (Country)	Hudong (China)	Matex (Japan)
Delivery Year	2024	2024

Supplier Information

- Taehwa Kalpa Seal Co., Ltd.
- <http://www.taehwa1.com/>
- TEL: +82-10-5383-1925
- E-Mail: syshin@taehwa1.com

O-Ring, Gasket, Seal



Spring Energized Seal

Product Description:

- Installing in the gland the S-E Seal forms a solid seal, as the seal cover lip is pressed against the gland surface by spring elasticity. In addition, sealing performance improves due to fluid pressure.
- Suitable for both static and dynamic seals
 - Compatible for most chemical products and organic solvents
 - Available to be used from -254°C to 300°C
 - A wide range of seal materials for different fluids is available
 - Available to be produced in accordance with JIS B2406, AS568, and DIN specifications

The S-E Seal forms a solid seal through spring-loaded compression, with performance further enhanced by fluid pressure. It is suitable for both static and dynamic sealing, across a wide temperature range (-254°C to 300°C), and compatible with most chemical and organic solvents. The seal is available in various materials and complies with JIS B2406, AS568, and DIN standards.

Specification:

- Application: Valve Actuator, Pump, Gas Turbine Engine, Pressure Switch, etc.
- Customizable depending on service conditions

Domestic Track Records			
Main Client	Taeon TPP	Kori NPP	Boryeong TPP
Delivery Year	2025	2025	2025

Overseas Track Records			
Main Client	North Bangkok CCPP (Thailand)	Narime (Vietnam)	Power Plants (Vietnam)
Project Name	2025	2025	2024

Supplier Information

- Dongsuh Industry Co., Ltd.
- www.dongsuhco.com/eng
- TEL: +82-70-7510-2039
- E-Mail: psgf@dongsuhco.com

Pipe, Tube



DST Venturi Steam Trap

Product Description:

- More than 20% reduction in steam leakage compared to mechanical/thermodynamic steam traps
- 15+ Year lifespan - Applied in every five Korean electric power companies, Korea Southeast Power Co., Korea Western Power Co., Korea Southern Power Co., Korea Central Power Co., and Korea East-West Power Co., Ltd.
- In 2023, the DST Venturi Steam Trap was designated as an "Innovative Product" in the energy sector by the Ministry of Trade, Industry and Energy

Specification:

Classified by steam operating pressure and temperature, pipe size, and connection method with the piping.

Domestic Track Records			
Main Client	Lotte Wellfood	KOWEPO Taeon Power Division	Incheon Power Division
Delivery Year	2024	2023	2024

Overseas Track Records			
Client (Country)	Lotte Rakhat (Kazakhstan)	CJ Bio Division (Malaysia)	Al Qatrana CCPP (Jordan)
Delivery Year	2020	2020	2025

Supplier Information

- Dongsung Energy Saving Solution Co., Ltd.
- www.gesds.com
- TEL: +82-10-9892-2016
- E-Mail: dses2019@gesds.com

Duplex Stainless Steel & High Nickel Alloy Pipe

Product Description:

Duplex Stainless Steel are widely used in highly corrosive environments, such as desalination processes, which require highly nickel content materials.

Specification:

- Duplex: Alloy Steel with a mixed microstructure of austenite and ferrite, made by high chromium (19~32%) and molybdenum (~5%) and lower nickel contents
- Nickel Alloy: High nickel alloy steel with more improved resistance to a localized corrosion (nickel content > 62.5%)
- Main Grades: S31803, S32205, S32750

Domestic Track Records			
Main Client	Woong Valve	Hangdo	TK Bend
Delivery Year	2024	2024	2024

Overseas Track Records			
Client (Country)	Formosa	Petronas	Petrovietnam
Delivery Year	2024	2024	2024

Supplier Information

- Gana Steel Co., Ltd.
- www.ganasteel.com
- TEL: +82-2-6300-7260
- E-Mail: wslee@ganasteel.com

Pipe, Tube



FOAMGLAS®

Product Description:

Foamglas is the trade name of Cellular Glass Insulation developed by Pittsburgh Corning Corporation (PCC) in the United States and is used in industries such as petrochemical, shipbuilding, and LNG, and is a top-quality thermal and cooling insulation material that has been proven globally for its superior quality in roofs, walls, and flooring of general buildings.

Specification:

- Material Composition: 100% Inorganic Cellular Glass
- Compressive Strength: Minimum 600 kPa, in accordance with ASTM C165
- Water Absorption: 0% (no moisture absorption) with a fully sealed cell structure
- Fire Resistance Rating: Class A (non-combustible), in accordance with ASTM E84, providing zero smoke or flame generation
- Temperature Range: -268°C to +432°C, suitable for both cryogenic and high-temperature environments
- Chemical Resistance: Excellent resistance to acids, alkalis, oils, and other chemicals with superior corrosion resistance
- Durability and Barrier Performance: Maintains performance for over 30 years, providing a complete vapor and gas barrier
- Compliance with International Standards: Meets ASTM C552, ASTM C165, ASTM C518, ASTM E84, and other global standards
- Marine/Offshore Certifications: Certified by DNV-GL, ABS, Lloyd's, among others

Domestic Track Records			
Main Client	Hanwha Ocean	SK Oceanplant	Hanwha Ocean
Project Name	Jans-lo	Barossa Gas	Gallaf Barch #3
Delivery Year	2025	2023-2024	2022-2024

Supplier Information

- APROGEN I&C, inc
- TEL: +82-10-8749-1734
- E-Mail: bspark@aprogen.com



Stainless Steel Seamless Pipe

Product Description:

Austenite Stainless Steel are used for sour, high pressure, high temperature, and aggressive services such as refinery, chemical and nuclear power plants, which require high nickel content materials.

Specification:

- Alloy steel with a minimum of 10.5% chromium (Cr) content by mass
- Main Grades: 300 series – 304, 316, 321

Domestic Track Records			
Main Client	Hyundai Engineering	Hyundai Construction	Samsung C&T
Project Name	Shin-Hanul NPP #1,2	Hanul NPP	Kori NPP
Delivery Year	2024~2025	2024~2025	2015~2025

Overseas Track Records			
Client (Country)	Samsung C&T (Qatar)	Samsung E&A (Malaysia)	GS Construction
Project Name	NFE	Sarawak	Evergreen
Delivery Year	2022~2025	2021~2025	2024~2025

Supplier Information

- Gana Steel Co.,Ltd.
- www.ganasteel.com
- TEL: +82-2-6300-7260
- E-Mail: wslee@ganasteel.com

Pump



Boiler Feed Water Pump

Product Description:

Boiler Feed Water Pump (BFP) is a main pump that supplies high temperature water to the boiler under high pressure. Equipped with a multi-stage impeller, it generates high pressure through high- speed rotation and delivers reliable performance with advanced technology and high added value.

Specification:

- Capacity: up to ~20m³/min
- Head: up to ~3,000m
- Temperature: up to ~250°C

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	Shin-Hanul NPP #3,4 ACP	Saeul NPP N201	Goseong CPP
Delivery Year	2025 (Contract)	2024	2025 (Contract)

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Salman Farsi Petrochemical (Iran)
Project Name	Barakah NPP #1~4 M212	SFPC Propane Dehydrogenation (PDH)
Delivery Year	2020	2020

Supplier Information

- CW-Hydro, Inc.
- www.cwhydro.co.kr
- TEL: +82-10-7707-9119
- E-Mail: jhpark@cwhydro.co.kr



Emergency Trip Devices for Turbine & FWPT

Product Description:

This advanced stop valve is commonly applied to the main feedwater pump turbine shutdown systems of NPPs. It minimizes failures due to seizing and blockage, allowing for performance enhancement and problem prevention in existing systems. Specifically, Korean nuclear reactors, including OPR1000 and APR1400, can directly replace their existing valves without modification.

Specification:

- Prevents failure due to internal fixation
- Prevents failure due to parts jamming
- Prevents heat generation when power is turned on
- Allows Monitoring/inspection during operation

Domestic Track Records	
Main Client	KHNP
Project Name	Hanul NPP Solenoid Valve for Trip
Delivery Year	2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)

Supplier Information

- HANVIT Industries Ltd.
- http://www.hanvit-ind.com/
- TEL: +82-10-5695-9920
- E-Mail: daekyu.choi@hanvit-ind.com

Pump



Fire Pumps, Mini Fire Trucks

Product Description:

- Ministry of National Defense, Korea Forest Service, Ministry of Oceans and Fisheries, and power plants
- Firefighting equipment for rapid response in narrow roads and confined spaces
- Pumps capable of suction for hoses up to 50 meters in length

Specification:

- JMPB 500 – Motorcycle-type fire pump
- JMPEV 500 – Electric mini fire truck
- JMPM 500 – 27HP gasoline engine fire pump

Domestic Track Records		
Main Client	Ministry of National Defense	Korea Port Authority
Project Name	Safety firefighting facilities	Safety firefighting facilities

Supplier Information

- JM motors Pump Co.,Ltd.
- TEL: +82-10-5899-5325
- E-Mail: shsloved@jmmotors-qfire.com



Lower Pump Shaft

Product Description:

RCP (Reactor Coolant Pump) is one of the key components of the Nuclear Steam Supply System (NSSS). It circulates coolant through the reactor core and steam generators, enabling efficient heat transfer and safe reactor operation.

Specification:

- Component for Reactor Coolant Pump of a 1.4GW (Gigawatt) Facility

Domestic Track Records	
Main Client	Doosan
Project Name	Shin-Hanul NPP #1,2

Supplier Information

- Youngjin Techwin Co.,Ltd.
- TEL: +82-10-3844-6056
- E-Mail: yjtechw@naver.com

Pump



MT, MTB, MB, MX (Multi-Stage Turbine Pumps)

Product Description:

Designed for pumping clean, low-temperature, or high-temperature liquids. Applied in condensate recovery in water supply, heating and boiler systems, and booster plants. In MT/MTB and MX models, axial thrust is counterbalanced by a hydraulic balancing device. In the case of the MX model, the balancing disc fully counteracts the axial thrust.

Specification:

- Capacity (up to) - MT/MTB: 400 m³/hr, MB: 150 m³/hr, MX: 150 m³/hr
- Head (up to) - MT/MTB: 250 m, MB: 450 m, MX: 750 m
- Operating Pressure (up to) - MT/MTB: 25 kgf/cm², MB: 25 kgf/cm², MX: 80 bar
- Operating Temperature (up to) - MT/MTB: 140°C, MB: -20°C ~ 180°C, MX: -20°C ~ 180°C
- * Pumps that fall outside the above-specified range can also be custom-manufactured

Domestic Track Records			
Main Client	KHNP	KHNP	KORAD
Project Name	Saeul NPP #1,2 Centrifugal Pump (M212)	Saeul NPP #3,4 Centrifugal Pump (M212)	Phase 1 Repository Tunnel Drainage Redundancy Construction
Delivery Year	2010	2019	2020

Overseas Track Records			
Client (Country)	Posco	Doosan	Doosan
Project Name	Indonesia Integrated Steel Mill SMP/CCP	Song Hau TPP #1	Nghi Son 2 BOT TPP
Delivery Year	2012	2017	2020

Supplier Information

- Shin Shin Machinery Co.,Ltd.
- www.sspump.com
- TEL: +82-10-3356-1576
- E-Mail: jangjg@sspump.com

Pump



NDV (Double Suction Volute Casing Centrifugal Pumps)

Product Description:

These pumps are designed for the transfer of clean water, seawater, raw water, pulp slurry, and intermediate products in petrochemical processes. They are widely utilized in applications such as water treatment plants, refineries, pulp and paper mills, steelworks, irrigation systems, pipeline booster stations, tank farms, and power plants—for circulation, auxiliary feed, drainage, water supply, and balance G/S services.

Specification:

- Impeller: Dynamically and hydraulically balanced; Possible to fit with fan type impeller (option)
- Flange Rating: KS or JIS 10 ~ 16 kgf/cm² FF
- Operating Pressure (up to) 18 kgf/cm², Operating Temperature(up to) - 105 °C
- * Pumps that fall outside the above-specified range can also be custom-manufactured

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Saeul NPP #1,2 Centrifugal Pump (M212)	Fire Pump & Drive Equipment for Shin-Hanul NPP #1,2(M258)	Saeul NPP #3,4 Safety-Class Centrifugal Pump (N202)
Delivery Year	2011	2013	2021
Overseas Track Records			
Client (Country)	Hyundai (UAE)	Hyundai	Samsung
Project Name	Mirfa IWPP	KALSELTENG2 CFSP (2X100MW) GSP(H)	Nhon Trach CCPP #3,4 GSP
Delivery Year	2015	2015	2023

Supplier Information

- Shin Shin Machinery Co.,Ltd.
- www.sspump.com
- TEL: +82-10-3356-1576
- E-Mail: jangjg@sspump.com

Pump



NLG, NHGH, HG, BHG (External Gear Pumps with Built-in Relief Valve)

Product Description:

Pumps designed for the transfer of petroleum-based fluids, such as lubricating oils and fuel oils, as well as viscous liquids with lubricating properties.

Specification:

- Differential Pressure (up to) - NLG: 6 kgf/cm², NHGH: 16 kgf/cm², HG: 7 kgf/cm², BHG: 5 ~ 10 kgf/cm²
- Operating Temperature (up to) - NLG, NHGH: 130 °C, HG: 70 °C, BHG: 80 °C
- Viscosity - NLG: 5~3000 cSt, NHGH: 5~2000 cSt, HG: BHG: 5 ~ 2000 cSt
- Number of Revolutions - NLG,NHGH: 1800 rpm ~ 1000 rpm, HG/BHG: 1200 rpm ~ 900 rpm (Applies by viscosity)
- * Pumps that fall outside the above-specified range can also be custom-manufactured

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Shin-Hanul NPP #1,2 Diesel Fuel Oil and Lubricating Oil Transfer Pump	Saeul NPP #3,4 FWBP Lube Oil Pump (M208)	Saeul NPP #3,4 AAC DG (M262)
Delivery Year	2014	2018	2021

Overseas Track Records			
Client (Country)	STX (Indonesia)	Doosan	Doosan (Turkistan)
Project Name	Kideco SMCP	Vinh tan TPP	GSP
Delivery Year	2012	2018	2025

Supplier Information

- Shin Shin Machinery Co.,Ltd.
- www.sspump.com
- TEL: +82-10-3356-1576
- E-Mail: jangjg@sspump.com



Pumps

Product Description:

With HHI-TMC's advanced pump technology and extensive experience, we have focused on developing cryogenic technology and now manufactures cryogenic pumps for efficient LNG unloading and fuel supply on LNG carriers and LNG-fueled ships. HHI-TMC is certified with ISO 9001 and KR classification, ensuring quality and reliability. Through ongoing R&D, we continue to improve product quality and maintain a fast and reliable after-sales service system.

Specification:

- Applications
 - 1) Vertical: CWP, CEP, SWP etc.
 - 2) Horizontal: BFP, General Supply
- Vertical Single stage
 - Capacity: Max. 100,000 m³/h, Head: Max. 160 m
- Vertical Multi stage
 - Capacity: Max. 28,000 m³/h, Head: Max. 600 m
- Horizontal Single stage
 - Capacity: Max. 200,000 m³/h, Head: Max. 800 m
- Horizontal Multi stage
 - Capacity: Max. 6,000 m³/h, Head: Max. 4,000 m

Domestic Track Records			
Main Client	KHNP	KEPCO	KHNP
Project Name	Shin-Hanul NPP #3,4	Saeul NPP #3,4	Barakah NPP #1~4
Delivery Year	2026 / 2027	2019 / 2020 / 2022	2013 / 2014 / 2016

Overseas Track Records			
Client (Country)	Westinghouse (USA)	Emco Corporation Rosenergoatom (Canada / Russia)	
Project Name	V.C. Summer NPP #2,3	Vogtle NPP #3,4	Kalinin NPP
Delivery Year	2013 / 2014	2013 / 2014	2010

Supplier Information

- Hyundai Heavy Industries Turbomachinery Co.,Ltd.
- https://www.hhitmc.com
- TEL: +82-10-9095-0453
- E-Mail: kwanghyun.jung@hhitmc.com

Pump



SDF-V (Vertical Mixed Flow Pumps)

Product Description:

These centrifugal pumps are used for applications in plants, TPPs, steel mills, wastewater and potable water systems, and docks. Installation methods include both single-stage and two-stage configurations, suitable for indoor and outdoor installations.

Specification:

- Flange Rating: KS 10 kgf/cm² FF, Impeller: Open or semi-open type having blades of Dimension
- Total Head: 4 ~ 15 m , Discharge Flow: 10 ~ 1200 m³/min
- Operating Temperature (up to) - 0 ~ 180°C, Bore: 350 mm ~ 3000 mm
- Pumps that fall outside the above-specified range can also be custom-manufactured

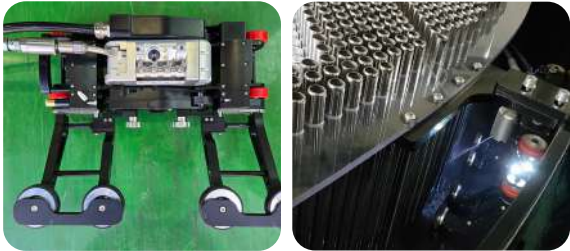
Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Shin-Wolsong NPP #1, 2 (N201)	Shin-Hanul NPP #1, 2 E.S.W.P & S.W.P (N201)	Saeul NPP #3,4 Primary Component Cooling Seawater Pump (N201)
Delivery Year	2009	2014	2020

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	Hyundai (Uzbekistan)	Hyundai (Indonesia)
Project Name	Barakah NPP #3m,4 Chlorinated Seawater Supply Pump (M210)	Takhiatash CCPP CWP	CIREBON-II 1000MW CFPP CWP
Delivery Year	2016	2018	2019

Supplier Information

- Shin Shin Machinery Co.,Ltd.
- www.sspump.com
- TEL: +82-10-3356-1576
- E-Mail: jangjg@sspump.com

System, Facility



ALAS-K1

Product Description:

ALAS-K1 is a cleaning equipment for KSNP OPR and APR type steam generators such as Shin-Kori NPP #1, Shin-Wolsong NPP #1, Hanbit NPP #2,3 and Hanul NPP #2,3. The ALAS-K1 robot moves by attaching to the SG wall using magnets attached to wheels, moves the spray head up and down to accurately adjust it between tubes, and then removes sludge from the steam generator with high-pressure water.

Specification:

- Sludge Cleaning Equipment for Insertion into the Annular Space of OPR1000 and APR1400 Steam Generators (S/G)
- Nozzle: 4 units, Operating Pressure: 150~180 bar, Flow Rate: 120 lpm
- Movement Method: Robot adheres to the inner wall using the magnetic force of permanent magnets
- Cleaning Range: Full upper tube sheet area of S/G accessible, Nozzle Specifications: PAN (±35°) / TILT (±65°)
- Cleaning Robot Operation: Controlled by 3D program, Real-time video monitoring with 4 channels (Front, Back, Setting, Bottom)

Domestic Track Records	
Main Client	KHNP
Project Name	Hanbit NPP #2 ALAS-K1
Delivery Year	2025

Supplier Information

- ANSCO
- http://www.ansco.kr/
- TEL: +82-42-820-2011
- E-Mail: kyd321@ansco.kr

APR1400 Type:
RVI(Reactor Vessel Internals) Support Beam

Product Description:

The RVI (Reactor Vessel Internals) is a structural component installed inside a nuclear reactor that secures the fuel assemblies and controls the flow of coolant. The support beam is one of the key components of the RVI.

Domestic Track Records	
Main Client	Doosan
Project Name	Saeul NPP #3,4
Delivery Year	2018

Overseas Track Records	
Client (Country)	Barakah NPP
Project Name	Barakah NPP
Delivery Year	2016

Supplier Information

- U-chang Industries Co., Ltd.
- www.uchang21.com
- TEL: +82-10-3854-0292
- E-Mail: uchang9001@hanmail.net

System, Facility



Blast Door

Product Description:

To prevent explosions caused by explosives in case of emergency, and to block debris and storm waves resulting from the pressure generated during an explosion.
Types (concrete, iron) are classified according to the required explosion-proof conditions.

Specification:

- ANSI / BHMA A 156
- Door Locking System / Exit Device, Mortise lock, Gear Latch, Handle etc.
- Door closer, Hinge, Anchor etc.
- UL 10B/10C, Air Leakage TEST, BLAST TEST
- KEPIC SWS - MT

Domestic Track Records	
Main Client	Samsung C&T Corporation
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.
- <http://www.hanadapco.co.kr/>
- TEL: +82-10-9237-3388
- E-Mail: joebaek@gmail.com



Bullet Resistant Door

Product Description:

A structure designed to protect people and facilities from firearms used by outside intruders. It performs both bulletproof and fire protection.

Specification:

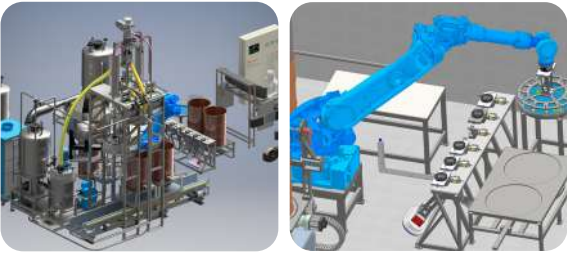
- ANSI / BHMA A 156
- Door Locking System / Exit Device, Mortise lock, Gear Latch, Handle etc.
- Door closer, Hinge, Anchor etc.
- UL 10B/10C, UL 752 Level 4, Level 5

Domestic Track Records	
Main Client	Samsung C&T Corporation
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.
- <http://www.hanadapco.co.kr/>
- TEL: +82-10-9237-3388
- E-Mail: joebaek@gmail.com

System, Facility



Cement Solidification System / Evaporator Package for Radwaste Treatment

Product Description:

Our cement solidification systems effectively convert radioactive liquid and resin waste into stable solid forms, ensuring safe long-term disposal. Our evaporator systems efficiently treat liquid and gaseous radioactive waste by condensation, utilizing precise heat, pressure control, and agitation to optimize gas separation. Both systems are designed for reliability, ease of operation, and superior performance in radioactive waste management.

Specification:

Product specifications are customized according to individual client requirements, considering the type and condition of radioactive waste, as well as specific site conditions.

Domestic Track Records			
Main Client	KHNP		
Project Name	Polymer Solidification Facility	Radioactive Waste Oil Solidification Service	Portable Concentrated Waste Evaporation
Delivery Year	2012, 2013	2013	2015

Overseas Track Records		
Client (Country)	Jordan Research & Training Reactor [Jordan]	
Project Name	Cement Solidification System	Evaporator System
Delivery Year	2017	

Supplier Information

- Korea Nuclear Engineering Co., Ltd.
- www.konec.com
- TEL: +82-10-2276-8952
- E-Mail: konec1@naver.com



Chemical Solidification System & Service

Product Description:

Our sludge solidification process transforms various radioactive wastes—including slurry, powdered waste, lubricants, and resins—into stable, rock-like forms suitable for safe, permanent disposal. This technology meets all required certification standards and testing protocols, representing the highest global standard in solidification expertise.

Specification:

Our technology meets and exceeds all qualification tests required for solidification processes.

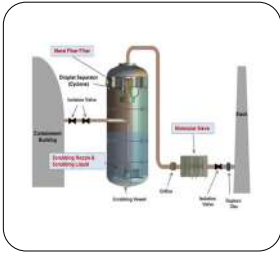
Domestic Track Records	
Main Client	KHNP
Project Name	All NPP Radioactive Sludge Solidification Service
Delivery Year	2018~2026

Overseas Track Records	
Client (Country)	Westinghouse (UAE)
Project Name	Resources (staffing)
Delivery Year	2021

Supplier Information

- Korea Nuclear Engineering Co., Ltd.
- www.konec.com
- TEL: +82-10-2276-8952
- E-Mail: konec1@naver.com

System, Facility



Containment Filtered Venting System (CFVS)

- Product Description:**
- Development of filtered venting system to prevent containment overpressure and mitigate the release of radioactive material by discharging filtered gases to the atmosphere
 - Securing the source technology and performance verification test of CFVS
 - Design of CFVS and linked existing system in NPP

- Specification:**
- Design Pressure: 900 kPa(g)
 - Design Temperature: 200 °C
 - Maximum Operating Pressure: 700 kPa(g)
 - Maximum Operating Temperature: 180 °C
 - LxWxH=7×3×7m
 - Test Vessel Section = 500mm(ID) 4,500mm(H)

Supplier Information

- FNC Technology Co., Ltd.
- <https://www.fnctech.com/>
- TEL: +82-10-2667-9360
- E-Mail: kkkjs0714@fnctech.com



CPP (Condensate Polishing)

Product Description:

An advanced system that purifies turbine condensate, ensuring steam generator integrity and preventing corrosion, even in the event of seawater leakage. Designed for high regeneration efficiency and long-term reliability.

- Specification:**
- Possession of Patent(IMR®)

Domestic Track Records		
Main Client	S-Oil	KHNP
Project Name	Petrochemical Plant	Nuclear Power Plant

Overseas Track Records		
Client (Country)	Uzbekistan	UAE
Project Name	Petrochemical Plant	Barakah NPP

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618/ +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr

System, Facility



EX-DRI

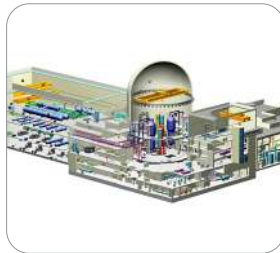
Product Description:

EX-DRI is a heavy-duty vacuum dehydration system designed to remove free, emulsified, and dissolved water from lubricants and hydraulic fluids. Its high-efficiency vacuum chamber and multi-stage filtration ensure optimal fluid cleanliness and extended equipment life. Ideal for power plants and industrial applications, EX-DRI supports continuous oil purification under demanding conditions.

- Specification:**
- Water Removal Method: Vacuum Dehydration + Coalescing Pre-Filter
 - Dehydration Capacity: Up to 1,500 mL/hour (free & emulsified water)
 - Flow Rate: 5~80 LPM (model-dependent)
 - Filtration Stages: Pre-filter + Fine filter (β>1000, 3~5μm)
 - Vacuum Pump Type: Oil-sealed rotary vane vacuum pump
 - Vacuum Level: -0.09 MPa (approx. 25~27 inHg)
 - Heater Capacity: 3~6 kW (adjustable temperature up to 65°C)
 - Oil Viscosity Range: Up to ISO VG 320 (optionally VG 460 with heater boost)
 - Control Panel: Touchscreen HMI with safety interlocks
 - Power Supply: 220~380V / 3Ph / 50-60Hz (customizable)
 - Mobility: Mounted on heavy-duty wheels (Portable Unit)
 - Applications: Turbine oil, Hydraulic oil, Gear oil, Transformer oil
 - Optional Features: Water ppm sensor, Online particle counter, Auto drain

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com



FHE(Fuel Handling Equipment)

Product Description:

The control system of the OHBC (Overhead Bay Crane)-type fuel handling equipment, designed exclusively for SMRs, enables unmanned automated control for faster and more stable nuclear fuel replacement.

- Specification:**
- Automatic control system for nuclear fuel transfer
 - Use of various sensors and encoders for position control
 - Interlock configuration and programming for safety
 - HMI configuration for monitoring and operation of the nuclear fuel transfer system

Domestic Track Records		
Main Client	Doosan	KHNP

Overseas Track Records		
Client (Country)	UAE	

Supplier Information

- SEAH S.A.
- <http://www.seahsa.co.kr/>
- TEL: +82-31-8084-0001
- E-Mail: hsjeong@seahsa.co.kr

System, Facility



Heat Recovery Steam Generator (HRSG)

Product Description:
A steam generation device and system of equipment designed to supply high-temperature exhaust heat, recovered from a gas turbine in a power plant, to a steam turbine.

Specification:

- General Scope of Supply for HRSG
 - Superheater, Reheater, Economizer, Drum & Evaporator
 - Non-Pressure: Duct, Casing, Steel Structure, Main Stack
 - Air Pollution Control System
 - Feedwater system
 - Electrical, Instrumentation System, etc.

Domestic Track Records			
Main Client	Doosan	Korea Western Power	NCCO
Project Name	Haman CCPP	Gumi CCPP	Namyangju CHPP
Delivery Year	2026	2024	2026

Overseas Track Records	
Client (Country)	ARAMCO (Saudi Arabia)
Project Name	Cogen CCPP
Delivery Year	2013

Supplier Information

- SNT Energy Co.,Ltd.
- <https://www.hisnt.com/eng/main/main.html>
- TEL: +82-10-8226-0780
- E-Mail: parkjs@hisnt.com



Hot Cell and Master-Slave Manipulator

Product Description:
Service: For the safe production, distribution and packaging of radioactive substances or isotopes.

Specification:

- RI Hot Cell
- Medical Hot Cell
- GMP Class A
- GMP Class B
- GMP Class C

Domestic Track Records			
Main Client	KAERI	KHNP	DIRAMS
Project Name	Isotope production chemical process hot cell	Shielded Cell Equipment	Radiopharmaceutical manufacturing plant Hassel
Delivery Year	2016	2008	2023

Overseas Track Records		
Client (Country)	NECSA (South Africa)	BATAN (Indonesia)
Project Name	Master-Slave Manipulator	Master-Slave Manipulator
Delivery Year	2006	2014

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr

System, Facility



HYPO (Seawater Electro-Hypochlorination)

Product Description:
An on-site sodium hypochlorite generation system that prevents fouling in cooling systems, maximizes heat transfer efficiency, and safeguards pipelines from corrosion and damage.
Built with an optimized modular design and high current efficiency for superior performance.

Domestic Track Records	
Main Client	KHNP
Project Name	NPP

Overseas Track Records	
Client (Country)	UAE
Project Name	Barakah NPP

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618/ +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr



Intake Facilities

Product Description:
Hyorim E&I Corp. specializes in intake facilities for power plants, petrochemical, and industrial sectors. The systems include trash racks, drum screens, and sludge collectors designed for efficient and safe water intake.
These components ensure continuous operation and protect downstream equipment from debris.
HYORIM's products are known for durability, easy maintenance, and adaptability to site conditions.
They are certified under ISO 9001, ISO 14001, and registered with KEPCO for quality assurance.

Specification:

- Bar Screen with Racking Machine
- Revolving Raked Bar Screen
- Traveling Band Screen: Through flow, Center flow, Dual flow
- Drum Screen: Single-entry, Double-entry
- Stop Log & Gate with accessories

Domestic Track Records			
Main Client	KGC	KHNP	POSCO
Project Name	SamCheok LNG Ph1	Shin-Hanul NPP #1,2	Pohang CCPP #19
Delivery Year	2013	2014	2020

Overseas Track Records			
Client (Country)	ADNOC (UAE)	ENEC (UAE)	Kuwait NPC (Kuwait)
Project Name	Ruwais REP #3 O&U	Barakah NPP #1,4	Kuwait Al Jour LNG IP
Delivery Year	2011	2016	2019

Supplier Information

- Hyorim E&I Corp.
- www.hyorim.co.kr
- TEL: +82-70-7492-2312
- E-Mail: kangsb@hyorim.co.kr

System, Facility



MDI (Membrane Deionization)

Product Description:

- 「MDI®」 – GEUMHWA's Signature CEDI Technology
- Trusted since 2000 for critical applications that require ultra-pure water.
- Applicable to NPPs and TPPs.
- High-tech industrial & semiconductor facilities
- Proven performance, global supply track record

Specification:

- Recovery: 90~95%
- Capacity: Max 25 m³/hr
- Pressure Drop: < 2.5 bar
- DC Voltage / Current: 0~600 V / 0~6 A
- Product Resistivity: > 16MΩ·cm

Domestic Track Records		
Main Client	KHNP	Other Company
Project Name	NPP	TPP

Overseas Track Records		
Project Name	Semi-conductor	Petrochemical Plant

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618 / +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr



Non-Metallic Sludge Collector

Product Description:

Developed locally in the 1990s, Hyorim's non-metallic sludge collector has continued to be supplied through consistent performance upgrade. Non-metallic sludge collectors are used in sewage and industrial wastewater rectangular sedimentation tanks in sewage and industrial wastewater treatment to remove settled sludge continuously. Key components made from corrosion-resistant materials offer excellent durability, low weight, and reduced power consumption.

Specification:

- Rectangular sedimentation for STP/WTP
- W2.5m ~ 9.0m x 6.0m ~ 70.0m
- Usage load: 2,000kgf, breaking strength:10,000kgf
- Parts: Flight & Chain (FRP), Sprocket(PU), Wear strip(HDPE), etc. (STS304 or 316)
- Option: Helical-type scum skimmer

Domestic Track Records			
Main Client	Anyang City	Daegu City	Jinju City
Project Name	Seoksu STP	Shincheon STP	Jinju STP
Delivery Year	2024	2023	2024

Overseas Track Records	
Client (Country)	MWSS(Philippines)
Project Name	Bulacan WTP
Delivery Year	2018

Supplier Information

- Hyorim E&I Corp.
- www.hyorim.co.kr
- TEL: +82-70-7492-2312
- E-Mail: kangsb@hyorim.co.kr

System, Facility



Passive Autocatalytic Recombiner (PAR)

Product Description:

A safety device designed to eliminate hydrogen gas inside nuclear containment buildings during design basis and beyond design basis accidents by initiating a catalytic reaction that converts hydrogen and oxygen into water vapor, thereby preventing a hydrogen explosion. Model Name: KPAR-40 / KPAR-80 / KPAR-160

- Honeycomb-shaped ceramic catalyst with high hydrogen removal efficiency
- Loop design to prevent spray water ingress during a LOCA
- Tool-free catalyst cartridge replacement
- Flow guide plates to minimize internal flow resistance
- Standardized support frame for easy and fast installation

Specification:

- Operating condition: 1.5 bar, 60℃
- Removal rate: up to 9.6 kg/h
- Models available: KPAR-40 / 80 / 160

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2023

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	2017

Supplier Information

- Korea Nuclear Technology Co., Ltd.
- www.knt.re.kr
- TEL: +82-42-935-8711
- E-Mail: jjjj4040@knt.re.kr

System, Facility



Petrochemical / Oil / Gas Process Equipment (Heat Exchanger, Vessel, Drum, Column and Tower)

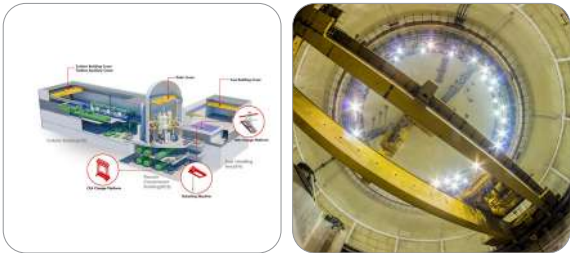
- Product Description:**
- Petrochemical / Oil / Gas Process Equipment: Power Plant Process Equipment
- Specification:**
- SA516-70N, 99t x ID4,572 x 32,064 L, 366ton
 - SA516-70N, 114t x ID5,334 x 14,740 L, 131ton
 - SA240-304L, 24t x ID5,848 x 27,800 L, 148ton

Domestic Track Records			
Main Client	S-Oil	SK Energy	Hyundai Oil Bank
Project Name	2025 TA HEX	2025 #2 FCC Maintenance	2026 #1 PLANT T/A
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	WOOD	Honeywell UOP	Technip Energies
Project Name	Willow	VG PQLNG1	ECA LNG Phase I
Delivery Year	2025	2023	2022

Supplier Information

- ILSUNG HISCO
- <https://www.ilsung.com/>
- TEL: +82-52-231-7576
- E-Mail: isecbiz@ilsung.com



Polar Crane & Nuclear Fuel Handling Facilities

- Product Description:**
- We have expanded into the nuclear power industry by designing and manufacturing polar cranes used for transporting devices and equipment within nuclear reactor buildings, and we plan to manufacture and commission fuel handling equipment in the future.
- Specification:**
- Polar Crane: The crane, which operates along a circular rail installed on the rounded outer wall of the containment building(reactor dome), is used for the installation of the reactor and the transportation and unloading of other equipment within the containment building.

Domestic Track Records	
Main Client	KHNP
Project Name	M248 950US Ton Polar Crane
Delivery Year	2026 / 2027

Supplier Information

- Kumoh Heavy Industries Co.,Ltd.
- www.kumohheavy.com
- TEL: +82-10-3575-7853
- E-Mail: kumoh@kumohheavy.com

System, Facility



Seawater Desalination System

- Product Description:**
- An effective solution to produce high-quality fresh water by desalinating seawater with advanced membrane technology. Energy efficiency is maximized by optimized system design.
- Specification:**
- UF (Ultrafiltration Filter) + RO (Reverse Osmosis) System

Domestic Track Records		
Main Client	KOSPO	KHNP
Project Name	Samcheok TPP	Hanul NPP

Overseas Track Records			
Client (Country)	Turkmenistan	Uruguay	Morocco
Project Name	Petrochemical Plant	Power Plant	Combined TPP

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618/ +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr



Shell Plate Bending

- Product Description:**
- Shell plate bending for manufacturing pressure vessels - such as those used in nuclear power, boilers, and petrochemicals - achieves maximum efficiency through optimized system design.
- Specification:**
- 156T * ID3500 * 3500L(steel plate thickness:156mm, tank diameter:3500mm, tank length:3500)

Domestic Track Records	
Main Client	Doosan
Project Name	TRIPOL 1-4
Delivery Year	2013

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)

Supplier Information

- Seolin Co., Ltd.
- TEL: +82-10-9326-4501
- E-Mail: seolins@daum.net

System, Facility



Skid & Module

Product Description:

The CCR* Module is a critical piece of equipment in oil refineries, requiring significant technical expertise as it involves assembling multiple units for erection. Since 2005, ILSUNG HISCO has successfully delivered five modules in countries such as the USA, Russia, and Vietnam. The current Yayskiy Module project marks our sixth module production, making us the only company in Korea with the highest number of module productions.

*CCR: Continuous Catalyst Regeneration

Specification:

- CCR Module: 16m W x 8m H x 72m L 880ton
- 15m W x 8m H x 76m L 900ton
- 21m W x 9m H x 83m L 1,200ton

Overseas Track Records			
Client (Country)	Honeywell UOP		
Project Name	PEMEX Tula CCR	Slavyansk Cyclemax	Enterprise Oleflex CCR
Delivery Year	2024	2022	2021

Supplier Information

- ILSUNG HISCO
- <https://www.ilsung.com/>
- TEL: +82-52-231-7576
- E-Mail: isecbiz@ilsung.com



Solid Waste Compactor

Product Description:

- Services: Compression of radioactive waste
- Characteristics: Automatic 3-stage compression function

Specification:

Basic 30 ton compression force (compression force can be changed)

Domestic Track Records	
Main Client	KHNP
Project Name	Solid Waste Compactor
Delivery Year	2019

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr

System, Facility



UF (UltraFiltration Filter)

Product Description:

- FiLONE® – GEUMHWA's proprietary Ultrafiltration module, trusted in power plants, chemical facilities, and seawater desalination systems worldwide.

Specification:

- Filtrate Flow: 2.0 ~ 6.0 / 2.8~8.4 m³/hr
- Filtrate SDI: ≤ 2.5 NTU
- Turbidity: ≤ 0.1
- Recovery Rate: 70~95%

Domestic Track Records		
Main Client	KHNP	Other Company
Project Name	NPP	TPP

Overseas Track Records	
Client (Country)	UAE
Project Name	Barakah NPP

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618/ +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr



Waste Shredder

Product Description:

- Services: Crushing of radioactive waste
- Characteristics: Capable of crushing various materials into very small pieces

Specification:

- Processable materials: wood, cloth, plastic, light metal, etc
- Discharge: below 0.5~3cm (50~500kg crushing per hour)

Domestic Track Records	
Main Client	KHNP
Project Name	Waste Shredder
Delivery Year	2017

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Waste Shredder
Delivery Year	2017

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr

System, Facility



Water Treatment System (including Desalination)

Product Description:

Hyorim offers advanced water treatment systems for both wastewater and freshwater applications, utilizing technologies such as MBR, EDI, EDR, UF, NF, RO, and Electro-Sorption. These solutions effectively treat industrial effluents and various water sources—including surface, ground, and seawater—ensuring high purification performance and enabling water reuse. They are suitable for municipal, industrial, and decentralized water treatment needs.

Specification:

- Pre-Treatment System: DAF, Clarifier, Gravity Filter, Sand Filter, Activated Carbon Filter, UF
- Sea Water Desalination System: SWRO Micro Filter, High Pressure Pump, Energy Recovery Device, SWRO
- Demineralization System: BWRO Micro Filter, BWRO, Ion Exchanger, Degasifier, EDI
- Remineralization System / Potable Water Treatment System: Activated Carbon Filter
- Chemical Dosing System: Chemical Injection Tank, Chemical Injection Pump, etc.

Domestic Track Records			
Main Client	Daewoo Energy	S-OIL	SC Bluepower
Project Name	POCHEON CCPP	RESIDUS UPGRADING COMPLEX	SAMCHEOK TPP
Delivery Year	2016	2018	2023

Overseas Track Records			
Client (Country)	PDH Polska (POLAND)	ADNOC (UAE)	Enter Engineering (Uzbekistan)
Project Name	Polimery Police	Optimum SHAH Gas Expansion	Boysun Gas Processing Plant
Delivery Year	2022	2022	2024

Supplier Information

- Hyorim E&I Corp.
- www.hyorim.co.kr
- TEL: +82-70-7492-2312
- E-Mail: kangsb@hyorim.co.kr

System, Facility



Water Treatment System (including Desalination)

Product Description:

Hyorim's Plant Division specializes in advanced wastewater treatment and reuse systems, employing technologies such as Membrane Bioreactor (MBR), Electrodeionization (EDI), and Electrodialysis Reversal (EDR). These solutions are designed to treat complex industrial effluents from sectors like thermal/nuclear power and petrochemicals, ensuring high removal rates of contaminants and enabling water reuse. The systems are modular, energy-efficient, and suitable for various scales, including industrial and decentralized applications.

Specification:

- Oil Removal: DAF, API, CPI, IAF, Oil Skimmer
- Chemical Treatment: Neutralization System, Clarifier
- Biological Treatment: Activated Sludge Treatment, MBR, Sand Filter, Activated Carbon Filter
- Sludge Treatment: Thickener, Dehydrator
- Reclamation / Reuse System: UF, RO, EDR, ECDS

Domestic Track Records			
Main Client	KHNP	KHNP	Samsung Biologics
Project Name	Saeul NPP #1,2	Shin- Hanul NPP#1,2	SBL P5
Delivery Year	2011	2014	2024

Overseas Track Records			
Client (Country)	Barakah NPP UAE)	ENEC (UAE)	Fujairah Power Company (UAE)
Project Name	Barakah NPP #1,2	Barakah NPP #1,4	Fujairah F 3 Independent CCPP
Delivery Year	2014	2016	2022

Supplier Information

- Hyorim E&I Corp.
- www.hyorim.co.kr
- TEL: +82-70-7492-2312
- E-Mail: kangsb@hyorim.co.kr

System, Facility



Watertight Door

Product Description:

A structure to prevent flood damage caused by natural disasters such as tsunamis and typhoons, for use in special facilities at risk of flooding, such as NPPs and military facilities.
It calculates water pressure based on terrain data and the surrounding environment.

Specification:

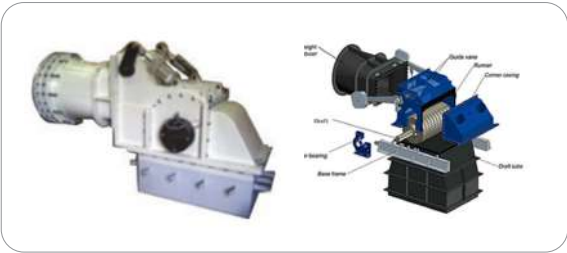
- ANSI / BHMA A 156
- Door locking System / Exit Device, Mortise lock, Gear Latch, Handle etc.
- Door closer, Hinge, Anchor etc.
- UL 10B/10C, Air Leakage Test, Blast Test
- KEPIC SWS - MT

Domestic Track Records	
Main Client	Samsung C&T
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.
- <http://www.hanadapco.co.kr/>
- TEL: +82-10-9237-3388
- E-Mail: joebaek@gmail.com

Turbine



Cross Flow Hydro Turbine

Product Description:

A small hydropower generation system using an impulse turbine, applicable to general rivers (freshwater).

Specification:

- Power Output: Approximately 300 kW
- Reaction Turbine
- Designed for Medium Head and Medium Discharge Conditions
- Single Regulation via Distributor Control

Domestic Track Records	
Main Client	POSCO E&C
Delivery Year	2024

Supplier Information

- Asian Power & Energy Corp.
- www.apecorp.co.kr
- TEL: +82-10-9691-1279
- E-Mail: apec@apecorp.org

Turbine



Oil Deflector

Product Description:

Services: Assembled at both end shields of a turbine and generator, it does not only have a bearing function, but also an internal sealing maintenance function through oil membrane
Characteristics: Application of various materials

Specification:

- Al Alloy Casting Type
- Fabrication Type

Domestic Track Records	
Main Client	Doosan
Delivery Year	1996~

Overseas Track Records			
Client (Country)	GE Vernova	GE Energy Parts	Toshiba Energy
Delivery Year	2002~	2002~	2005~

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr



Turbine Blade

Product Description:

Turbine Blade is composed of diaphragm and bucket. Diaphragm converts high pressure steam from boiler or nuclear reactor to energy. Bucket converts this energy to work. Bucket form tool and taper ball end mill of SUNGSAN TOOLS are cemented carbide tools which are used to machine moving blade dovetail and vane, requiring high precision dimensional allowance.

Specification:

- Custom-designed (No standard Spec)

Domestic Track Records	
Main Client	Doosan Enerbility
Delivery Year	2015

Overseas Track Records	
Client (Country)	Doosan Skoda Power (Czech)
Delivery Year	2015

Supplier Information

- Sungsan Tools
- <http://www.sungsantools.com/>
- TEL: +82-10-5025-0049
- E-Mail: ssctool@hanmail.net

Turbine



Turbine Rotor

Product Description:

Turbine Rotor is a core part of power plant facilities and made with high precision machining technology. Form tools of SUNGSAN TOOLS are cemented carbide tools for machining of dove tail of turbine rotor which require high precision dimensional allowances.

Specification:

- Custom-designed (No standard Spec)

Domestic Track Records	
Main Client	Doosan Enerbility
Delivery Year	2015

Overseas Track Records	
Client (Country)	Doosan Skoda Power (Czech)
Delivery Year	2015

Supplier Information

- Sungsan Tools
- <http://www.sungsantools.com/>
- TEL: +82-10-5025-0049
- E-Mail: ssctool@hanmail.net

Valve, Actuator



AOV(Air Motor Operated Valve Actuator)

Product Description:

The Valve Actuator that uses the rotational torque (power) of an air motor that uses air as a driving source is called an AOV (Air Motor Operated Valve Actuator). Automatically opens and closes various valves used in the field without relying on manpower.

Specification:

- It holds many safety-related patents, including a gearbox for torque control, and enables precise remote control by displaying the open/close amount according to the valve opening percentage through an indicator.
- Attach to a manual valve for remote control and conversion to an automated valve
- Since the driving force is air, it can be used in explosion-proof areas and during power outages.
- Used as an emergency shut-off valve in case of a power outage

Domestic Track Records			
Main Client	LG Chemical	POSCO	Lotte Chemical
Project Name	Daesan	Kwangyang	Daesan
Delivery Year	2024	2024	2023

Overseas Track Records			
Client (Country)	Minh Viet Tech	Blue Energy & Maritime	CTCI
Project Name	PO-MV		
Delivery Year	2023	2020	2019

Supplier Information

- Flotron Co., Ltd.
- www.flotron.co.kr
- TEL: +82-2-3470-5880
- E-Mail: sales@flotron.co.kr

Valve, Actuator



Electro Hydraulic Power Cylinder & Servo Valve

Product Description:

Feedwater Pump Turbine Governor: Applicable to diverse environments including Korean nuclear power plants OPR1000 and APR1400. Addresses existing system issues and enhances performance. Designed for direct replacement within the existing system footprint without structural modifications.

Specification:

- Electric feedback control
- Installation in existing location (24V DC power required)

Supplier Information

- HANVIT Industries Ltd.
- <http://www.hanvit-ind.com/>
- TEL: +82-10-5695-9920
- E-Mail: daekyu.choi@hanvit-ind.com

Globe Type Control Valve

Product Description:

A Control Valve is a power-operated device used to regulate or manipulate the flow of fluids (like gas, oil, water, steam) in a process control system. It helps maintain process variables like pressure, temperature, or flow rate within desired ranges. Flow direction of an SVC is categorized into three types as follows:

- Standard Trim: Underflow (Normally)
- Anti-Cavitation Trim: Overflow
- Low Noise Trim: Underflow

Specification:

- Size: 1/2" to 24"
- Rating: ANSI Class 150 to 1500
- Trim Type: Minimal Flow Trim, General Service Trim, Severe Service Trim
- Rangeability: 30 ~ 50 (Max 100)
- Flow Characteristic: Linear, EQ%, Quick Open

Domestic Track Records		
Main Client	Doosan	KHNP
Project Name	Large Gas Turbine Development	Hanul NPP #5,6 / Hanbit NPP #5,6
Delivery Year	2020	~2024

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	P214 Package
Delivery Year	~2023

Supplier Information

- Smart Valve Company(SVC Inc.)
- <http://www.smartvalve.com>
- TEL: +82-10-3326-6960
- E-Mail: mephi6004@smartvalve.com

Valve, Actuator



Instrument Valves

Product Description:

BMT's Instrument Valves (trademark: SUPERLOK) are engineered to deliver high-precision flow control and exceptional leak-tight performance for critical instrumentation systems across a wide range of industries. Designed to withstand high-pressure environments, they feature smooth handle operation with low torque, enabling safe and user-friendly handling. Manufactured from corrosion-resistant materials such as 316 stainless steel, these valves ensure long-term durability in demanding conditions, including oil & gas, chemical processing, power generation, offshore installations, and semiconductor facilities. Every valve undergoes 100% leak testing before shipment, meeting or exceeding international quality and performance standards.

Specification:

- Size: 1/8 to 3/4 in.
- Working Pressure: up to 10,000 psi (689 bar)
- Temperature: -54 to 454°C (-65 to 850°F)

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Hanul NPP	Hanbit NPP	Kori NPP
Delivery Year	2023	2016	2014

Supplier Information

- BMT Co., Ltd.
- <https://superlok.com/kr/>
- TEL: +82-51-780-5132
- E-Mail: hsjeon@superlok.com



LT-Metal Seal Ball Valve

Product Description:

SEO-HEUNG MCO's LT-Metal Seal Ball Valve features a one-piece body with a top-entry design. This structure enables easy disassembly and maintenance without removing the valve from the pipeline. It is ideal for applications requiring reliable performance and simplified serviceability.

Specification:

- Valve Size: 1/2" - 4"
- Applicable Rating: ASME Class 150 - 4500
- Temperature: Max. 700°C, Main Steam: 300kg/cm² @ 700°C
- Code & Standard: API, ASME, MSS, ASTM
- LT: Low Torque

Domestic Track Records	
Main Client	KEPCO's subsidiaries
Project Name	Samcheonpo TPP
Delivery Year	2023
Overseas Track Records	
Client (Country)	NS2PC (Vietnam)
Project Name	Test-Bed
Delivery Year	2024

Supplier Information

- Seo-heung MCO
- www.shmco.co.kr
- TEL: +82-10-2225-2250
- E-Mail: vms6677@hanmail.net

Valve, Actuator



Pressure Safety/Relief Valve

Product Description:

Hydraulic actuator technology plays a critical role in ensuring the reliability of hydraulic systems used in the operation of steam turbine valves. enesG has been certified as a holder of New Excellent Technology (NET) by the Korean government for its expertise in hydraulic system reliability. The company supplies hydraulic actuators for TBN valves with enhanced durability and reliability compared to existing products, serving nuclear, fossil, and combined-cycle power plants.

- Engineering
 - CPP, NPP, CCPP Valve Actuator Maintenance & Comprehensive Performance Test
 - Air Vent System Development
 - Design, Manufacturing for Hydraulic Actuator of TBN Control system hydraulic valve maintenance and performance diagnosis
 - ETS Hydraulic valve Maintenance & Comprehensive Performance Test
 - Main TBN, BFP-T(MFWP-T), Main Steam/ Feed water Sol' Valve Maintenance & Comprehensive Performance Test
 - Servo Valve Maintenance & Comprehensive Performance Test

Specification:

Description	Nuclear PP	Fossil PP	CCPP
Hydraulic Actuator	395 Actuators	754 Actuators	558 Actuators
Hydraulic Valve	23 Plants	66 Plants	26 Plants

Domestic Track Records	
Main Client	5 Electric Power Companies, KSNP, Samsung, Doosan, POSCO, Daelim
Overseas Track Records	
Client (Country)	MHPS (Japan)

Supplier Information

- enesG Co., Ltd.
- <http://www.enesg.co.kr>
- TEL: +82-42-718-5000

Valve, Actuator



Safety/Relief Valve

Product Description:

Safety Relief Valves should be used to protect any pressurized system, from the effects of exceeding its design pressure limit. A safety relief valve is designed to automatically discharge gas, vapor, steam or liquid from any pressure containing system to prevent the safe pressure limit from being exceeded, hence protecting plant and personnel.

Specification:

- Material: Carbon Steel, Stainless Steel, Alloy Steel
- Dimension (L*W*H): Size: 1/2" x 3/4" ~ 18" x 20"
- Orifices Area: 0.11 to 26 in²
- Inlet Ratings: ANSI Class 150 to 2500
- Temperature Range: -20°F to +1000°F
- Pressure Range: 15 to 6000psig

Domestic Track Records		
Main Client	Doosan	KHNP
Project Name	CCPP	Shin-Kori NPP #1,2, Saeul NPP #1,2, Shin-Hanul NPP #1,2
Delivery Year	~2024	~2024

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	~2024

Supplier Information

- Smart Valve Company(SVC Inc.)
- <http://www.smartvalve.com>
- TEL: +82-10-3326-6960
- E-Mail: mephi6004@smartvalve.com

Etc.



Actuator Diagnostic Test Block Module(DBM)

Product Description:

- Actuator Diagnostic Test & Hydraulic Fluid Filtering solution

Specification:

- Dodel: MR/DM-ETS-01
- Dimension: 250*70*260mm
- Material: SUS304, AL60**
- Pressure: ~200bar

Domestic Track Records	
Main Client	KHNP
Project Name	Turbine Valve Actuator Prediction Diagnostic Test Equipment
Delivery Year	2018, 2023, 2024

Supplier Information

- Future Automation Co., Ltd.
- www.servokorea.co.kr
- TEL: +82-51-316-5650
- E-Mail: mac@servokorea.co.kr

Etc.



Carbon Alloy Steel, Tool Steel, Stainless Steel/Duplex, Nickel Alloys (e.g. Inconel, Hastelloy, Monel), Titanium Alloys

Product Description:

- Production Capabilities: Melting Shop(EAF, VIM, VAR, ESR), Rolling & Forging Shop, Seamless Extrusion Line, Processing & Machining
- Materials: Carbon Alloy Steel, Tool Steel, Stainless Steel/Duplex, Nickel Alloys (e.g. Inconel, Hastelloy, Monel), Titanium Alloys
- End use applications: Fuel module components, Reactor and Pressure vessel parts, Steam Generators, Turbines, Piping, Pumps, Valves and Fittings, Bolts and Nuts

Specification:

- Flat Bars: Thickness 10~200 mm, Width 150~1,250 mm (up to 2,700mm available upon request)
- Round Bars: Ø13~250 (up to Ø260 available upon request)
- Forged Products: Up to Ø1,000 mm (material-specific consultation required)
- Open Die Forgings: Shape-specific consultation required (e.g., ring, shaft, disc, engine, etc.)
- Pipes & Tubes:
 - Outer Diameter Ø10~141.3
 - Wall Thickness: 1~16 mm
- Wire Rods: Ø 4.5 ~40
- Semi-finished Products: Available upon request

Domestic Track Records			
Main Client	Doosan Enerbility	Hyundai E&C	KEPCO
Project Name	Shin-Hanul NPP #3,4	Shin-Hanul NPP #3,4	Saeul NPP #3,4
Delivery Year	2022-2024	2024	2017-2018

Overseas Track Records			
Client (Country)	Westinghouse (USA)	Canada	UAE
Project Name		Darlington	Barakah NPP
Delivery Year	2023	2018~2020	2016

Supplier Information

- SeAH CSS Corp.
- <https://www.seahcss.co.kr/>
- TEL: +82-2-6970-2322
- E-Mail: jbumyong.lee@seah.co.kr

Etc.



Glove Box

Product Description:

Services: For safe production, distribution and packaging of radioactive substance or isotopes.
Characteristics: Airtight structure, Biological cleaning structure(Medical GMP Class A, B, C)

Specification:

- RI Hot Cell
- Medical Hot Cell
- GMP Class A
- GMP Class B
- GMP Class C

Domestic Track Records	
Main Client	KAERI
Project Name	RI Glove Box
Delivery Year	2017

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr



Honeycomb Safety Grating

Product Description:

By installing it in drainage channels and sewers in facilities such as plants, power stations, roads, sidewalks, parks, and playgrounds, it functions as a drainage solution that enables the safe passage of people, vehicles, and heavy objects.
It also incorporates a slip-resistant section, including a truss-structured BeeHive Bar, to enhance load resistance and prevent slipping.

Specification:

- Beehive safety grating products are manufactured according to the order's request
- Beehive safety grating surface plating is galvanized
- Used SS275 carbon steel for raw materials

Domestic Track Records			
Main Client	Samsung	KHNP	Hyundai Steel
Project Name	Godeok New Town Infrastructure	Saeul NPP #3,4	Dangjin Site Maintenance

Supplier Information

- Grating Korea Co., Ltd.
- <https://www.gratingkorea.com>
- TEL: +82-10-5206-4007
- E-Mail: grating8383@hanmail.net

Etc.



Hot-Rolled Section

Product Description:

- High-quality hot-rolled sections for ensuring safety of Nuclear Power Plant (NPP)
- Providing optimal construction solutions for NPP structures based on securing quality and seismic performance
- Eco-friendly product line certified with GR and EPD-UL

Specification:

- Certification: ASME (MO), KEPIC-SN, ISO 9001, ISO 14001, OHSAS 18001, and etc.
- Hot-rolled sections according to KS D 3866, EN10025, and ASTM A572 and A992
- Refer to the catalog for detailed product dimensions and properties for each standards

Domestic Track Records			
Main Client	Daewoo E&C	Hyundai E&C	Hyundai E&C
Project Name	Shin-Wolsong NPP #1,2	Shin-Hanul NPP #1,2	Shin-Hanul NPP #3,4
Delivery Year	2006-2010	2012-2016	2025-

Supplier Information

- Hyundai Steel
- <https://www.hyundai-steel.com/>
- TEL: +82-31-510-3404
- E-Mail: tokim27@hyundai-steel.com



Hydrogen Igniter (HI)

Product Description:

A hydrogen igniter designed to combust hydrogen gas generated inside the containment building during severe accidents, thereby preventing explosions and ensuring structural integrity.
Model Name: KIGN-120A (for IRWST)
- NEMA Type 4 waterproof housing
- Seismic-qualified design
- Rapid ignition response
- Radiation- and heat-resistant cabling
- IEEE 383 vertical flame test certified
- Tested under harsh environmental conditions including LOCA spray, humidity, pressure, and ignition performance evaluation

Specification:

- Configuration includes: Plug Connector, Flexible Conduit, Pigtail Cable
- Installation Type: Wall-mounted or Internal Containment
- Applicable Zone: IRWST and general containment areas

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2021

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1,2,3,4
Delivery Year	2018

Supplier Information

- Korea Nuclear Technology Co., Ltd.
- www.knt.re.kr
- TEL: +82-42-935-8711
- E-Mail: jjjj4040@knt.re.kr

Etc.



Lining, Ball Mill Liners

Product Description:

- Rubber Lining: Internal rubber and PE coating for piping components
 - Rubber and PE lining applied to the interior of piping materials
 - Proven track record in both domestic and overseas projects
- TPP Ball Mill Liners
 - Design and installation of rubber liners for impact absorption inside ball mills
 - Multiple installation records at domestic TPPs

Specification:

- Extensive track record in domestic and international projects involving internal rubber and PE lining for piping systems
- Design, manufacture, and installation of rubber liners for shock absorption inside ball mills
- Proven experience with multiple installations at TPPs in South Korea

Domestic Track Records	
Main Client	Hyundai
Project Name	TION

Supplier Information

- MJ TSR
- TEL: +82-10-8523-9653
- E-Mail: saint@mjtsr.com



Motor Housing Ass'y

Product Description:

The control rod is a critical component that regulates the number of neutrons in the reactor to prevent or stop rapid chain reactions. CEDM (Control Element Drive Mechanism) is the device that drives these control rods, playing a key role in the safe and stable operation of the nuclear reactor.

Specification:

Control Rod Component for APR1400 Nuclear Power Plant with a Generation Capacity of 1,400MW

Domestic Track Records	
Main Client	Doosan
Project Name	Shin-Hanul NPP #1,2

Supplier Information

- Youngjin Techwin Co., Ltd.
- TEL: +82-10-3844-6056
- E-Mail: yjtechw@naver.com

Etc.



NUKON® [Nuclear Grade Blanket Type Insulation (NGBTI)]

Product Description:

NUKON provides excellent thermal performance. It has been fully tested and analyzed to meet numerous nuclear safety requirements, and it helps reduce personnel radiation exposure. Also, less time & expense are required in qualifying the NUKON® system for use in a particular plant.

Specification:

- Base Wool: Fibrous glass wool with phenolic resin binder
- Fabric Cloth: E-type fiberglass yarns (1925 or 2025 plain weave) with 9845 or 603A organic finish, or equivalent
- Scrim Reinforcement (quilted): E-type fiberglass yarns with 1659 grieger leno weave
- Thread: Continuous filament fiberglass yarns (E electrical composition) with starch-based sizing
- Velcro (hook/loop): Nomex fiber with hooks fabricated from stainless steel or Elgiloy

Domestic Track Records			
Main Client	Daewoo E&C	Hyundai E&C	Hyundai E&C
Project Name	HB 3&4 SGR NGBTI	SHU 1&2 NGBTI	SKN 3&4 NGBTI
Delivery Year	2021~2023	2014~2020	2011~2017

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	CP-P2 Insulation 1~4
Delivery Year	2014~2022

Supplier Information

- APROGEN I&C, inc
- TEL: +82-10-8749-1734
- E-Mail: bspark@aprogen.com

Etc.



Profile Wire

Product Description:

Dongsan Rolling’s products are used in sliding rails for premium home appliances (such as refrigerators, kimchi refrigerators, and washing machines), space blocks for power plant turbines, and internal structural parts for medical and precision electronic devices. They are ideal for industries requiring high dimensional stability and precision, offering superior wear resistance and smooth, silent performance.

Specification:

Dongsan Rolling specializes in custom manufacturing of profile wires, tailored to meet your specific shape and design requirements. We offer flexible production capabilities with thickness ranging from 0.1 mm to 20 mm and width from 0.2 mm to 100 mm. Available materials include steel, stainless steel, nonferrous metals, and various special materials — with additional options available upon requests.

Domestic Track Records			
Main Client	Segos	LG	Doosan
Project Name	Underali Slide	TV,Cellphone frame	Haman, Gongju, Boseong, Shin-Hanul NPP #3,4
Delivery Year	2025	2020	2024

Overseas Track Records			
Client (Country)	India	Japan	USA
Project Name	Valmet	O.F Industry	Model locomotive rail
Delivery Year	2025	2020	2005

Supplier Information

- Dongsan Rolling (EMPW)
- em.co.kr
- TEL: +82-10-7141-0176
- E-Mail: em@em.co.kr

Etc.



Radiation Shield Door

Product Description:

A Radiation Shield Door is a structure designed to protect facilities from radiation. It uses lead, concrete, and other materials to block gamma rays and X-rays. Based on the external radiation dose rate, the shielding thickness and structure are determined through gamma scanning using the radioisotope Cobalt-60.

Specification:

- Eletric device(Motor, Space Heater, Photo sensor, Controller, UPS, Rail)
- Cobalt 60 gamma-scanning
- KEPIC SWS - MT

Domestic Track Records	
Main Client	Samsung C&T
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.
- http://www.hanadapco.co.kr/
- TEL: +82-10-9237-3388
- E-Mail:joebaek@gmail.com

Radiation Shielding Door

Product Description:

- Services: For radiation shielding at the entrance (Sliding Type, Plug Type and Hanger Type)
- Characteristics: Gamma-ray Shielding, Neutron Shielding

Specification:

- Lead Shielding Door
- Concrete Shielding Door
- PE Shielding Door

Domestic Track Records			
Main Client	KHNP	KAERI	Daewoo
Project Name	Lead Shield Door	Radiation Shielding Door	Radiation Shielding Door
Delivery Year	2024	2008	2011

Supplier Information

- Korea Radiation Shield Engineering
- www.krse.co.kr
- TEL: +82-53-856-7026
- E-Mail: krse@krse.co.kr

Etc.



RAPID(Reusable Advanced Piping Insulation Device)

Product Description:

We specialize in fully reusable, integrated aluminum insulation systems. Our modular, detachable design cuts maintenance costs by over 80% in 5 years. Quick Latch and Connector assembly ensures easy installation and minimal heat loss.

Specification:

- RAPID is a modular, removable pipe insulation system designed to withstand extreme temperatures from -180°C to 1,100°C.
- It is 100% reusable, generating zero waste even after multiple maintenance and inspection cycles.
- Connector technology allows for an active response to pipe thermal expansion, enhancing energy efficiency.
- Enhanced thermal performance is achieved with Multi-layer™ insulation filling and precision sealing techniques.
- 3D scanning-based design and pre-fabricated modules enable highly accurate and rapid on-site installation.
- Easy latch mechanism minimizes damage risk and ensures convenient, tool-free maintenance.

Domestic Track Records			
Main Client	Hanbit NPP	Hanul NPP	Kori NPP
Project Name	MSIV Room #5,6	MSIV Room #1,2	MSIV Room #3,4
Delivery Year	2024, 2025	2024, 2025	2022, 2023
Overseas Track Records			
Client (Country)	Hakata (Japan)	Hakata (Japan)	Tokyo (Japan)
Project Name	Valve, Elbow	Valve, Pipe, Elbow	Valve
Delivery Year	2024, 2025	2024, 2025	2024, 2025

Supplier Information

- Dongin Engineering Co., Ltd.
- dongineng.com
- TEL: +82-10-5809-1588
- E-Mail: hwiju@dongineng.com

Etc.



Reinforcing Steel Bar

Product Description:

- High-quality reinforcing steel bar for ensuring safety of nuclear power plants (NPP)
- Providing optimal construction solutions for NPP structures based on securing quality and seismic performance
- Eco-friendly product line certified with GR and EPD-UL

Specification:

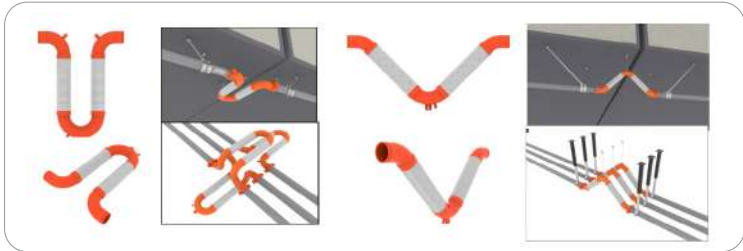
- Certification: ASME (MO), KEPIC-SN, ISO 9001, ISO 14001, OHSAS 18001, and etc.
- Reinforcing steel bars according to KS D 3504, BS 4449, and ASTM A615/A615M
- Refer to the catalog for detailed product dimensions and properties by each standards

Domestic Track Records			
Main Client	Daewoo E&C	Hyundai E&C	Hyundai E&C
Project Name	Shin-Wolsong NPP #1,2	Shin-Hanul NPP #1,2	Shin-Hanul NPP #3,4
Delivery Year	2006-2010	2012-2016	2025-
Overseas Track Records			
Client (Country)	Hyundai E&C (UAE)		
Project Name	Barakah NPP		
Delivery Year	2011-2017		

Supplier Information

- Hyundai Steel
- <https://www.hyundai-steel.com/>
- TEL: +82-31-510-3404
- E-Mail: tokim27@hyundai-steel.com

Etc.



Seismic Flexible Joint U & V-Loop

Product Description:

This Seismic Separation Flexible is installed at the piping passing through the building’s expansion joint sections and the piping entry points of the building, effectively absorbing and isolating seismic displacements (X, Y, and Z directions) and thermal expansion of the piping caused by earthquakes and temperature variations, thereby protecting the structure and facilities.

The U-Type is primarily applied to piping installed at expansion joint sections of buildings, providing excellent displacement absorption performance due to its low thrust force and spring rate. The V-Type minimizes ceiling interferences and allows for easy installation even in complex parallel piping layouts, offering superior space utilization.

This equipment is applied to key utility piping systems such as fire protection, water supply, and gas piping, serving as a core seismic isolation device that ensures seismic safety and accommodates thermal expansion, thereby preventing damage to facilities and property caused by seismic events and structural deformations.

Specification:

- Product Name: Seismic Separation Flexible U & V-Loop
- Design Pressure: 1.2 MPa, 2.0 MPa.
- Material & Size (N.D): Carbon Steel or Stainless Steel / 25A ~ 600A
- End Connection: Flange End, Groove End, Weld End
- Approval Movement (X,Y,Z): ±51mm, ±102mm, ±203mm, ±305mm, ±406mm, ±610mm,

Domestic Track Records		
Main Client	Hanwha E&C	KHNP
Project Name	Hanwha Global N-1	Nuclear Rescsarch Complex
Delivery Year	2024	2025

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Lotte E&C (Indonesia)
Project Name	Barakah NPP #1,2,3,4	LINE HWH
Delivery Year	2021~2025	2023

Supplier Information

- JRMS Co., Ltd.
- www.jrms.co.kr
- TEL: +82-10-3107-2112
- E-Mail: jy@jrms.co.kr

Etc.



Seismic Separation Flexible L - Type

Product Description:

This L-Type is used for the same purpose as the U & V-Loop Type Seismic Separation Flexible, but it is particularly effective in piping layouts where directional changes are required at expansion joint sections or piping entry points, or where interference with surrounding equipment or structures causes angular changes in the piping. It offers excellent space utilization for both vertical and horizontal piping, and minimizes interference during multiple piping installations, greatly improving both workability and spatial efficiency. Therefore, it is effectively applied as a seismic isolation device for complex parallel piping systems and seismic isolation sections in base-isolated buildings.

Specification:

- Product Name: Seismic Separation Flexible L-Type (Dog-Leg)
- Design Pressure: 1.2 MPa, 2.0 MPa.
- Material & Size (N.D): Carbon Steel or Stainless Steel / 25A ~ 600A
- End Connection: Flange End, Groove End, Weld End
- Approval Movement (X,Y,Z): ±25mm ±51mm, ±102mm, ±203mm, ±305mm, ±406mm, ±610mm,

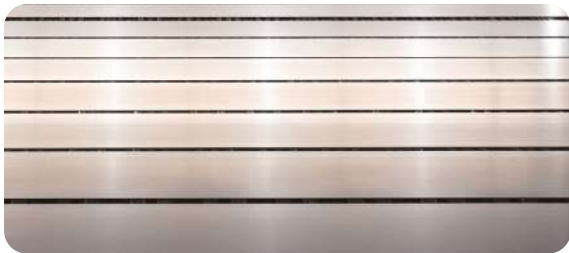
Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	Saeul NPP #3,4	Saeul NPP #3,4	LG Chemical E
Delivery Year	2022	2022	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Lotte E&C (Indonesia)
Project Name	Barakah NPP #1~4	LINE HWH
Delivery Year	2021~2025	2023

Supplier Information

- JRMS Co., Ltd.
- www.jrms.co.kr
- TEL: +82-10-3107-2112
- E-Mail: jy@jrms.co.kr

Etc.



Steel Plates

Product Description:

Hyundai Steel produces high-quality steel plates for NPPs, and we have several supply records totaling over 10 thousand tons of plates for main equipment. Our Dangin integrated Steelworks, where we produce plates, are verified by The American Society of Mechanical Engineers for having had the adequacy of our quality system for the Boiler and Pressure Vessel Code of ASME and have obtained ASME Quality System Certificate.

Specification:

- ASME SA516 grade 60, 65, 70
- ASME SA515 grade 60, 65, 70
- ASME SA738-B
- ASME SA572 Grade 50
- ASME SA36, etc.

Domestic Track Records		
Main Client	KHNP	
Project Name	Shin-Hanul NPP #1, #2	Saeul NPP #3,4
Delivery Year	2013 ~ 2015	2017 ~ 2021

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP
Delivery Year	2013 ~ 2018

Supplier Information

- Hyundai Steel
- <https://www.hyundai-steel.com/>
- TEL: +82-31-510-3404
- E-Mail: tokim27@hyundai-steel.com

Etc.



Thermal Insulation Cover

Product Description:

This product is designed to insulate high-temperature facilities such as piping, valves, and turbines. It has excellent insulation properties, protects workers from burns, and supports rapid initial response in the event of a fire.

Specification:

- Material
 - Inner cloth: Silica Fabric or Ceramic Fabric, etc.
 - Insulation: Mineral Wool or Ceramic Wool
 - Outer cloth: Silicon Coated Glass Fabric or Flame Retardant Coated Fabric
- Thickness: Customer's requirements
- Size: Customer's requirements

Domestic Track Records			
Main Client	KHNP	Korea Western Power	Korea Midland Power
Project Name	Installation of Fire-Spread Prevention Insulation for High-Pressure Feedwater Heaters at Hanbit NPP #1,2	Installation of Turbine Casing Insulation for Taean TPP #9	Installation of Turbine Insulation for Jeju TPP # 3
Delivery Year	2024	2024	2024
Project Name	Repair Work of Insulation for Upper Exhaust Stack of EDG at Kori NPP #4	Installation of Fire-Spread Prevention Insulation for Boiler Hydraulic Operated Valves at Taean TPP #5~8	Installation of Fire-Spread Prevention Insulation at Shin Seocheon TPP
Delivery Year	2024	2024	2024
Project Name	Installation of Insulation in Turbine Building at Kori NPP #3,4	Installation of High-Temperature Turbine Insulation for Taean TPP #10	Installation of Fire-Spread Prevention Insulation Mats for Gas Turbines at Sejong CCPP
Delivery Year	2024	2024	2024
Project Name	Installation of Insulation for HP Turbine, Piping, and Pumps at Kori NPP	Installation of Insulation for Major Turbine Valves at Taean TPP #5~8	Installation of Insulation Mats for Turbine Equipment at Boryeong TPP #8
Delivery Year	2023	2024	2024

Overseas Track Records			
Client (Country)	El Dabaa NPP (Egypt)	Cirebon Power Plant(Indonesia)	PT. Krakatau-Posco Energy (Indonesia)
Project Name	Turbine Insulation Installation	Installation of Steam Turbine Insulation at Cirebon Power Plant	Antifire Insulation Blanket for BFWP
Delivery Year	2025	2024	2023

Supplier Information

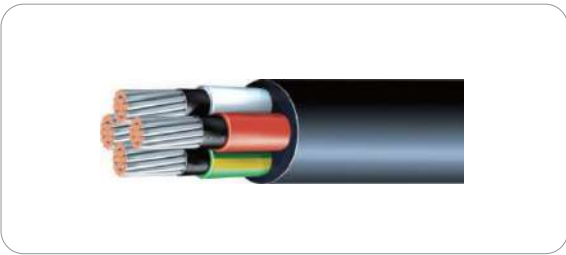
- Ecopowertec. Co., Ltd.
 - www.ecopowertec.kr
- TEL: +82-10-2383-0411
 - E-Mail: ted@ecopowertec.kr

Cable, Probe	239
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ELECTRICAL

Cable, Probe



Power Cable

Product Description:

It is most important to secure the safety of nuclear power plant cables against accidents. To this end, heat resistance, radiation resistance are required. In particular, Class 1E cables installed in the reactor must meet environmental qualification requirements in accordance with IEEE 323 and 383. TMC's cable for nuclear power plants was designed for a lifespan of over 60 years and has completed environmental qualification.

Specification:

- Product range: Cable dimension can be different according to client's request
- Material: Conductor (Tinned copper wire), Insulation (EPR, Ethylene Propylene Rubber), Jacket (FR-PO, Flame Retardant Poly-Olefin)
- Rated voltage: 600V ~ 15kV

Domestic Track Records			
Main Client	KHNP	KHNP	KORAD
Project Name	Saeul NPP #3,4	Shin-Hanul NPP	Radioactive Waste Disposal Facility
Delivery Year	2021 ~	2026 ~	2017 ~ 2021

Supplier Information

- TMC Co., Ltd.
- <http://www.tmc-cable.com/>
- TEL: +82-10-9227-4597
- E-Mail: hyang@tmc-cable.com

Cathodic Protection, Electrode



Aluminum Anode

Product Description:

Aluminum anodes produce a large amount of current and are widely used in seawater. They are considered the most economical type of anode.

Specification:

Type	Life Time (year)	Nom. Dimension (B1+B2) × D × L (mm)	Nom. Weight Gross (kg)
HA1	10	(150+170) × 145 × 335	23.8
HA2	10	(135+170) × 130 × 585	34.8
HA3	10	(125+160) × 125 × 875	47.8
HA4	10	(115+155) × 120 × 1,195	59.0
HA5	10	(120+155) × 110 × 1,555	71.3
HB1	20	(200+235) × 230 × 300	45.4
HB2	20	(190+225) × 205 × 510	64.4
HB3	20	(180+220) × 190 × 765	85.4
HB4	20	(170+200) × 190 × 1,035	106.3
HB5	20	(165+195) × 180 × 1,340	126.5

Domestic Track Records			
Main Client	ECOSSET	KOMIPO	KOEN
Project Name	Dangjin TPP Intake	Complex Marine facility	Gangneung TPP #1 exhalation
Delivery Year	2024	2024	2024

Overseas Track Records			
Client (Country)	Thailand	KEPCO E&C	Doosan Enerbility
Project Name	Gheco One TPP	Barakah NPP	Ras Al-Khair Plant
Delivery Year	2024	2024	2019

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82-10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr

Cathodic Protection, Electrode



Anode for O₂ evolving

Product Description:

O₂ is generated during the electrolysis process using special anodes in inorganic acids such as sulfuric acid and acetic acid, as well as in other organic acids and aqueous solutions.

This type of electrode is supplied to both domestic and international power plants, including KHNP.

Key Benefits: Low operating & maintenance costs / Low energy consumption / Extended electrode life

Specification:

- Dimensions: 911*278*1.2mm(T) or customized according to customer requirements
- Material: Titanium
- Weight, Capacity, Rated voltage: customized according to customer requirements

Domestic Track Records	
Main Client	KHNP, KEPCO, KOGAS, GS EPS, Posco, Posco Energy, Posco E&C, etc.
Project Name	Hanbit NPP, Hadong TPP, Boryeong TPP, Tongyeong Terminal, SinBoryeong TPP #5, 6, LNG CCPP, etc.
Delivery Year	~ at present
Overseas Track Records	
Client (Country)	Posco Energy, Cumberland, KELECO, KEPCO Lebanon, PJB Indonesia, etc.
Project Name	Indonesia CCPP, Muara Karang CCPP, etc.
Delivery Year	~ at present

Supplier Information

- WESCO Electrode Co., Ltd.
- <http://en.e-wesco.com/>
- TEL: +82-55-261-3406
- E-Mail: wesanode@wesanode.co.kr

High Silicon Cast Iron Anode

Product Description:

H.S.C.I Anode (ASTM A518 Gr.3)		Backfill Material (Coke Breeze)	
Si	14.20 ~ 14.75%	Carbon	99.35% Min.
Cr	3.25 ~ 5.00%	Ash	0.6% Max.
C	0.70 ~ 1.10%	Moisture	0.05% Max.
Mn	1.50% Max.	Volatiles	0%(950°C)
Cu	0.50% Max.		
Mo	0.20% Max.		
Fe	Remainder		

Specification:

- It is manufactured and used according to the field situation
- High Silicon Cast Iron Anodes are applied in the following facilities.
 - Underground Piping, Underground Tank, Tank Bottom, Water Tank Inside, etc.

Domestic Track Records			
Main Client	KHNP	Meinntech	Posco Energy
Project Name	Hanbit NPP #3	Hanbit NPP #2	Incheon CCPP
Delivery Year	2025	2025	2024
Overseas Track Records			
Client (Country)	IL-SIN	HDEC	KHNP
Project Name	NT34	Barakah NPP	EL- Kureimat TPP
Delivery Year	2024	2016	2001

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82-10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr

Cathodic Protection, Electrode



Magnesium Anode

Product Description:

- Magnesium anodes have a higher open circuit potential in comparison with other anodes
- Therefore, they are widely used in high electrical resistivity electrolytes (fresh water, soil and so on).

Specification:

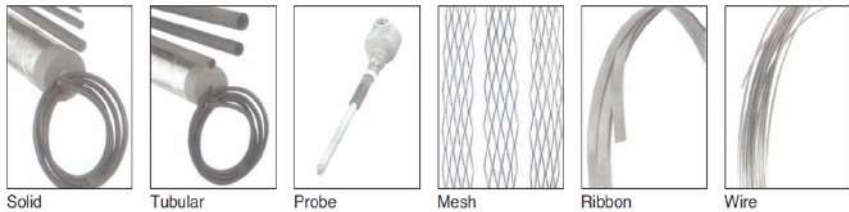
Type	Weight(lb/kg)		Dimension(inch/mm)				
	Bare	PKGD	A	B	C	D	E
9D2	9 (4.08)	35 (15.87)	2-3/4 (70)	3 (76)	21-2/3 (550)	6 (152.4)	31 (787.4)
9D3	9 (4.08)	27 (12.24)	3-1/2 (88.9)	3-3/4 (95.2)	14-1/8 (358.8)	6 (152.4)	17 (431.8)
14D2	14 (6.35)	50 (22.68)	2-3/4 (70)	3 (76)	33-1/2 (850.9)	6 (152.4)	46 (1168.4)
17D2	17 (7.71)	60 (27.21)	2-3/4 (69.8)	2-3/4 (69.8)	50 (1270)	6 (152.4)	55 (1397)
17D3	17 (7.71)	45 (20.41)	3-1/2 (88.9)	3-3/4 (95.2)	25-7/8 (657.2)	6-1/2 (165.1)	29 (736.6)
32D3	32 (14.51)	91 (41.27)	3-1/2 (88.9)	3-3/4 (95.2)	45-1/4 (1149)	6-1/2 (165.1)	53 (1346.2)
32D5	32 (14.51)	74 (33.56)	5-1/2 (139.7)	5-3/4 (146)	20-5/8 (523.9)	8 (203.2)	28 (711.2)

Domestic Track Records			
Main Client	KDHC	SK E&S	KEPCO KPS
Project Name	Hwaseong CHPP	Annual Unit Price Contract	Hwaseong CHPP
Delivery Year	2025	2024	2021
Overseas Track Records			
Client (Country)	Ilshin	Doosan Enerbility	
Project Name	PHU MY3 U/G Pipe	Amata TPP #4, 5	
Delivery Year	2024	2018	

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82-10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr

Cathodic Protection, Electrode



MMO (Mixed Metal Oxide) Anode

Product Description:

Type of Anode	Consumption Rate (kg/A-yr)	Current Density (A/ft²)
Solid Rod Anode	1.0 × 10 ⁻⁶ Max.	10 ~ 50
Tubular Anode	1.0 × 10 ⁻⁶ Max.	10 ~ 50
Probe Anode	1.0 × 10 ⁻⁶ Max.	10 ~ 50
Expanded Mesh Anode	(Minimum)	0.02
Ribbon Anode	(Minimum)	0.005
Wire Anode	(Minimum)	-

Specification:

- It is manufactured and used according to the field situation
- MMO ANODEs are applied in the following facility.
 - Reinforced Con'c Structure, Above Ground Tank(Internal/External), Condenser, Heat Exchanger, Intake Structure, etc.

Domestic Track Records

Main Client	BHI	EWP
Project Name	Bucheon CHPP	Dangjin TPP # 1~3 Exhalation TBN
Delivery Year	2025	2024

Overseas Track Records

Client (Country)	Samsung C&T	Doosan Enerbility	Posco
Project Name	KSA Amiral Cogen IPPT	Jafurah	LSP Complex
Delivery Year	2024	2023	2020

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82-10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr

Cathodic Protection, Electrode



Pt-Ti Anode

Product Description:

- Coating Thickness(micro-inches): 100~300
- Consumption rate(kg/A-yr): 6X10⁻⁶
- Current Density(A/ft²): 50~300
- Electrolytes: Salt Water, Fresh Water(Nb)

Specification:

- It is manufactured and used according to the field situation
- Pt-Ti anodes are applied in the following facility.
 - Condenser, Heat Exchanger, Intake Structure, Seawater Piping, etc.

Domestic Track Records

Main Client	KOSPO	IWEST	KOMIPO
Project Name	Steam Turbine Condenser	Condenser & Heat exchanger	Condenser
Delivery Year	2025	2024	2024

Overseas Track Records

Client (Country)	KEPCO	Asia Networks PEMS
Project Name	Barakah NPP Condenser	NS 2 Condenser
Delivery Year	2025	2023

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82-10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr



Sacrificial Anodes(Magnesium Anode, Zinc Anode, MMO-Ti Anode)

Product Description:

Sacrificial anodes such as magnesium, aluminum, and zinc are used to protect underground and marine structures by corroding preferentially. Magnesium is ideal for high-resistivity soils, aluminum is suited for seawater applications with long service life, and zinc is a versatile option for both soil and marine environments. MMO-Ti anodes, known for their low consumption rate and high durability, are employed in impressed current systems across various environments, including concrete and seawater.

Specification:

- Material: Magnesium / Aluminum / Zinc / MMO-Titanium / Pt-Ti / Pb-Ag / Pt-Nb
- Form: Varies depending on application (e.g., rod, tubular, plate, ribbon)
- Application: U/G piping, Offshore Pipeline, Tank bottom external & internal, Heat Exchanger, Condenser, Intake structure, etc.
- Current Capacity: Mg: 1,100Ah/kg, Al: 2,600Ah/kg, Zinc: 780Ah/kg

Domestic Track Records

Main Client	SK Ecoengi-neering	KHNP	SK Ecoplant
Project Name	SK MU CHP	Shin-Hanul NPP #1,2	Green Energy Program Phase I
Delivery Year	2025	2020	2023

Overseas Track Records

Client (Country)	ENEC (UAE)
Project Name	Barakah NPP #1~2 Condenser and Auxiliaries
Delivery Year	2016

Supplier Information

- Dong Yang Corrosion Engineering Co., Ltd.
- www.dyce.co.kr
- TEL: +82-70-4672-4913
- E-Mail: hupo@dyce.co.kr

Generator



Diesel/Gas Generator Set

Product Description:

- Emergency power at Power plant, Industrial plant, Oil & Gas Plant and others.
- Commercial power at no Utility power or area for unreliable Utility power

<Design Features>

- Accurate and proper product design according to ISO standard and customer's requirement
- Advanced control system based on multi-functional digital control system
- Heavy-duty fabricated steel base frame for stable Generator set operation

Specification:

- Material: Steel & Copper
- Capacity: 14kW ~ 6,000kW
- Dimension(L*W*H): Depend on applied engine and rated power
- Weight: Depend on applied engine and rated power

Domestic Track Records	
Main Client	KEPCO, Power Plant, Airport, Building, Hospital, Industrial plant & etc
Delivery Year	1970 ~ 2019

Overseas Track Records	
Client [Country]	Vietnam, Yemen, Japan, Saudi Arabia, Oman, UAE, Algeria * etc
Delivery Year	1985 ~ 2019

Supplier Information

- Bokuk Electric Ind. Co., Ltd.
- www.bokuk.co.kr
- TEL: +82-10-3370-3027

Diesel/Gas Power Package(Plant)

Product Description:

- Temporary power for Commercial power or IPP project
- Commercial power for Cogeneration, Peak shaving, Site construction and etc.

<Design Features>

- Accurate and proper product design according to ISO standard and customer's requirement
- Advanced control system based on multi-functional digital control system
- Weatherproof and soundproof type design for each site condition

Specification:

- Material: Steel & Copper
- Capacity: 14kW ~ 6,000kW
- Dimension(L*W*H): Depend on applied engine and rated power
- Weight: Depend on applied engine and rated power

Domestic Track Records	
Main Client	KEPCO, Power Plant, Airport, Building, Hospital, Industrial plant & etc
Delivery Year	1970 ~ 2019

Overseas Track Records	
Client [Country]	Vietnam, Yemen, Japan, Saudi Arabia, Oman, UAE, Algeria * etc
Delivery Year	1985 ~ 2019

Supplier Information

- Bokuk Electric Ind. Co., Ltd.
- www.bokuk.co.kr
- TEL: +82-10-3370-3027

Light



Emergency LED Lighting Fixture

Product Description:

- The NAMBUK Emergency Lighting Fixture Model ELF-2514 is a seismically-designed nuclear class 1E emergency lighting fixture as per IEEE Standard 344-1987 for NPPs.
- ELF series model has an integral sealed rechargeable battery and a solid-state charging circuit that provides a minimum of 8 hours of emergency illumination.

Specification:

- Provides 8 hours of emergency illumination.
- Simple push-button test switch verifies proper operation of all major internal circuitry.
- Suitable for use inside primary nuclear containment.
- Easy maintenance.
- Seismically qualified.

Domestic Track Records			
Main Client	KHNP	KHNP	KEPCO E&C
Project Name	Operating NPP	Shin-Hanul NPP #3,4	ARA
Delivery Year		2025	2025

Overseas Track Records	
Client [Country]	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4

Supplier Information

- Nambuk Electric Co., Ltd.
- www.nambuk.co.kr
- TEL: +82-10-9116-4403
- E-Mail: sales@nambuk.co.kr

LED Lighting

Product Description:

- LED lighting development/production/sales
- OEM manufacturing: Manufacturing for all types of plants and industries
- Electrical engineering and lighting construction
- Solar power plant design and facility construction

Specification:

- KS Certification
- KC Certification
- Green Certification
- High Efficiency Equipment Certification
- ISO9001: 2015, ISO14001: 2015
- Inno-Biz

Domestic Track Records			
Main Client	KT	Korea Expressway Corporation	Gumi City Hall
Project Name	The Ocean CC Energy Convergence Construction in Yeosu	Redevelopment of LED in Madal Tunnel ESCO	LED Streetlamp Replacement Energy Saving Service
Delivery Year	2025-2026	2024	2023

Supplier Information

- TaeYang Engineering Co., Ltd.
- www.tyecl.com
- TEL: +82-2-6332-7010
- E-Mail: theloveapple@tyecl.com

Light



LED Lighting Fixture Series for Nuclear Facility Zones - Control Rooms & Technical Spaces

Product Description:

- Main Control Room LED Lighting
 - Ergonomically designed indirect lighting ensures visual comfort for operators.
 - Dimming control enhances readability of VDU and LDP screens.
 - Semi-indirect illumination minimizes glare on console surfaces.
 - Equipped with DALI control units for easy installation, operation, and maintenance.

Specification:

- Common Features
 - EMC Compliance (US NRC 1.180 Reg.)
 - Temperature Endurance: 50°F to 122°F (10°C to 50°C)
 - Seismic Category II Compliance

Domestic Track Records		
Main Client	KHNP	
Project Name	Saeul NPP #3, 4 for High & Low radiation area	Kori NPP #3 for High & Low radiation
Delivery Year	2020 ~ 2025	2020

Supplier Information

- Solux Co., Ltd.
- www.solux.co.kr/eng
- TEL: +82-10-9767-4316
- E-Mail: kkn@solux.co.kr

Light



LED Lighting Fixture Series for Nuclear Facility Zones - General Utility & Reactor Containment

Product Description:

- Graphite LED Flood Light for High-Radiation areas
- Compatible with ceiling, wall, pendant, and chain mounts
- Comprehensive Coverage
- Enhanced Termination Structures
- LED Downlight(6") for Low Radiation area
- Comprehensive Coverage
- Enhanced Termination Structures
- LED Air supply / Heat exchange Recessed Lighting fixture for Inverted "T or M" Ceiling
- Comprehensive Coverage
- Enhanced Termination Structures

Specification:

- Common Features
 - Radiation Resistance TID 1 x 10⁴ Gy ~ TID 8 x 10⁵ Gy
 - EMC Compliance (US NRC 1.180 Reg.)
 - Temperature Endurance: 50°F to 120°F (10°C to 49°C) ~ 50°F to 150°F (10°C to 65.6°C)
 - Seismic Category II,III Compliance

Domestic Track Records			
Main Client	KHNP		KHNP
Project Name	Saeul NPP #3, 4 for High & Low radiation area	Kori NPP #3 for High & Low radiation	Wolsong NPP #3 for Low radiation area
Delivery Year	2020 ~ 2025	2020	2023

Supplier Information

- Solux Co., Ltd.
- www.solux.co.kr/eng
- TEL: +82-10-9767-4316
- E-Mail: kkn@solux.co.kr

Light



Underwater Lighting Fixture

Product Description:

- The NAMBUK underwater lighting fixture model UWL series is designed for underwater use in a NPP fuel pool.
- While widely used as a general area lighting fixture in new and spent fuel pools, it is also used for localized inspection and for in-core use during refueling operations.
- The UWL series is widely used for long-term illumination of fuel pools and canals, reactor cavity illumination during fuel movement, and other large-scale activities.

Specification:

- High-intensity illumination, with two sealed beam lamp or LED Lamp
- Easy maintenance
- Integral underwater connectors, designed for easy operation
- All Materials are passed to radiation test of 1.0 X 103Gy basically
- Ingress Protection: IP68

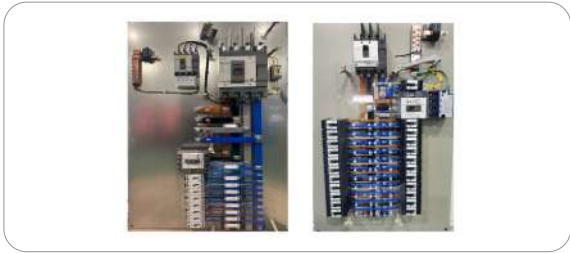
Domestic Track Records			
Main Client	KHNP	KHNP	KEPCO E&C
Project Name	Operating NPPs	Shin-Hanul NPP #3, 4	ARA
Delivery Year		2025	2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4

Supplier Information

- Nambuk Electric Co.,Ltd.
- www.nambuk.co.kr
- TEL: +82-10-9116-4403
- E-Mail: sales@nambuk.co.kr

Panel



Distribution Board/Panel

Product Description:

G2 Power's operation information monitoring system equipped with Partial Discharge (PD) AI diagnostic technology monitors the status of the distribution panel in real time to prevent electrical accidents. Utilizing AI algorithms, it precisely detects partial discharges and arc discharges, enabling early identification of insulation deterioration and abnormal signals. Additionally, it detects major causes of electrical fires in advance, preventing accidents and maximizing maintenance efficiency.

Specification:

- Rated Maximum Voltage(V): Up to 690
- Rated Normal Voltage(V): 480, 460, 380-220, 208/120
- Rated Current(A): Up to 5000
 - Horizontal Busbar(Max.)/Vertical Busbar(Max.): Up to 1000/up to 630
- Rated Frequency(Hz): 50/60
- Rated Short-Time Current (1s/2s)(kA): Up to 5000
- Power Frequency Withstand Voltage(1min)(V)
 - Main Circuit/Control Circuit: 2000/1500
- Protection Grade(IEC/NEMA): Up to 56/NEMA 4X

Supplier Information

- G2 Power Co.,Ltd.
- www.g2p.co.kr
- TEL: +82-31-427-1261
- E-Mail: g2phr@g2p.co.kr

Optimum Power Control Device for Motors(OPC-M)

Product Description:

- Optimum Power Control Device for Motors(OPC-M)
 - Reduces power consumption by more than 15% to 50%
 - Applicable to compressors, fans, blowers, pumps, hydraulic systems, etc
 - In 2022, OPC-M was designated as an "Innovative Product" in the energy sector by the Ministry of Trade, Industry and Energy.

Specification:

- Classified according to voltage and motor capacity.

Domestic Track Records			
Main Client	Lotte Chilsung	Novelis Korea Limited	KOWEPO Taeon Power Division
Delivery Year	2020~	2022~	2023~

Overseas Track Records		
Client (Country)	Tungsheng Group(China)	Shoei Chemical (Nagase/Japan)
Delivery Year	2023	2025

Supplier Information

- Dongsung Energy Saving Solution Co., Ltd.
- www.gesds.com
- TEL: +82-10-9892-2016
- E-Mail: dses2019@gesds.com

Panel



Swing Panel

Product Description:

HI AIR KOREA Swing Panel for NPPs can be installed in HVAC systems provided for various buildings of NPPs. HAK Swing Panel mitigate the impact of internal or external explosions and prevent overpressure on major equipment inside the plant.

Specification:

- Design basis
 - ASME AG-1 (KEPIC-MH)
 - IEEE 344 (KEPIC END 2000)
- Design maximum temperature: 360°F
- Operation Setting Pressure
 - Out flow type: 0.45 ~ 0.5 psid
 - In flow type: 1.35 ~ 1.5 psid
- Mounting type: Wall-mounted
- Leakage classification in accordance with ASME AG-1, Appendix DA-1
 - Blade (seat): Leakage class II

Domestic Track Records		
Main Client	KHNP	
Project Name	Saeul NPP #3,4 M254	Shin-Hanul #1,2 M254
Delivery Year	2016-2021	2011-2018

Supplier Information

- Hi Air Korea Co.,Ltd.
- <http://hiarkorea.co.kr/ko/main/index.php>
- TEL: +82-51-319-7826
- E-Mail: wscho34@hiarkorea.co.kr

Switch, Circuit Breaker



Control Devices

Product Description:

Control devices are used in various industrial sites as well as in NPPs to control and monitor critical systems. They are designed for high reliability, excellent durability, and strong resistance to radiation, vibration, and extreme temperatures, ensuring safe and stable operation in harsh environments.

Specification:

- Environmentally qualified according to IEEE 323
- Seismically qualified according to IEEE 344
- EMC qualified according to NRC Reg. Guide 1.180

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	MMIS Safety system for ARA	Saeul NPP #3,4, Shin-Hanul NPP #3,4 etc	Kori NPP #3, 4, Hanbit NPP #1, 2, etc
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	QinShan NPP (CHINA)	Westinghouse (USA)
Project Name	Barakah NPP #1-4	320MW Unit Rectification	Limerick NPP #1, #2 PPS MCR
Delivery Year	2025	2025	2023

Supplier Information

- Yong Sung Electric Co.,Ltd.
- <http://yongsungelec.co.kr>
- TEL: +82-2-2212-7324
- E-Mail: anthony.oh@yongsungelec.co.kr

Switch, Circuit Breaker



Indicators

Product Description:

Indicator lights are used in various industrial sites as well as in nuclear power plants to display system status and provide reliable electrical connections. Designed for harsh environments, they offer excellent durability and strong resistance to heat, vibration, and radiation, ensuring stable, long-term performance.

Specification:

- Environmentally qualified according to IEEE 323 (indicator lights) and IEEE 572 (terminal blocks)
- Seismically qualified according to IEEE 344
- EMC qualified according to NRC Reg. Guide 1.180
- LOCA & MSLB qualified according to IEEE 572

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	MMIS Safety system for ARA	Saeul NPP #3,4, Shin-Hanul NPP #3,4 etc	Kori NPP #3, 4, Hanbit NPP #1, 2 etc
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	QinShan NPP (CHINA)	Westinghouse (USA)
Project Name	Barakah NPP #1~4	320MW Unit Rectification	Limerick NPP #1, #2 PPS MCR
Delivery Year	2025	2025	2023

Supplier Information

- Yong Sung Electric Co.,Ltd.
- <http://yongsungelec.co.kr>
- TEL: +82-2-2212-7324
- E-Mail: anthony.oh@yongsungelec.co.kr

Switchgear, MCC



Low Voltage Switchgear

Product Description:

G2 Power's low-voltage switchgear, adopting standard components, is highly regarded in the market for its cost efficiency and fast delivery. In particular, it ensures high reliability, as proven through various tests in TPPs, hydraulic power plants, and CCPPs.

Specification:

- Rated Maximum Voltage(V): Up to 690
- Rated Normal Voltage(V): 480, 460, 380-220
- Rated Current(A): Up to 5000
- Rated Frequency(Hz): 50/60
- Rated Short-Time Current (1s/2s)(kA): Up to 65
- Power Frequency Withstand Voltage(1min)(V)
 - Main Circuit/Control Circuit: 2000/1500
- Rated Operating Voltage(V): DC110 or 125, AC 110 or 230

Supplier Information

- G2 Power Co.,Ltd.
- www.g2p.co.kr
- TEL: +82-31-427-1261
- E-Mail: g2phr@g2p.co.kr

Switchgear, MCC



Low-Voltage Switchgear

Product Description:

The low-voltage switchgear offers high cost-efficiency and short lead times through the use of standardized components. In particular, it has demonstrated high reliability by successfully completing seismic qualification tests for nuclear power plants, as well as type tests for TPPs and various industrial facilities.

- Standard vertical enclosed case with bolted assembly using frames and components
- Internal configurations can be customized beyond standard layouts according to order requirements

Specification:

- Rated Voltage: 600V
- Rated Current: 630~6000A
- Internal Protection: IP4X(IP54)
- IEC 60947/ IEC 61439-2/ IEC 60529/ ANSI C37.20.1/ JEM 1265
- Dimension: {W}600~800 x {D}1900 x {H}2350

Domestic Track Records			
Main Client	KORAD	Samchully ES	KOEN
Project Name	Phase 2 of the Radioactive Waste Disposal Facility	West Incheon Phase 5 of the Fuel Cell	Gangneung Anin TPP #1, 2
Delivery Year	2022	2022	2022

Overseas Track Records			
Client (Country)	Doosan (Vietnam)	Posco (Argentina)	Posco (Bangladesh)
Project Name	Vung Ang 2 TPP	Sal de Oro Power Supply System	Matarbari Supercritical TPP
Delivery Year	2023	2022	2020

Supplier Information

- KwangMyung Electric Co., Ltd.
- <http://kmec.co.kr/>
- TEL: +82-2-2240-8165
- E-Mail: jjh96@kmec.co.kr

Switchgear, MCC



LV Motor Control Center

Product Description:

Equipment which supplies low voltage power to motor loads & non-motor loads, cuts off overcurrent & fault current and protects related devices and system

Specification:

- AC 480V 600A 30/42KA, 380V 800A 50KA, 480V 1250A 65KA
- Dimension: 565x550x2350, 600x600x2350, 1000x600x2350mm
- Weight: 450 kg
- Material: Steel
- Capacity: Refer to 'Design Features'
- Rated voltage: Refer to 'Design Features'
- ISO 9001, ISO 14001, KEPIC-EN
- Certification: ISO 9001, ISO 14001, KEPIC-EN
- HS CODE: 8537 10 2000

Domestic Track Records	
Main Client	KHNP, KOMIPO, EWP, Posco, Daewoo
Project Name	Shin-Kori NPP #1,2, Saeul NPP #1,2, Sejong CHPP, Dangjin TPP #9, 10
Delivery Year	2007~2017

Overseas Track Records			
Client (Country)	KEPCO (UAE)	SC ENG (Iran)	OCI (Malaysia)
Project Name	Barakah NPP #1~4	Tehran Oil Refining	MP3
Delivery Year	2017	2018	2018

Supplier Information

- KwangMyung Electric Co., Ltd.
- <http://kmec.co.kr/>
- TEL: +82-2-2240-8165
- E-Mail: jjh96@kmec.co.kr

Switchgear, MCC



LV Switchgear

Product Description:
Equipment which supplies the low voltage power transformed from transformer to each load, cuts off overcurrent & fault current and protects related devices and system

Specification:

- AC 480V 1600/2000/3000A 30/50KA, AC 690V 3000A 65KA
- Dimension: 700 x 2066 x 2450, 900 x 1800 x 2350 mm
- Weight: 1400 kg
- Material: STEEL
- Capacity: Refer to 'Design Features'
- Rated voltage: Refer to 'Design Features'
- ISO 9001, ISO 14001, KEPIC-EN
- Certification: ISO 9001, ISO 14001, KEPIC-EN
- HS CODE: 8537 10 1000

Domestic Track Records	
Main Client	KOSEP, KOMIPO, Doosan, Posco, Daewoo
Project Name	Shin-Boryeong TPP #1,2, Pocheon TPP, Samcheonpo TPP #3,4
Delivery Year	2007~2017

Overseas Track Records		
Client (Country)	Hyundai E&C (UAE)	Daewoo E&C (Libya)
Project Name	Barakah NPP	ZWITINA CCPP
Delivery Year	2015	2013

Supplier Information

- KwangMyung Electric Co., Ltd.
- <http://kmec.co.kr/>
- TEL: +82-2-2240-8165
- E-Mail: jjh96@kmec.co.kr



Medium Voltage Metal Clad Switchgear

Product Description:
G2 Power's Medium Voltage Switchgear is designed in accordance with domestic and international standards. We have focused on building a strong foundation of reliability and have been dedicated to research and development to manufacture products with high safety, low cost, and ease of assembly and disassembly. This ensures that customers can conveniently perform maintenance.

Specification:

- Rated Maximum Voltage(kV): 38, 24, 15/12, 7.2/5
- Rated Normal Voltage(kV): 36,22.9, 13.8/11, 6.6/4.16
- Rated Current(A): 630/1250/2000/2500/3150
- Rated Frequency(Hz): 50/60
- Rated Short-Time Current [1s/2s](kA): Up to 50
- Power Frequency Withstand Voltage(1min)(kV): 70, 50, 28, 20
- Lightning & Switching Impulse withstand Voltage(kV): 170, 125, 75, 60
- Rated Operating Voltage(V): DC110 or 125, AC 110 or 230

Supplier Information

- G2 Power Co.,Ltd.
- www.g2p.co.kr
- TEL: +82-31-427-1261
- E-Mail: g2phr@g2p.co.kr

Switchgear, MCC



Medium-Voltage Switchgear

Product Description:
The MCSG is a compact metal-clad switchgear designed in compliance with IEC 62271-200 standards. It is engineered with a minimum of four independent compartments to prevent fault propagation within the system. Furthermore, the cable, circuit breaker, and busbar compartments have been verified through internal arc testing, ensuring exceptional safety and durability. This provides superior protection for both equipment and personnel in the event of an electrical fault.

Specification:

- Rated Voltage: 7.2kV, 12kV, 17.5kV, 24kV, 25.8kV
- Rated Current: 630A, 1250A, 2000A, 3200A, 4000A
- Internal Protection: IP4X
- IEC 62271-200
- Standard Dimension: (W)600~800 x (D)1900 X (H)2350

Domestic Track Records			
Main Client	Doosan	KOSPO	Lotte
Project Name	Gimpo CHPP	Shin-Sejong CCPP	Daegu-Cheongju Eco-friendly Energy Improvement
Delivery Year	2022	2022	2023

Overseas Track Records			
Client (Country)	Doosan [Guam]	KEPCO [Dominican]	Posco (Argentina)
Project Name	Ukudu CCPP	Plan de Expansi3n Subestaci3n Centro de Operaciones 138/12.5kV	Sal de Oro Power Supply System
Delivery Year	2022	2024	2022

Supplier Information

- KwangMyung Electric Co., Ltd.
- <http://kmec.co.kr/>
- TEL: +82-2-2240-8165
- E-Mail: jjh96@kmec.co.kr



Motor Control Center

Product Description:
G2 Power's Motor Control Center (MCC) can easily accommodate design specification changes, such as capacity requirements, based on all planned and stocked components. It features a sleek appearance and high safety.

Specification:

- Rated Maximum Voltage(V): Up to 690
- Rated Normal Voltage(V): 480, 460, 380-220
- Rated Current(A): Up to 5000
 - Horizontal Busbar(Max.)/Vertical Busbar(Max.): Up to 4000/up to 1200
- Rated Frequency(Hz): 50/60
- Rated Short-Time Current [1s/2s](kA): Up to 65
- Power Frequency Withstand Voltage(1min)(V)
 - Main Circuit/Control Circuit: 2000/1500
- Rated Operating Voltage(V): AC 110 or 230

Supplier Information

- G2 Power Co.,Ltd.
- www.g2p.co.kr
- TEL: +82-31-427-1261
- E-Mail: g2phr@g2p.co.kr

Switchgear, MCC



Motor Control Center

Product Description:

As all components are produced on schedule and inventory is managed in accordance with the PLC process, KwangMyung’s Motor Control Centers can promptly respond to any design changes, including capacity modifications. The system also boasts an elegant appearance and excellent safety features.

- Standard vertical enclosed case with bolted assembly using frames and components, 600 mm in width, with a 100 mm vertical wire way
- Equipped with interlock devices for service, test, and isolation positions. In the test position, test operations can be performed with both power and load sides blocked.

Specification:

- Rated Voltage: 600V
- Rated Current: 630~3150A
- Internal Protection: IP3X
- IEC 60439/ NEMA ICS 2.322/ KEPIC EEE 1000/ JEM 1195
- Dimensions: (W)600~800 x (D)600~800 x (H)2350

Domestic Track Records			
Main Client	KHNP	KHNP	KOEN
Project Name	Hanbit NPP #1,2	Saeul NPP #1,2	Gangneung TPP #1,2
Delivery Year	2024	2007	2022

Overseas Track Records			
Client (Country)	ENEC(UAE)	Doosan (Vietnam)	Doosan (Guam)
Project Name	Barakah NPP #1~4	Vung Ang TPP #2	Ukudu CCPP
Delivery Year	2015~2017	2023	2022

Supplier Information

- KwangMyung Electric Co., Ltd.
- <http://kmec.co.kr/>
- TEL: +82-2-2240-8165
- E-Mail: jjh96@kmec.co.kr

Terminal Block, Terminal Lug



Explosion-Proof Junction Box

Product Description:

Dong-A Bestech’s Junction Box is largely divided into DJBS made of Stainless Steel 316L and GRP DJBG. Dong-A Bestech’s Junction Boxes all have ATEX, IECEx Dual Certificate, and can be manufactured according to the buyer’s desired configuration and size. In addition, explosion-proof glands are also manufactured, and Dong-A Bestech can supply them as a full set.

Specification:

- Application: Industrial and Hazardous Area
- Standard: EN/IEC 60079-0, 60079-7, 60079-11, 60079-31
- Certification: ATEX CML 15ATEX3058, IECEx CML 15.0026
- Materials: Stainless Steel 316L or GRP
- Temperature: T4, T5, T6

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com

Terminal Block, Terminal Lug



Terminal

Product Description:

Provides electrical connection points; supports stable current flow with high conductivity and reliability.

Specification:

- Certification: UL, LR, DNV.GL, TUV

Domestic Track Records	
Main Client	Doosan
Delivery Year	2024

Supplier Information

- Tae Sung Industrial Systems Co., Ltd.
- www.bestcu.kr
- TEL: +82-10-2822-180
- E-Mail: tssj8324@daum.net



Terminal Block

Product Description:

Dong-A Bestech’s Terminal Block is compact and space saving design, provides excellent performance to users based on their excellent quality. We offer various certificates based on global quality control standards and deliver the best service with fast, competitive quotations.

Specification:

- Certification: UL, LR, DNV.GL, TUV

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com

Terminal Block, Terminal Lug



Terminal Blocks

Product Description:

Terminal blocks are used in various industrial sites as well as in nuclear power plants to display system status and provide reliable electrical connections. Designed for harsh environments, they offer excellent durability and strong resistance to heat, vibration, and radiation, ensuring stable, long-term performance.

Specification:

- Environmentally qualified according to IEEE 323 (indicator lights) and IEEE 572 (terminal blocks)
- Seismically qualified according to IEEE 344
- EMC qualified according to R.G 1.180
- LOCA & MSLB qualified according to IEEE 572

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai
Project Name	MMIS Safety system for ARA	Saeul NPP #3,4, Shin-Hanul NPP #3, 4	Kori NPP #3, 4, Hanbit NPP #1, 2
Delivery Year	2025	2025	2025

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)	QinShan NPP (CHINA)	Westinghouse (USA)
Project Name	Barakah NPP #1~4	320MW Unit Rectification	Limerick NPP #1, 2 PPS MCR
Delivery Year	2025	2025	2023

Supplier Information

- Yong Sung Electric Co., Ltd.
- <http://yongsungelec.co.kr>
- TEL: +82-2-2212-7324
- E-Mail: anthony.oh@yongsungelec.co.kr

Terminal Lug (IEC61238-1 & UL486), Terminal (KSC 2620 & UL Listed) and Sleeve

Product Description:

Dong-A Bestech's Terminal Lug PPE0(1hole) & PPET(2hole) type comply with IEC61238-1 requirement and they have been carried out the tests according to "Class A" of IEC61238-1. Materials High Conductivity copper per 99.9% up with Electro-Tin Plated, Voltage Rating: According to IEC61238-1 up to 30kV (Um 36kV).

Specification:

- Application: Cable connection end
- Standard: IEC61238-1
- Certification: cUL, TUV Rheinland, DNV.GL
- Materials: High Conductivity Copper per 99.9% up with Electro-Tin Plated
- Voltage Rating: 35kV

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com

Transformer



UL Transformer

Product Description:

The product, which is a single & three phase isolation transformer general electric source, is UL and CE certified for its proven reliability and safety.

Specification:

- 1-Phase / 3-Phase Dry-type Auto Transformer, Isolation Transformer
- UL, CE certified: 1Phase 100VA~30kVA, 3Phase 500VA ~100kVA
- CE certified Only: 1Phase 1VA~50kVA, 3Phase 100VA ~3000kVA
- FUSED, DIN-RAIL, WALL Mounting, Standing, Casing-TYPE

Domestic Track Records			
Main Client	LS Electric	Hyosung Heavy Industries	Seoul Metro
Project Name	LG Display	Dqum	Yeonsinnae
Delivery Year	2022~	2020~	2020~

Overseas Track Records			
Client (Country)	Punglim (Vietnam)	MTS-SK (Slovakia)	Taantu General Trading(UAE)
Project Name	2022/03/24-000049	P25004	TGT-T-3599
Delivery Year	2022~	2024~	2024~

Supplier Information

- WOONYOUNG Co., Ltd.
- <https://www.woonyoung.com>
- TEL: +82-41-411-3829
- E-Mail: sbpark@woonyoung.com



Current Transformer, Voltage Transformer

Product Description:

This product provides transformed voltage and current for monitoring power quality in electrical power systems.

Specification:

- LV, MV, HV CTs and VTs (Metering, Protection, SGR)
- Standards: IEC 61869-1.2.3 IEEE 57.13 KSC1706,1707 VDE0414 JIS1731,1736
- JEC1201 AS IEC60044-1.2.3 CSN/CSA C60044-1.2
- Voltage Transformer: 15VA~200VA, Earthed & non-Earthed type
- Current Transformer: 15VA~40VA 12.5kA, 25kVA, 31.5kA, 40kA

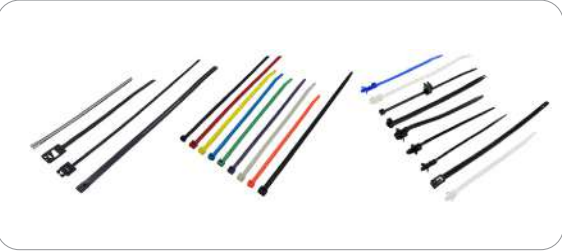
Domestic Track Records			
Main Client	LS Electric	Hyosung Heavy Industries	Seoul Metro
Project Name	LG Display	Dqum	Yeonsinnae
Delivery Year	2022~	2020~	2020~

Overseas Track Records			
Client (Country)	LS Electric (Vietnam)	LS Electric (China)	Sebong (Vietnam)
Project Name	Sk Nexilis	CW1Y-060-25030028	SBPO-241023
Delivery Year	2023~	2020~	2019~

Supplier Information

- WOONYOUNG Co., Ltd.
- <https://www.woonyoung.com>
- TEL: +82-41-411-3829
- E-Mail: sbpark@woonyoung.com

Etc.



Cable Tie (Nylon & Stainless Steel)

Product Description:

Dong-A Bestech's nylon cable ties provide excellent performance to users based on their excellent quality. We provide various certificates based on global quality control standards and provide the best service with fast and competitive quotations. Stainless Steel Ties have Self-locking systems. The ball mechanism assures high tensile strength where strong bundling is required.

Specification:

- Application: Industrial and Hazardous Area
- Standard: UL 62275
- Certification: cUL, LR, BV, KR, ABS, DNV, NK
- Materials: Brass, Nickel Plated Brass, Stainless Steel 316L, Aluminum
- Service Temperature up to 80°C

Supplier Information

- Dong-A Bestech Co., Ltd.
- www.dongabestech.com
- TEL: +82-32-675-0081
- E-Mail: sgwoo@dongabestech.com



CNC-RPS, Redundant Power Supply (Q)

Product Description:

The CNC-RPS redundant power supply was localized to replace the existing 3205 CPU power supply used in the PDAS and CPC/CEAC systems of standard NPPs. It addresses the limitations of single power output and resolves maintenance challenges caused by aging components and discontinued parts. Furthermore, we develop and manufacture power supply systems for various power plant environments.

Specification:

- Input: 95~132VAC 47~63Hz
- Output: 4.9~5.2 VDC
- Ripple: MAX 50mV
- Hot swap Module
- Alarm Function
- Redundant AC Input Module,
- * Redundant Output Voltages for P5 and P5U
- Quality Grade: Q Class

Domestic Track Records	
Main Client	KHNP
Project Name	Standard NPP 3205 System Redundant Power Supply
Delivery Year	2003~

Supplier Information

- Corenet Corporation
- http://core-net.co.kr
- TEL: +82-70-7580-4458
- E-Mail: jhyoon@core-net.co.kr

Etc.



Rectifier

Product Description:

It is D.C power supply equipment which is being used to provide a required current from anode to protected structures through electrolytes. The rectifiers are classified into a manual and automatic type, depending upon the controlling method of the rectifier to keep the proper protective potential.

Specification:

- This is manufactured with voltage, current, and frequency determined according to the field situation, and its size is also determined.
- This rectifier, which is mainly used for external power supply, is installed on site with the following types of objects: Tank bottom, Pipe, Condenser

Domestic Track Records	
Main Client	BHI
Project Name	Ulsan CCPP
Delivery Year	2022.11

Overseas Track Records			
Client (Country)	KEPCO	Ilshin	Samsung E&T
Project Name	Barakah NPP	PHU MY3 U/G Pipe	Tanajib Intake
Delivery Year	2025	2024	2022

Supplier Information

- Prime Corporation
- www.primecorp.co.kr
- TEL: +82 10-3792-1569
- E-Mail: jhjoo@primecorp.co.kr



STATCOM

Product Description:

Control System – A certified control system recognized by EMC, TUV, and the European Union's CE standards. It includes a dual independent power supply. Drive System – Features directional air intake and exhaust outlets, high-efficiency heat dissipation, and proprietary intellectual property. The drive also incorporates protection and control functions.

Specification:

- Optimized Small STATCOM (~20MVar)
- Applicable Voltage: Up to 66kV
- Frequency: 50 or 60Hz
- Control System Response Speed (sec): < 0.01
- Application: Indoor, Outdoor(Container Type) Applied Standard: IEC

Domestic Track Records	
Main Client	LS Electric
Delivery Year	2025

Overseas Track Records		
Client (Country)	Kansai Electric Power (Japan)	TMEIC (Japan)
Delivery Year	2025	2025

Supplier Information

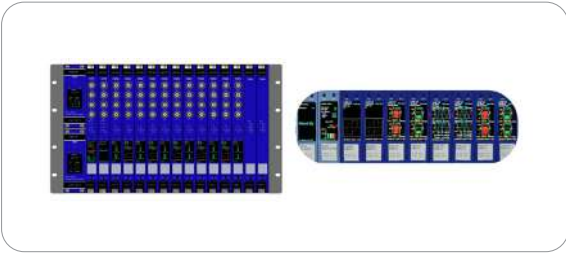
- Asian Power & Energy Corp.
- www.apecorp.co.kr
- TEL: +82-10-9691-1279
- E-Mail: apec@apecorp.org

Control & Monitoring System	265
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INSTRUMENTATION & CONTROL

Control & Monitoring System



CMS-5000S
(Vibration Monitoring System:VMS)

Product Description:

The CMS-5000S is a vibration monitoring system for turbines and rotating machinery, fully compliant with the API 670 standard. It features a dual power supply with automatic switchover between NPS and APS, ensuring uninterrupted system operation. The System Control Module (SCM) incorporates redundancy technology to ensure consistent and reliable system performance. The system supports on-device AI for predictive analysis, and each module is equipped with a graphic OLED display that visually presents vibration conditions in real time.

Specification:

- No. of Racks connected - up to 16 Units
- Max. Vibration Inputs - 400 Points
- No. of Spectrum Lines - 400 Lines
- Fast Trend Data Interval - 1 Second
- Trend Data Interval - 1/5/10/20min, 1/2 hr

Domestic Track Records			
Main Client	Doosan	KHNP	KOWEPO
Delivery Year	2025	2017	2023

Overseas Track Records	
Client (Country)	CEDC(Philippines)
Delivery Year	2022

Supplier Information

- AUTOSYS Co., Ltd.
- <https://www.autosys.co.kr/>
- TEL: +82-10-9052-3600
- E-Mail: princekorea@gmail.com



Controller for Nuclear Power, Oil & Gas
Plant System

Product Description:

RTP system supports 1Gbps Ethernet communication configured redundantly with the upper network. In addition, since it provides Hot-Swappable function for all modules, it is possible to replace the module in which the problem occurred while the system is running. RTP system had passed through with satisfying all the strict requirement of TUV SIL3, and it was recognized for the highest level of performance and safety evaluation in the process control industry.

Specification:

- Dimension: 19" Standard, W*H*D=48.3*28.7*28.7[cm]
- Weight: N/A
- Material: Stainless Steel
- Capacity: N/A
- Rated Voltage: N/A
- Certification: TUV SIL-3 / Cyber Security: EDSA-300 Level 2 / ISO 9001
- HS CODE: 8471.90-0000

Domestic Track Records	
Main Client	KHNP, KAERI, KARI, GS Power, SK, Soosan, YPP
Project Name	PDAS, CPC, DRPI, TGSi, PMAS etc

Overseas Track Records	
Client (Country)	SK Ningbo, Malaysia Nuclear Research Reactor, Jordan Research Reactor, PEMEX, SHARON
Project Name	ESD, F&G, PICS etc

Supplier Information

- RTP Korea
- <http://www.rtpkorea.com>
- TEL: +82-42-863-9400
- E-Mail: support@rtpkorea.com

Control & Monitoring System



Integrated Monitoring and Control System

Product Description:

This system is an integrated monitoring and control system capable of centralized remote monitoring, control, and real-time measurement of large-scale equipment, including various industrial plant facilities and power systems. Utilizing a range of embedded application software, it analyzes, integrates, and outputs real-time on-site data in report form, making it a highly reliable control system.

Specification:

The system consists of two main components: a workstation with peripheral devices and a power system control panel. The workstation is connected to the RTU (Remote Terminal Unit) of the centralized SCADA (Supervisory Control and Data Acquisition) system installed at the substation. It collects and processes field data at high speed. The processed data and alarm information are displayed on-screen or printed out, depending on the operator's needs. Additionally, the system enables remote control of on-site power equipment via the power system control panel using keyboard and mouse operations.

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3, 4
Delivery Year	2025

Supplier Information

- Youho Electric Ind. Co., Ltd.
- www.youho.co.kr
- TEL: +82-10-8397-9849
- E-Mail: kimks@youho.co.kr

Control & Monitoring System



Multi-Purpose Aerosol Control System

Product Description:

- Development of an aerosol generation, injection, mixing, and measurement system to study and analyze the behavior of radioactive aerosols under severe accident conditions
- By extending the operating condition of the existing aerosol generation system, the new system can function under a variety of environmental conditions; its performance verification testing has been successfully completed.
- Applicable as a research platform to investigate the behavior and phenomena of aerosols generated under harsh conditions(steam and non-condensable gas environments)

Supplier Information

- FNC Technology Co., Ltd.
- <https://www.fnctech.com/>
- TEL: +82-10-2667-9360
- E-Mail: kkkjs0714@fnctech.com



Nuclear Qualified Auto Manual Station

Product Description:

This Nuclear Qualified Auto Manual Station helps prevent human errors, thereby improving plant safety. As the display module can be replaced separately, without the need to replace other components, maintenance costs can be reduced by approximately 20%. The backup display allows continuous monitoring even in case of a display module failure. By applying the state-of-the-art technologies such as hot-swapping, this product improves maintenance efficiency.

Specification:

- Analog Input: 2 ch / type: mA, VDC / range: -10 ~ +10VDC, -50 ~ +50mA
- Analog Output: 1 ch / type: mA, VDC / range: -10 ~ +10VDC, 0 ~ +20mA
- Digital Input: 3 ch / type: Voltage / Level: High: 0VDC / Low: -15VDC
- Digital Output: 4 ch / type: Voltage / Level: High: 0, 5.6VDC / Low: -15VDC
- Accuracy: ±0.2% of full span (at reference condition)

Domestic Track Records	
Main Client	KHNP
Project Name	Kori, Hanbit NPP
Delivery Year	2006 ~

Supplier Information

- WOJIN INC
- www.wojininc.com
- TEL: +82-31-379-3243
- E-Mail: leejw@wojininc.com

Control & Monitoring System



Nuclear Qualified Controller

Product Description:

The control board and other major components of this product feature redundancy. Human factors engineering has been incorporated into this product to prevent human errors, thereby providing accurate information to users. In case of a display module failure, the display module can be replaced separately, without having to replace other components. A backup display enables continuous monitoring even when the display module fails.

Specification:

- Analog Input: 4 ch / AI1, AI2: mA, VDC, mV, TC, RTD / AI3, AI4: mA, VDC
- Input Range: -10 ~ +10VDC, -50 ~ +50mA, -50 ~ +152mV, -200 ~ +850°C(RTD), TC
- Accuracy(at reference condition): ±0.2% of full span(mV, VDC, mV), ±0.5% of full span(TC, RTD)
- Analog Output: 4 ch / mA, VDC / range: 0 ~ +10VD, 0 ~ +20mA / Accuracy: ±0.2% of full span
- Digital Input: 2 ch / Voltage, Contact, Frequency
- Digital Output: 4 ch / DO1, DO2: Open collector type / DO3, DO4: Relay

Domestic Track Records	
Main Client	KHNP
Project Name	Kori, Hanbit NPP
Delivery Year	2020 ~ present

Supplier Information

- WOJIN INC
- www.wojininc.com
- TEL: +82-31-379-3243
- E-Mail: leejw@wojininc.com



Panel PC

Product Description:

- NTP19KRF-V11-DS
 - 19"Rackmount(9U) 19"TFT LCD (1280x1024) Touch Panel PC
 - Intel i7-1165G7 CPU / 16G DDR4 RAM / 512G SSD
 - DC24V input Power Redundancy
 - Nuclear Power Plant Certification

Specification:

- Fanless & Dustproof System
- Wide Temperature
- Front Panel LED Status _Redundancy Power
- DC24V Input
- Nuclear Power Plant Certification



Product Description:

- Explosion Proof Touch Panel PC
 - 21" Touch Screen (Full HD) & Capacitive Touch
 - Ex nA IIC T4

Specification:

- Fanless & Dust Proof System
- Intel i7-1165G7 CPU / 16G DDR4 RAM / 512G SSD
- Non-sparking Device
- Wide Temperature
- Explosion-Proof

Supplier Information

- iNewtek Inc.
- www.inewtek.com
- TEL: +82-31-448-8229
- E-Mail: kblee@inewtek.com

Control & Monitoring System



Seismic Data Recording System

Product Description:

The Seismic Data Recording System is a high-precision seismic instrument capable of measuring micro-seismic events as small as 10 nano-g RMS, as well as structural vibration signals. It records and analyzes seismic signals synchronized with a GPS clock for precise time alignment. The system integrates cutting-edge digital signal processing, internet communication, and GPS technologies. It supports 3 to 9 signal channels to measure, store, and transmit broadband seismic data.

Specification:

- [Recorder] Dynamic Range - Over 137dB@40Hz
- [Recorder] Input Channels - 3 / 6 / 9 Channel
- [Sensor] 1 / 2 / 3 - Axis with Dynamic Range - 127dB@40Hz
- [Sensor] Sensitivity - 2.4V/G Differential Output
- [Sensor] Frequency Response - DC ~200Hz(±3dB)

Domestic Track Records			
Main Client	KOGAS	Government Offices	Bridges
Project Name	Seismic Monitoring		
Delivery Year	2022	2023	2023

Supplier Information

- AUTOSYS Co., Ltd.
- <https://www.autosys.co.kr/>
- TEL: +82-10-9052-3600
- E-Mail: princekorea@gmail.com

Transformer / Rectifier, Remote Monitoring & Control System

Product Description:

Transformer/rectifiers are the most common and preferred type of power supply. If there is only one structure or zone to be cathodically protected with impressed current, a single-channel transformer/rectifier will be applied. If multiple structures or zones require cathodic protection with impressed current, a multi-channel transformer/rectifier will be used. A Remote Monitoring & Control System enables remote supervision and adjustment of rectifier output and system status, enhancing both reliability and maintenance efficiency.

Specification:

- DC output: Designed to customer requirements
- Control Method: Auto/Manual type
- Cooling: Air-cooled / Oil-cooled
- Meter Display: Analog or Digital type
- Degree of Protection: IP42-IP65
- Design Life: Over 20 years
- Operating Temperature Range: -20°C to +55°C
- Rectification: SCR/SMPS type

Domestic Track Records			
Main Client	SK ecoengineering	KHNP	KOWEPO
Project Name	SK MU CHP	Shin-Hanul NPP #1, 2	Green Energy Program Phase I
Delivery Year	2025	2020	2023

Overseas Track Records	
Client (Country)	ENEC (UAE)
Project Name	Barakah NPP # 1,2 Condenser and Auxiliaries
Delivery Year	2016

Supplier Information

- Dong Yang Corrosion Engineering Co., Ltd.
- www.dyce.co.kr
- TEL: +82-70-4672-4913
- E-Mail: hupo@dyce.co.kr

Detection & Protection System



CNC-FOT & CNC-FOR, CPOIA Transmitter & Receiver (Q)

Product Description:

The CPOIA(CEA* Position Optical Isolation Assembly) Transmitter & Receiver are devices used to send position signals from the control rods to the Core Protection Calculator (CPC). The optical modem inside the module converts the input voltage corresponding to the control rod position signals into optical signals and transmits them to the control rod calculation system. CEA*: Control rod Element Assembly

Specification:

- Power Requirement: 15 VDC ± 5%
- Overvoltage Protection: Transmitter - +25 to -10.24 VDC, Receiver - Up to +25 VDC
- Output: Transmitter - Optical Signal at SMA Port, Receiver - 0 ~ 10.24 VDC
- Current: Less than 75 mA,
- Temperature Range: 10 to 48.8 °C, * Quality Grade: Q Class

Domestic Track Records	
Main Client	KORAD
Project Name	Localization of Optical Modem for Core Protection Calculator System in Standard NPPs
Delivery Year	2010~

Supplier Information

- Corenet Corporation
- <http://core-net.co.kr>
- TEL: +82-70-7580-4458
- E-Mail: jhyoon@core-net.co.kr



EPD Reader Station

Product Description:

A system used to separately manage entry and exposure to high-radiation areas (RCB: Reactor Containment Building) or to change the work permit (RWP) within the radiation management area. It prevents contamination of EPDs, can be used in narrow spaces due to its compact size, and is easy to move.

Specification:

- Power: 100V240V / 50Hz-60Hz
- Dimension (W x H x D mm): 350 x 1200 x 400
- Industrial PC: CPU: Intel Core™ i7, 3.4GHz, RAM: 4GB, SSD: 120GB
- Monitor: 10.4 Inch LCD Infrared Type, Screen Ratio 4:3, Resolution 1024 x 768
- EPD Reader
 - Front: RFID or Infrared communication
 - Left: Wing type 125kHz Short-range frequency, contactless RF communication(Maximum recognizable distance 10cm)

Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Hanul NPP #3	Kori NPP #3	Hanbit NPP
Delivery Year	2015	2018	2019

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1,2
Delivery Year	2021

Supplier Information

- U2NG Co., Ltd.
- www.u2ng.co.kr
- TEL: +82-10-9702-0414
- E-Mail: jsh@u2ng.co.kr

Detection & Protection System



EPD Storage & Management System

Product Description:

EPD Storage & Management System dispenses and stores Electronic Personal Dosimeter (EPD). Each worker can take out or return an EPD after identification via the system's personal identification technology. This system is not only 'storage system' but also 'EPD reader'.

Specification:

- Biometric information Recognition System (select one)
 - Fingerprint: Optical Sensor, USB Interface
 - Hand Vessel: Contactless Infrared sensor, Interface Ethernet / RS232 / RS485
- Barcode Scanner: 1D / 2D Radial Form, Effective Distance 47~216mm
- Industrial PC: CPU: Intel Core™ i7, 3.4GHz, RAM: 4GB, SSD: 120GB
- Monitor: 15 Inch LCD Infrared Type, Screen Ratio 4:3, Resolution 1024 x 768

Specification:

- Slots Q'ty (EA): 120
- Power: 100V240V / 50Hz60Hz
- Dimension (W x H x D mm): 1200 x 1100 x 266
- Type: Wall-mount (Standable)
- Industrial PC: CPU: Intel i7-477034Ghz, RAM: 4GB, SSD: 250GB
- Touch Monitor: 10.4 Inch Infrared Type, Screen Ratio 4:3, Resolution 1024 x 768
- Face Depot: ZKTecho / FaceDepot-7B
- Fingerprint: Suprema / BioMini Slim S
- Barcode Reader: Honeywell / 3320G
- SMPS: Meanwell / LRS-350-24

Domestic Track Records			
Main Client	KHNP	KHNP	KAERI
Project Name	Hanul NPP #3	Hanbit NPP #3	Isotope Utilization Center
Delivery Year	2011	2019	2017

Domestic Track Records		
Main Client	NAVY	KORAD
Project Name	Naval Maintenance Depot	Radioactive Waste Storage Facility
Delivery Year	2022	2023

Supplier Information

- U2NG Co., Ltd.
- www.u2ng.co.kr
- TEL: +82-10-9702-0414
- E-Mail: jshl@u2ng.co.kr

Detection & Protection System



Fault Record

Product Description:

This device is installed in power plants and substations to analyze fault phenomena, the operational status of protection devices, and the root causes of power system failures. It supports up to 32 AC channels and 64 DC channels per unit and is equipped with an automatic oscilloscope function featuring fault location (FL) capabilities.

Specification:

- Capable of simultaneously receiving dozens of AC/DC signal channels.
- Records data in milliseconds before and after a fault occurs.
- Automatically estimates the location of the fault.
- Allows configuration and data analysis via a web browser over the Internet/Intranet.
- Enables precise operation time recording by linking with protection devices.

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2019

Supplier Information

- Youho Electric Ind. Co.,Ltd.
- www.youho.co.kr
- TEL: +82-10-8397-9849
- E-Mail: kimks@youho.co.kr

Detection & Protection System



Personal Dosimeter Integrated Type Storage & Management System (C-Type)

Product Description:

It is an integrated electronic storage & management system that can store TLDs and EPDs regardless of their use. It is equipped with two-step self-authentication system as standard using the user’s biometric information. In addition, each personal dosimeter passes through a surface contamination detector and safely stored in separate spaces for each individual, which can increase the calibration accuracy of the natural radioactivity coefficient.

Specification:

- Item: Description
- Slots Q'ty (EA): 120
- Power: 100V-240V / 50Hz-60Hz
- Dimension (W × H × D): 1200 × 1100 × 266 mm
- Type: Wall-mount (Standable)
- Industrial PC: CPU Intel i7-4770 3.4GHz, RAM: 4GB, SSD: 250GB
- Touch Monitor: 10.4 Inch Infrared Type, Screen Ratio 4:3, Resolution 1024 × 768
- Face Depot: ZKTeco / FaceDepot-7B
- Fingerprint: Suprema / BioMini Slim S
- Barcode Reader: Honeywell / 3320G
- SMPS: Meanwell / LRS-350-24

Domestic Track Records		
Main Client	NAVY	KORAD
Project Name	Naval Maintenance Depot	Radioactive Waste Storage Facility
Delivery Year	2022	2023

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	ENEC (UAE)
Project Name	Barakah NPP #1~4	Training Center
Delivery Year	2016	2018

Supplier Information

- U2NG Co., Ltd.
- www.u2ng.co.kr
- TEL: +82-10-9702-0414
- E-Mail: jsh@u2ng.co.kr

Detection & Protection System



Wireless Dose Management System

Product Description:

Wireless exposure dose monitoring solution is configured to allow real-time monitoring of workers’ exposure doses of workers in radiation area. Intelligent Smart Helmets with high-performance wireless communication technology are designed to be suitable for workers at nuclear facilities, and they detect risks by monitoring exposure dose and worker behavior, immediately communicate them to managers, and quickly activate alerts.

Specification:

- ADR(DMC-3000): Semiconductor Sensor / Sensor detected: Gamma and X-ray / Measurement range Hp(10)
- Helmet-attachable IoT device: Battery AAAA Alkaline (1.5V) x 3ea / Size: 70 x 85 x 25 mm / Weight: ≤ 90 g
 - Processor: STMicroelectronics Arm Cortex M3 72Mhz / Memory: 64KB FLASH, 20KB SRAM
 - Communications: Telemetry Module(for ADR), BLE Module (for SmartPhone)
 - Frequency: 2.4Ghz (FHSS)
- PS-LTE wireless repeater exclusively for IoT devices: Frequency 2.4Ghz
- Beacon terminal: Frequency 2.4 Ghz / Protocol: Bluetooth 4.0+ / Size 39x15.5mm
- Operational Program: PC monitoring software for control room / PS-LTE Smartphone APP (for supervisors)
- Server & Monitor

Domestic Track Records	
Main Client	KORAD
Project Name	Radioactive Waste Disposal Facility
Delivery Year	2022

Supplier Information

- U2NG Co., Ltd.
- www.u2ng.co.kr
- TEL: +82-10-9702-0414
- E-Mail: jsh@u2ng.co.kr

Indicator, Sensor



Dissolved Water Sensor

Product Description:
Our Dissolved Water Sensor accurately detects moisture dissolved in lubricants in real time. It measures Relative Humidity (RH%) to determine saturation levels and prevent free water formation. Ideal for proactive maintenance, it helps extend lubricant life and protect critical equipment.

Specification:

- Measured Value: RH (Relative Humidity) [%], Temperature [°C]
- RH Resolution: 0.01%
- RH Display Range 0 ~ 95 %
- Accuracy: ±2 RH% @ 20°C ~ 70°C, ±3 RH% @ ≤20°C and ≥70°C
- Operating Temperature: 0 ~ 120°C
- Dimension including probe and connector: 39 Φ x 128 L (mm)
- Mounting Thread: PF 1/2"
- IP Grade: IP67
- Cable Length: Max 5 m
- Output Signal: RS485
- Input Power: DC 12V ~ DC 24V

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com



EZ-FeCheck

Product Description:
EZ-FeCheck is a portable test kit designed for quick, on-site detection of iron wear debris in lubricants. It provides visual, semi-quantitative results without requiring electricity or advanced instruments. Ideal for predictive maintenance, it helps prevent equipment failure by identifying abnormal iron levels early.

Specification:

- Range: 0 ~ 20,000ppm(Default is 0 ~ 2,000ppm)
※Measurement range can be changed according to customer's request
- Resolution: 1ppm
- Sample: 2ml
- Battery: 3.7V 7,000 ~10,000mA
- Charging Type: C-Type(Free Voltage(100~240V) 50/60Hz)
- Battery Life: Approximately 34 hours(100% to 0%)
- Condition: 0 ~ 50 °C (At -5 to 0°C, use after preheating for at least 10 minutes)
(Not recommended for use below -5°C)
- Test Method: ASTM D8184-18 (Measurement results may vary depending on test standards)
- Measurement Time: <5 sec
- Size(mm): 130 x 94 x 115
- Weight: 430g

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com

Indicator, Sensor



EZ-LubeCheck

Product Description:
EZ-LubeCheck is a compact sensor that monitors multiple lubricant properties in real time. It simultaneously measures viscosity, dielectric constant, temperature, and moisture (RH%). Designed for on-site diagnostics, it enables early detection of oil degradation and contamination.

Specification:

- Measurement Value: Relative Humidity(RH%), Total Water(ppm), Temperature[°C], Permittivity[%]
- Relative Humidity Resolution: 0.01%
- Relative Humidity Display Range: 0~95%
- Relative Humidity Accuracy: ±2% @20~70°C, ±3% @≤20°C and ≥70°C
- Absolute Water Display Range: 0~50,000ppm / 0~100,000ppm / 0~200,000ppm
- Test Method: Correlation to ASTM D7546 or ASTM D4928
- Temperature: 0 ~ 120°C
- Permittivity/Oil Life Resolution: 0.01 / 1%
- Permittivity/Oil Life Range: 1 ~ 7 / 0~100%
- Permittivity/Oil Life Accuracy: ±0.02
- Monitor Unit Size: 69Φ x 90L (mm)
- Sensor Unit Size Short: 39Φ x 87L (mm) / Long: +27mm, 39Φ x 114L (mm)

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com



Ferro Mon Sensor

Product Description:
The Ferro Mon Sensor continuously monitors ferrous wear debris in lubricants using magnetic flux technology. It detects real-time iron particle concentration to identify abnormal wear at an early stage. Ideal for gearboxes and rotating equipment, it enhances predictive maintenance and reduces downtime.

Specification:

- Measuring Target: Ferrous Wear Concentration (%)
- Ferrous Debris Resolution: 0.1%
- Display Range: Severe Wear 0~100%, Wear 0~100%
- Operating Temperature: 0~120°C
- Dimension incl. probe and connector: 39Φ x 133 L (mm)

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com

Indicator, Sensor



Flow Nozzle

Product Description:

- Measurement flow rate using Differential Pressure

Specification:

- Dimension (L*W*H): It depends on specification
- Weight: It depends on specification
- Material: C.S, LTCS, Stainless Steel, A182F11,22,5,9,91, Monel, Hastelloy C...etc
- ISO 5167, ASME MFC 3M, L.K SPINK, AGA NO. 3, ASME PTC-6
- HS CODE: 9026.10.2000

Domestic Track Records	
Main Client	Doosan, Daelim, DKME, etc
Project Name	Wonju RDF, Chuncheon CHPP, etc
Delivery Year	2013~

Overseas Track Records	
Client (Country)	CTCI, Toyo, NEM, CMI, Alstom, Hangzhou Boiler, etc
Project Name	MOCD 2, Argentina 9F HRSG, Darling Downs, etc
Delivery Year	2002~

Supplier Information

- Samil Industry Co., Ltd.
- <http://www.samilind.co.kr/>
- TEL: +82-32-819-9671
- E-Mail: samilind79@samilind.co.kr



Level Gauge

Product Description:

- Measurement flow rate using Differential Pressure

Specification:

- Dimension (L*W*H): It depends on specification
- Weight: It depends on specification
- Material: C.S, LTCS, Stainless Steel, A182F11,22,5,9,91, Monel, Hastelloy C...etc
- Capacity: N/A
- Certification: ASME STAMP(U.PP.S), CE(PED), ATEX, ISO 9001, ISO 45001, ISO 1400

Domestic Track Records	
Main Client	GS, SK, Hyundai, Samsung, Doosan, etc
Project Name	SK Gas PDH, YNCC OCU, S-Oil , etc
Delivery Year	1996~

Overseas Track Records	
Client (Country)	JGC, Toyo, Petrofac, Tecnicas Reunidas, etc
Project Name	CFR, NSRP Complex, etc.
Delivery Year	2001~

Supplier Information

- Samil Industry Co., Ltd.
- <http://www.samilind.co.kr/>
- TEL: +82-32-819-9671
- E-Mail: samilind79@samilind.co.kr

Indicator, Sensor



Magic Block Breather (MBB)

Product Description:

Magic Block Breather (MBB) is a compact desiccant breather designed to block moisture and airborne contaminants from entering lubricant reservoirs. It uses high-efficiency desiccant and multi-layer filtration to ensure clean, dry air intake in harsh environments. Ideal for gearboxes, hydraulic tanks, and storage drums, MBB extends equipment life by preventing oil degradation.

Specification:

- Size (Height / O.D.): 336/130 [mm]
- Air Flow: 17.2 CFM @1PSID (487 LPM) (MBB-WMPM)
- Amount of Silica Gel: 620g
- Particle Filtration: 1µm
- Connection: 1" Female PF Thread
- Differential Pressure Gauge: -25IN H2O(-62.27mbar) [-0.06227bar]
- Operating Temperature: -20°C~70°C
- Material: Housing(Polycarbonate, Nylon), Filter Media(P.E)
- Capacity: The flow rate of air breather is generally sum of flow * 1 ~ 5 times of the relevant circulation and pump. Oil bath reservoirs (reducers, etc.) can be used up to 2,000 liters with MBB.

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com



Nuclear Qualified Digital Bar-Graph Indicator

Product Description:

This digital indicator helps improve plant safety and security by preventing human errors and applying the latest cyber security requirements. Existing analog and digital indicators can be replaced at a competitive price. As the display module can be separately replaced, maintenance costs can be reduced by approximately 20%. Using this product will improve maintenance convenience.

Specification:

- Size: 6 inch, 3.5 inch
- Seismic Category: I, II (Q,A,S Quality Class)
- Bar Display: Full color TFT-LCD Type, Tri-color (Red/ Yellow/Green)
- Digit Display: Full color TFT-LCD, Green color
- Accuracy: 0.01% of full span ± 1 count (at reference condition)
- Power: Line Voltage 120VAC, 60Hz(Free Voltage)

Domestic Track Records	
Main Client	KHNP
Project Name	Kori, Saeul, Hanbit, Hanul, Wolsong NPP
Delivery Year	2011 ~

Supplier Information

- WOOJIN INC
- www.woojininc.com
- TEL: +82-31-379-3243
- E-Mail: leejw@woojininc.com

Indicator, Sensor



Nuclear Qualified Thermocouple, RTD

Product Description:
Temperature sensors are generally classified as thermocouples (TC) and resistance temperature detectors (RTD) based on the principle of temperature measurement. WOOJIN INC manufactures a wide range of thermocouples and RTDs. Additionally, various types of temperature sensors are available depending on the usage environment and application, allowing customers to have a broad range of options. We provide customized design, manufacturing, and testing to supply the most suitable temperature sensors according to the customer's specific environmental requirements.

Specification:

- WOOJIN INC offers a wide range of design and manufacturing options tailored to specific applications.
- TC - Sheath Type: K, E, J, T, etc.
 - Hot Junction Forms: Grounded, Ungrounded, Exposed
- RTD - Sensor Type(PT100Q): 2-wire, 3-wire, 4-wire
 - Element Type: Glass-Sealed Platinum, Mica Type Platinum, Ceramic Type Platinum

Domestic Track Records		
Main Client	KHNP	Doosan
Project Name	Kori, Saeul, Hanbit, Hanul, Shin-Hanul, Wolsong NPP	Shin-Hanul, Saeul NPP
Delivery Year	2008 ~	2019 ~

Supplier Information

- WOOJIN INC
- www.woojininc.com
- TEL: +82-31-379-3243
- E-Mail: leejw@woojininc.com



Particle Counter for Laboratory

Product Description:
Particle Counter for Laboratory uses laser light scattering to detect and count particles suspended in lubricants or hydraulic fluids. It provides real-time contamination analysis based on ISO 4406, NAS 1638, or SAE AS 4059. Widely used in critical industries, it ensures fluid cleanliness for equipment protection and reliability.

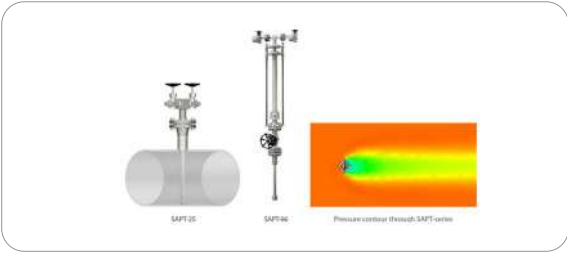
Specification:

- Light Source: Semiconductor Laser
- Measurement Range: 1µm-100µm
- Sensitivity: 1µm (ISO4402) or 4µm(c) (ISO11171)
- Measuring Channel: 16 Channels, setting any particle size within 1µm-100µm
- Way of Sampling: Bottle
- Sampling Volume: 0.3~100ml, Interval 0.1ml
- Flow Rate: 5 mL/min~60 mL/min
- Maximum Vacuum of Sample Cabin: 0.06 Mpa
- Maximum Pressure of Sampling Cabin: 0.6 Mpa
- Samples Viscosity: 2~320cSt @40°C
- Sample Temperature: 0°C~80°C
- Resolution: Superior to 10% (ISO11171 GB/T18854-2002)
- Coincidence Error Limit: 24000p/mL (5% coincidence error)
- Repeatability: RSD<2% (Particle Counter>5000 particles/Sample volume)
- Moisture: ppm(typically 0~10000) depending on calibration
- Turbidity: ASTM D4176
- Test Results Output: Screen display, built-in printer, and output to an external computer
- Power: 220V, 60Hz
- Operating Temperature: 0~50°C

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khji@solge.com

Indicator, Sensor



Pitot Tube

Product Description:

- Measurement flow rate using Differential Pressure
- Design Features: R.W Miller, ASME MFC-12M

Specification:

- Dimension (L*W*H): It depends on specification
- Weight: It depends on specification
- Material: C.S, LTCS, STAINLESS STEEL, A182F11,22,5,9,91, Monel, Hastelloy C, etc.
- Capacity: N/A
- Certification: ASME STAMP(U.PP.S), CE(PED), ATEX, ISO 9001, ISO 45001, ISO 1400

Domestic Track Records	
Main Client	GS, SK, Hyundai, Samsung, Doosan, etc.
Project Name	SR , S-OIL Residue Upgrading Complex, HDO Revamping, DEOA
Delivery Year	2007~

Overseas Track Records	
Client [Country]	JGC, Toyo, Petrofac, Tecnicas Reunidas, etc.
Project Name	CFR, NSRP Complex, MOCD 2
Delivery Year	2007~

Supplier Information

- Samil Industry Co., Ltd.
- <http://www.samilind.co.kr/>
- TEL: +82-32-819-9671
- E-Mail: samilind79@samilind.co.kr



Pressure Gauge

Product Description:
WISE pressure gauges are ideal for corrosive environments. They are typically used in chemical, petrochemical, refining, power generation, marine, and food industries. The stainless steel case and cover offer a clean appearance and excellent resistance to corrosion and chemical attack.
Absolute Pressure Measurement: Measured relative to a perfect vacuum, such as atmospheric pressure.
Differential Pressure Measurement: Represents the difference between two distinct pressure values.

Specification:

- Dimension (Dial): 40, 50, 60, 75, 100, 150, and 200 mm
- Weight: 0.3 ~ 5kg
- Operating Temperature: -20°C~70°C
- Material (Case): 304SS, 316SS / (Element): 326SS, Monel
- Range: -0.1~0.2, 0~100 MPa
- HS Code: 9026.20-1120

Domestic Track Records	
Main Client	KHNP (UAE)
Project Name	Barakah NPP
Delivery Year	2015~2019

Supplier Information

- Wise Control Inc.
- <https://www.wisecontrol.com/home/eng>
- TEL: +82-2-300-2300
- E-Mail: webmaster@wisecontrol.com

Indicator, Sensor



Rotameter / Turbine Flow Meter

Product Description:
Rotameter: There is a float inside the flow meter, and the fluid flows up and down and the indicator displays the flow rate.
Turbine Flow Meter: A wing is installed inside the flow meter, and the rotation generated by the flow of the fluid is measured to indicate the flow rate.

- Specification:**
- Dimension (L*W*H): It depends on specification
 - Weight: It depends on specification
 - Material: C.S, LTCS, Stainless Steel, A182F11,22,5,9,91, Monel, Hastelloy C...etc
 - Capacity: N/A
 - Rated Voltage: DC 24V

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2020

Overseas Track Records	
Client (Country)	Aramco, Shell, etc (Saudi Arabia)
Project Name	SASREF, etc
Delivery Year	2018

Supplier Information

- Samil Industry Co., Ltd.
- <http://www.samilind.co.kr/>
- TEL: +82-32-819-9671
- E-Mail: samilind79@samilind.co.kr



Temperature Gauge

Product Description:
A thermometer measures the temperature of gases or fluids and is suitable for measurement, regulation, and monitoring. It meets high standards for corrosion and climate resistance. Bimetallic and gas-actuated types are available, including models with nitrogen-filled bulbs connected to pressure-sensitive gauge indicators.

- Specification:**
- Dimension (Dial): 50, 65, 75, 100, 125, and 150 mm
 - Weight: 0.3 ~ 3kg
 - Material (Case & Element): 304SS, 316SS
 - Temperature Range: -50~50°C, 0~600 °C
 - HS Code: 9025.19-1000

Domestic Track Records	
Main Client	KHNP
Project Name	Barakah NPP
Delivery Year	2015~2019

Supplier Information

- Wise Control Inc.
- <https://www.wisecontrol.com/home/eng>
- TEL: +82-2-300-2300
- E-Mail: webmaster@wisecontrol.com

Indicator, Sensor



Total Water Sensor

Product Description:
Total Water Sensor provides real-time measurement of all forms of water-dissolved, emulsified, and free in lubricants. Using capacitance-based technology, it delivers accurate PPM (parts per million) readings. This sensor ensures early detection of water contamination, protecting machinery and optimizing oil life.

- Specification:**
- Measures: Relative Humidity (RH%), Total Water (ppm), Temperature (°C), RUL (%)
 - Relative Humidity Resolution: 0.01%
 - Relative Humidity Display Range: 1~100%
 - Relative Humidity Accuracy: ±2% @20~70°C, ±3% @≤20°C and ≥70°C
 - Absolute Water Resolution: 1ppm
 - Absolute Water Display Range: 0~50,000ppm / 0~100,000ppm / 0~200,000ppm
 - Total Water Accuracy: Typical calibrating measuring oil: ±100ppm(±0.01%), Typical no calibrating measuring oil: ±1000ppm(±0.1%)
 - Test Method: Correlation to ASTM D7546 or ASTM D4928
 - Operating Temperature: 0 ~ 120°C
 - Dimensions with probe and connector: 39Φ x 127L (mm)
 - Mounting Thread: PF 1/2"
 - IP grade: IP67
 - Output Signal: RS485
 - Input Power: DC12V ~ DC24V

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com



Vartector

Product Description:
Vartector is a dual-pane Oil sight Glass engineered to prevent fogging and freezing in extreme environments. It visually detects water contamination and metallic wear debris in lubricants. Ideal for cold-weather operations, it enhances reliability through continuous fluid condition monitoring.

- Specification:**
- Size: 214(W) x 306 (L) x 254 (H) / 5.5kg
 - Power: DC 220V with 24V, 5A
 - Measuring Geometry: 0°/45° measuring geometry (in full compliance with ASTM D7843)
 - Measurement Condition: Observer: CIE 10° Standard Observer
 - Receiver: Spectrumscan
 - Detector: Spectrophotometer
 - Measuring Time: 3 Seconds
 - Operating Temperature: 0° C ~ 50° C
 - Output Value: CIE delta E, delta L, a, b
 - Patch Color Image Display: YES
 - OS: Linux
 - Moving: Steppingmotor
 - Analog Peripherals: 7" Capacitive Touch Screen LCD

Supplier Information

- Solge Corporation
- www.lubricationplus.net
- TEL: +82-10-6734-1974
- E-Mail: khj@solge.com

Indicator, Sensor



Videoscope

Specification:

- Scope dia.: Φ4mm or 6mm x Length: 2,000 x 10,000mm
- Monitor: 8.0 inch WVGA LCD with touch screen
- Stereo 3D Measurement
- Interchangeable Scope unit
- Monitor & Joystick Detachable

Domestic Track Records

Main Client	Doosan
Delivery Year	1998~

Supplier Information

- Join Trading
- www.join7.co.kr
- TEL: +82-55-223-1441
- E-Mail: ms2231441@naver.com

Etc.



Integrated Automatic Relay Testing Equipment

Product Description:

Integrated automated testing equipment (Model: RTS 100S) enables real-time assessment of relay integrity by automatically performing all electrical characteristics and performance evaluation tests required for maintenance with a single click.

- Automatically performs all electrical property tests related to maintenance with one click
- Automatically records test history data by model and measurement time
- Measured relay values can be automatically output in test report form

Specification:

- 231(H) × 433(W) × 517(D)mm, depending on socket size
- 25kg, depending on socket weight

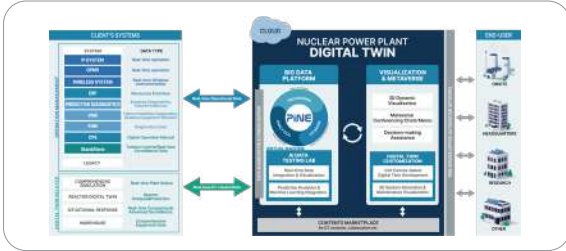
Domestic Track Records

Main Client	KHNP
Project Name	Kori, Wolsong, Hanul, Hanbit NPP
Delivery Year	2021~2025

Supplier Information

- Enersys Co., Ltd.
- www.ener-sys.co.kr
- TEL: +82-10-5280-2064
- E-Mail: skh@ener-sys.co.kr

Etc.



NPP Digital Twin & Metaverse

Product Description:

The NPP Digital Twin is a cutting-edge data-driven power plant optimization solution that supports NPP operation through large-scale, real-time data consolidation, AI analytics, and 3D dynamic visualization. It provides key features for nuclear power plant operation, including remote surveillance, preventive diagnostics, predictive maintenance, and operational assistance.

Specification:

- Cloud-based system environment and web-based end-user access
- Prompt malfunction detection and situation assistance (e.g., guideline retrieval)
- Customizable data testing environment and digital twin development
- 2D/3D dynamic digital twin visualization and simulations, AR/VR-based equipment assembly training
- Metaverse video conferencing and chat for effective remote situational response

Domestic Track Records

Main Client	KHNP
Project Name	NPP Digital Twin and Metaverse
Delivery Year	2022-2025

Supplier Information

- Pine C&I Co., Ltd.
- https://pinecni.com/eng/main/main.html
- TEL: +82-10-4708-0981
- E-Mail: sn637828@pinecni.com

Portable Integrated Automatic Circuit Breaker Testing Equipment

Product Description:

Portable circuit breaker testing equipment (Model: CBS 100) can automatically perform all electrical tests for VCB, ACB, and RTSG.

- All tests can be run automatically with a one-touch button
- Capable of testing various types of circuit breakers
- Test reports can be generated at any time and efficiently managed through a smart management system

Specification:

- 270(H) × 520(W) × 270(D)mm
- 25 kg

Domestic Track Records

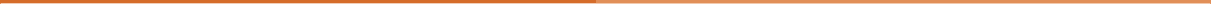
Main Client	KHNP
Project Name	Hanul NPP
Delivery Year	2023

Supplier Information

- Enersys Co., Ltd.
- www.ener-sys.co.kr
- TEL: +82-10-5280-2064
- E-Mail: skh@ener-sys.co.kr

Coating
Concrete
Charcoal

287
287
288



CHEMICAL



Coating



WRC-100

Product Description:

- WRC-100 is a solvent-free, two-component ceramic epoxy coating certified both as an eco-friendly material and a NET (New Excellent Technology) innovation.
- It adheres strongly to rusted, moist, and even submerged surfaces, without the need for abrasive blasting.
- Ideal for pipelines, tanks, and steel structures in highly corrosive environments such as refineries, petrochemical plants, and power generation facilities.

Specification:

- Mechanical Strength: Tensile strength 59.2 MPa, flexural strength 103 MPa, impact resistance 19.6 Nm, hardness 87
- Adhesion Performance: Excellent adhesion: 23.9 MPa (blasted), 21.7 MPa (rusted), 19.5 MPa (rust + moisture)
- Durability: Abrasion loss 3 mg (Taber)
- Anti-Corrosion: 2,000-hour salt spray resistance (no defects)
- Packaging Specification: 5kg kit

Domestic Track Records			
Main Client	Doosan	KHNP	Hyundai Steel
Project Name	NPP Seawater System & Condenser Coating	NPP Seawater System & Condenser Coating	Corrosion Protection Coating
Delivery Year	2020~Now	2020~Now	2020~Now

Overseas Track Records	
Client (Country)	Cutes (Taiwan)
Project Name	Energy-saving coating for pumps
Delivery Year	2024~2025

Supplier Information

- Taejung Industry Co., Ltd.
- <http://arccoating.co.kr/>
- TEL: +82-10-9210-0894
- E-Mail: cjfdnd2528@naver.com

Concrete



860L Polymer Concrete High Integrity Containers (860L PC-HIC)

Product Description:

- Use: Treatment and disposal of LILW radioactive waste (spent resin, concentrated waste, sludge, etc.)
- Properties: Licensed in November 2014

Specification:

- Compression strength: 1,000 kgf/cm²
- Water absorption rate: 0.05~0.2 %
- Design: Over Lifetime of 300 years
- Size: 1200 mm (Diameter) x 1288 mm (Height)
- Thermal Load test: Pass
- Radiation Stability: Pass
- Ultraviolet Radiation Test: Pass
- Biodegradation test: Pass
- Type A Package Verification test: Meet
- Prototype test: Pass

Domestic Track Records	
Main Client	KHNP
Project Name	860L PC-HIC supply
Delivery Year	2023

Supplier Information

- Kyelim Polycon Co., Ltd.
- <https://polycon.co.kr/>
- TEL: +82-10-9038-0193
- E-Mail: bin0233@polycon.co.kr

Concrete



BioCrete

Product Description:

Safety-related concrete structure repair reinforcement for nuclear power plants optimized ceramic mortar products that dramatically improve the durability of damaged concrete structures such as salt, degradation, neutralization, chemical erosion, rebar corrosion, cracks, etc

Specification:

- 20kg/Bag / 20kg pail

Supplier Information

- BioCrete Co., Ltd.
- www.biocrete.co.kr
- TEL: +82-10-4178-1294
- E-Mail: ecoworld21@naver.com

Charcoal



Charcoal

Product Description:

- Removal of Radioactive Gas
- Coconut Shell-based Carbon
- Impregnated Activated Carbon 5% TEDA (TEDA: Tri-Ethylene Di-Amine)
- Perform Qualification tests every 5 years (ASTM D4069)

Specification:

- 8x16, 20x30, 12x30, 40x50 Mesh
- ASME AG-1 (ASTM D3467, D2854, D2862, D3802, D3466, D3803)
- Efficiency: 97.5~99.9% Min. (2 inch Bed)
- Surface Area: 1,000 ~ 1,200 m²/g

Domestic Track Records			
Main Client	KHNP	Hi Air Korea	KAERI
Project Name	Charcoal	Saeul NPP #3,4	Charcoal 1,000(Kg)
Delivery Year	2024	2024	2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP Carbon
Delivery Year	2020

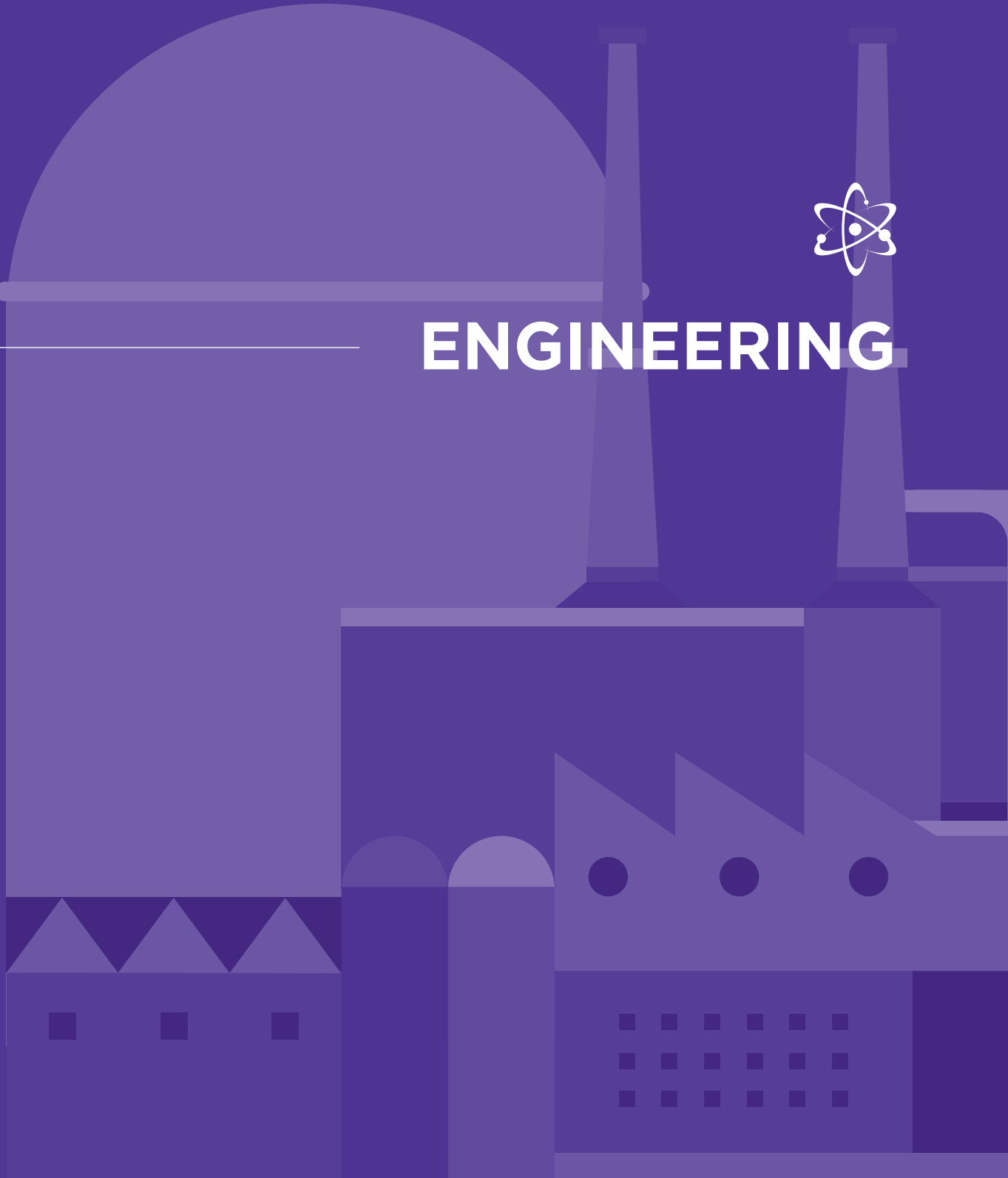
Supplier Information

- NAC Co., Ltd.
- <http://www.i-nac.co.kr/>
- TEL: +82-10-5321-3253
- E-Mail: wg2525@naver.com

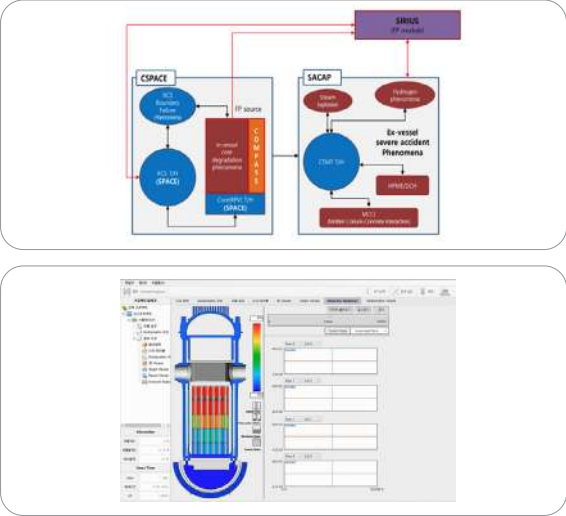
Nuclear, Mechanical	291
Electrical, Instrumentation & Control	295
Other Services	296



ENGINEERING



Nuclear, Mechanical



CINEMA & SACAP

Product Description:

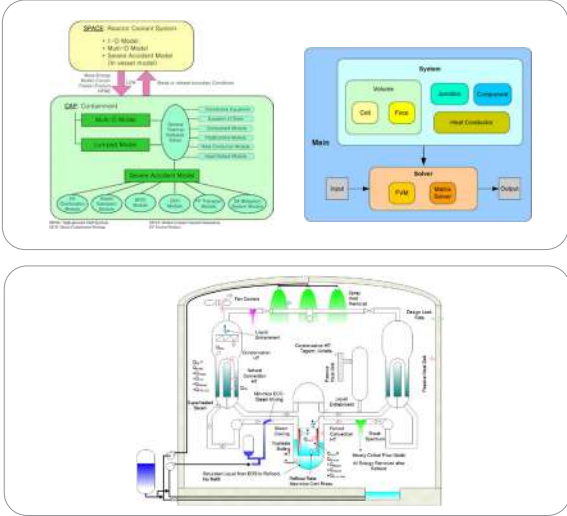
- CINEMA
 - Code for Integrated severe accident Evaluation and Management
 - Comprehensive severe accident analysis code integrating SPACE, SACAP, and SIRIUS
 - FNC, as a major participant of the project, developed the containment analysis module, SACAP, which can handle the ex-vessel severe accident phenomena and integrated all the modules as CINEMA.
- SACAP
 - Thermal hydraulic analysis module, Hydrogen combustion analysis module, Core melting-concrete response analysis module, Steam explosion analysis module, Containment direct heating analysis module

Specification:

- Stand-alone type module for the analysis of in-vessel & ex-vessel fission product
- Object-oriented programming implemented using C++
- Efficient information linkage realized through MPI protocol
- Compatible with various Windows-based platforms

Supplier Information

- FNC Technology Co., Ltd.
- <https://www.fnctech.com/>
- TEL: +82-10-2667-9360
- E-Mail: kkkjs0714@fnctech.com



Containment Analysis Package

Product Description:

- Developed by FNC to analyze the thermal-hydraulic behavior of nuclear plant containment as the fourth barrier
- Using state-of-the-art technique including 3-fields and 3-phases
- Coupled with SPACE (System code independently developed in Korea)
- Successfully licensed by NSSC(Nuclear Safety and Security Commission)

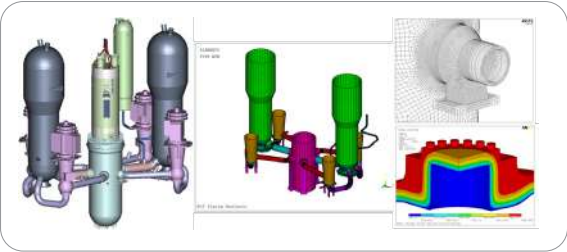
Specification:

- Three-Phase Flow Field Model (Gas, Continuous Liquid, & Droplets)

Supplier Information

- FNC Technology Co., Ltd.
- <https://www.fnctech.com/>
- TEL: +82-10-2667-9360
- E-Mail: kkkjs0714@fnctech.com

Nuclear, Mechanical



Design / Analysis Reports for High Pressure & Temperature Components

Product Description:

We provide design analysis services for engineering, manufacturing, or utility companies, or R&D institutes in the nuclear industry. The analysis of the components or structures is performed considering all the requirements of the design specifications, and the results are evaluated in accordance with the applicable codes and standards, e.g., ASME Boiler & Pressure Vessel Code, Section III, Subsection NB.

Specification:

Analytical reports include static, dynamic, thermal, fatigue, environmental fatigue, or fracture analyses, depending on applicable requirements. Design reports include tentative sizing and opening reinforcement calculations, as well as all analytical calculations and evaluations needed to verify the structural integrity of the component or structure.

Domestic Track Records			
Main Client	Doosan	Moojin Keeyeon	Hyundai
Project Name	Hanbit NPP #1	Kijangro	Hanbit NPP #3,4 SGR
Delivery Year	2024	2026	2021

Supplier Information

- KOASIS Inc.
- www.koasis.co.kr
- TEL: +82-70-5029-2026
- E-Mail: jhlee@koasis.co.kr



Environment Radioactivity Analysis

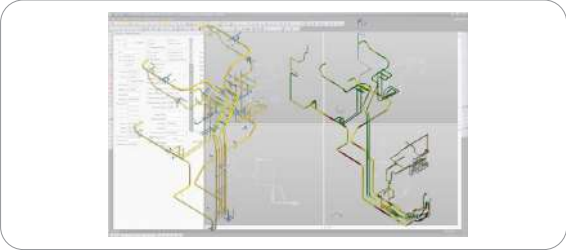
Product Description:

- Food and livestock products radioactivity testing
- Survey and Analysis on Naturally occurring radioactive materials in soil
- Analysis of Sample for leak test for sealed radiation sources
- Environmental Radiation measurement and analysis around the nuclear facilities

Supplier Information

- Hana Nuclear Power Engineering. Co.,Ltd.
- www.hananpe.co.kr
- TEL: +82-70-4035-1439
- E-Mail: 72022048@hananpe.co.kr

Nuclear, Mechanical



Pipe Stress Analysis Services

Product Description:

Aceplant performs stress analysis to evaluate piping system behavior under thermal and operational loads. We use CAESAR II and AutoPIPE for accurate and standards-based assessment. Our analysis helps clients reduce mechanical risk and improve long-term system reliability.

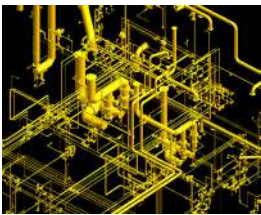
Specification:

- Stress evaluation for thermal, pressure, seismic, and sustained load conditions
- Analysis performed using CAESAR II (Hexagon) and AutoPIPE (Bentley Systems)
- Verification of support loads, nozzle loads, and expansion joint behavior
- Reports tailored to project documentation standards and client review workflows
- Aligned with commonly accepted engineering practices and design requirements

Domestic Track Records			
Main Client	Doosan Enerbility		KC Cottrell
Project Name	Saeul NPP #1,2 TBN	Shin-Sejong CCPP - BOP	Taichung
Delivery Year	2010	2014	2025

Supplier Information

- Aceplant Co., Ltd.
- <https://aceplant.co.kr>
- TEL: +82-55-288-7836
- E-Mail: hyungseok.jang@aceplant.co.kr



Piping Design & 3D Plant Modeling Services

Product Description:

Aceplant provides piping design and 3D modeling services using E3D, PDS, and SmartPlant 3D. We focus on clash-free layouts and smooth coordination with equipment and structures. Our deliverables support faster reviews, fewer revisions, and a smooth transition to construction.

Specification:

- Optimized piping layout designed for constructability and long-term maintainability
- 3D modeling and clash management using E3D (AVEVA), PDS (Hexagon), and SmartPlant 3D (Hexagon)
- Integrated coordination across piping, equipment, and structural interfaces
- Deliverables include isometrics, GA drawings, and design-based MTOs for EPC coordination.
- Fully adaptable to client documentation standards and modeling guidelines

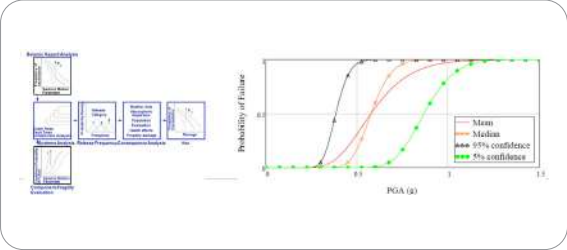
Domestic Track Records		
Main Client	Doosan Enerbility	
Project Name	Shin-Hanul NPP #3,4 TBN	Shin-Hanul NPP #1,2 TBN
Delivery Year	2017	2014

Overseas Track Records			
Client (Country)	STEP ENG (Japan)		
Project Name	Rapidus Semiconductor Facility	Toshiba Thailand 1st Plant	Nghi Son Refinery and Petrochemical
Delivery Year	2025	2020	2017

Supplier Information

- Aceplant Co., Ltd.
- <https://aceplant.co.kr>
- TEL: +82-55-288-7836
- E-Mail: hyungseok.jang@aceplant.co.kr

Nuclear, Mechanical



Seismic Fragility Evaluation

Product Description:

- Seismic fragility assessment for nuclear power plant structures and equipment
- Probabilistic risk evaluations
- Seismic walkdown

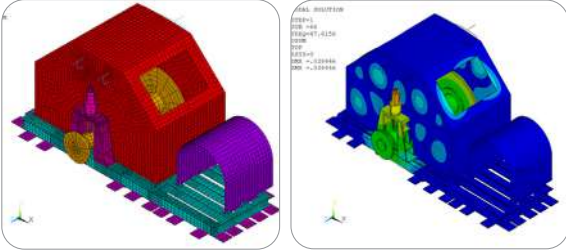
Specification:

- Seismic fragility analysis report
- Seismic walkdown report

Domestic Track Records	
Main Client	KHNP
Project Name	Development of Earthquake and Pressure Fragility Evaluation Technology for Representative NPPs
Delivery Year	2022

Supplier Information

- Innose Tech Co., Ltd.
- <http://www.innosetech.com>
- TEL: +82-10-9068-9507
- E-Mail: ghso@innose.co.kr



Seismic Qualification Reports for Safety Related Equipment

Product Description:

KOASIS is one of the organizations qualified and certified by the Korea Foundation of Nuclear Safety (KoFONS) to perform seismic qualification by through of safety-related equipment in nuclear power plants. The images above show, for example, the finite element model and one of the natural mode shapes obtained for the upper housing of the traveling screen system in a nuclear power plant.

Specification:

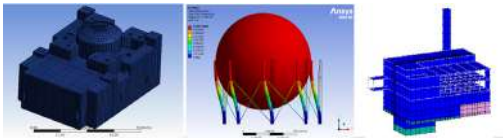
- Seismic qualification documents include the Seismic Qualification Plan, Seismic Qualification Report, and Building Structure Load Summary, as needed.
- Seismic qualification is performed by utilizing finite element response spectrum analysis.
- Seismic qualification is usually performed in accordance with the applicable USNRC regulatory guides.

Domestic Track Records			
Main Client	Dt&C	Moojin Keeyeon	DHHI
Project Name	Shin-Hanul NPP #3, 4	Kijangro	Shin-Hanul NPP #3, 4
Delivery Year	2025	2025	2026

Supplier Information

- KOASIS Inc.
- www.koasis.co.kr
- TEL: +82-70-5029-2026
- E-Mail: jhlee@koasis.co.kr

Nuclear, Mechanical



Structural Design / Seismic Design

Product Description:

INNOSE TECH company provides high-quality services in advanced structural design, seismic analysis and seismic design.

INNOSE TECH Co., Ltd. is equipped with advanced capabilities to perform Nonlinear Time History Analysis and Soil-Structure Interaction (SSI) analysis. These high-fidelity simulations enable accurate assessment of structural responses under seismic loads, supporting the development of reliable and efficient seismic designs.

Specification:

- Structural design of concrete structures & steel structures
- Seismic qualification of equipment & structures
- Soil-Structure Interaction analysis
- Dynamic identification testing
- Seismic isolation design & vibration control

Domestic Track Records		
Main Client	KHNP	
Project Name	Qualification Test of CEA	
Delivery Year	2022	2024

Supplier Information

- Innose Tech Co., Ltd.
- <http://www.innosetech.com>
- TEL: +82-10-9068-9507
- E-Mail: ghso@innose.co.kr

Electrical, Instrumentation & Control



SSILS

Product Description:

The Solid-State Interposing Logic System (SSILS) is a system that utilizes solid-state logic circuits to control the operation of various process equipment.

Specification:

- One set consists of two Logic Cabinets and one Termination Cabinet, controlling a total of 92 processes.
- The system includes key modules such as the ULM (Universal Logic Module), CBM (Control Buffer Module), and FBM (Field Buffer Module).

Domestic Track Records	
Main Client	KHNP
Project Name	Kori NPP #3,4 / Hanbit#1,2
Delivery Year	2018 / 2020~2024

Supplier Information

- ORBIS Co., Ltd.
- www.orbis1.co.kr
- TEL: +82-31-739-6100
- E-Mail: shlee1@orbis1.co.kr

Other Services



Design Engineering and Technical Support

Product Description:

Design engineering services for nuclear power plants, thermal power plants, and chemical plants: mechanical systems, nuclear safety analysis, piping design, electrical and instrumentation systems, and improvement of operating NPP facilities.

Specification:

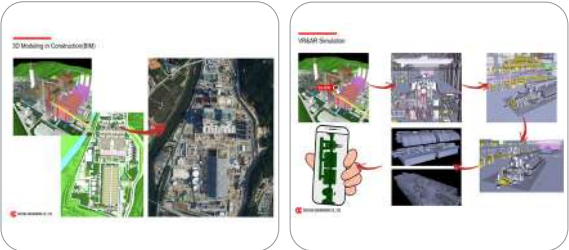
- Design Engineering Services
- Technical Support Services

Domestic Track Records			
Main Client	KHNP	KEPCO E&C	Doosan
Project Name	NPP O&M DCP	NPP OPR1000~APR1400	Samcheok TPP
Delivery Year	2020~2024	2000~2025	2018~2021

Overseas Track Records			
Client (Country)	Barakah NPP (UAE)/ KEPCO E&C	Hyundai Engineering (Indonesia)	Hyundai Engineering (Saudi Arabia)
Project Name	Barakah NPP Piping Design	RDMP RU V Balikpapan	SACE (JFGP-UTOS)
Delivery Year	2011~2024	2019~2025	2021~2025

Supplier Information

- TaeYang Engineering Co., Ltd.
- www.tyecl.com
- TEL: +82-2-6332-7010
- E-Mail: theloveapple@tyecl.com



Digital Twin

Product Description:

The digital transformation of the plant industry through engineering knowledge and ICT technologies.

- Industry 4.0(Digital Twin) technologies.
- Development of 3D/VR/AR content for system equipment and components.

Specification:

- Digital Twin
- 3D Design
- VR/AR Simulation System
- Intelligent Navigation System
- Configuration Management

Domestic Track Records	
Main Client	KHNP
Project Name	NPP APR1400 / OPR1000 Navigation System / 360° Panoramic Content
Delivery Year	2023~2026

Supplier Information

- TaeYang Engineering Co., Ltd.
- www.tyecl.com
- TEL: +82-2-6332-7010
- E-Mail: theloveapple@tyecl.com

Other Services



Intelli3D WebViewer for MRO
(Maintenance, Repair and Operation)

Product Description:

A solution that maximizes MRO efficiency by seamlessly integrating 3D models with legacy systems for any kind of plants, enabling easy access to plant information in different kinds of formats.

Specification:

- Operate and visualize the entire unit 3D model of a nuclear power plant unit in a web environment.
- Interface and retrieve 3D models and related data based on tag information.
- Integrate with and retrieve data from legacy systems.

Domestic Track Records		
Main Client	KHNP	KHNP
Project Name	Web Visualization System and its Upgrade	Valve Lineup Prototype System Development
Delivery Year	2022, 2024	Ongoing

Supplier Information

- Youl Systems Inc.
- <http://www.youlsys.co.kr/>
- TEL: +82-10-6511-9762
- E-Mail: jwkim@youlsys.co.kr



Intelli3D WebViewer for Construction

Product Description:

An integrated system that simulates construction schedules to identify and eliminate process risks in advance, ensuring optimized project planning and tracking actual progress by merging BIM models with daily scan data through automated modules, enabling precise comparison with the baseline plan.

Specification:

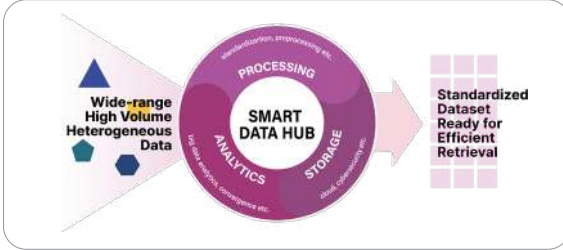
- Operate and visualize the entire unit 3D model of a NPP unit in a web environment.
- Integration of the 3D model with the construction schedule and progress management system allows for comprehensive visualization and simulation of construction data.
- A self-developed tracking algorithm provides accurate construction status updates

Domestic Track Records			
Main Client	Korea East-West Power	KHNP	Samsung C&T
Project Name	Development of 4D Construction Management System	NPP Cyber Plant Development (4D/VR/AR)	Development of Automated Tracking Technology for Drone Utilization Records
Delivery Year	2016	2021	2022

Supplier Information

- Youl Systems Inc.
- <http://www.youlsys.co.kr/>
- TEL: +82-10-6511-9762
- E-Mail: jwkim@youlsys.co.kr

Other Services



Smart Data Hub & Smart Data Lab

Product Description:

Smart Data Hub is a high-performance all-in-one data consolidation solution that accelerates large-scale digital transformation (DX). It is widely applied as a “Keystone for DX” in projects involving AI and digital twins, where massive volumes of data computation and analytics are critical.

Specification:

- Automated real-time systematic data consolidation process including big data aggregation, standardization, modeling, and analytics.
- Includes and supports diverse protocols and tools to enable smooth data exchange between various systems and platforms
- Combined with a container-based virtual data testing environment, Smart Data Lab, for AI generation and more
- Highly versatile and scalable to accommodate clients’ DX needs and preferences

Domestic Track Records	
Main Client	KHNP
Project Name	NPP Big Data Platform
Delivery Year	2022-2024

Supplier Information

- Pine C&I Co., Ltd
- <https://pinecni.com/eng/main/main.html>
- TEL: +82-10-4708-0981
- E-Mail: sn637828@pinecni.com



Sump Strainer Performance Test Technology

Product Description:

- Development of comprehensive performance test facility and technology for sump strainer reflecting containment conditions under LOCA (Loss of Coolant Accident)
- Applying actual debris formation for fibrous, particulate, and chemical precipitates generated by large-break LOCA
- Unique and competitive test technology considering the 3D structure of containment, chemical effects, and in-core downstream effects

Domestic Track Records			
Main Client	KHNP (Central Research Institute)	BHI	TSM
Project Name	Performance Evaluation (II) and Verification Testing Service for Jinshan NPP Recirculation Sump	22 Sets of Containment Recirculation Sump Strainers (Performance Test Outsourced)	Downstream Effect Test Service for Saeul NPP #3,4 IRWST Sump Strainer (N206)
Delivery Year	2013	2017	2019

Overseas Track Records	
Client (Country)	Transco Products (USA)
Project Name	In-Vessel Downstream Tests for Kori NPP #2,3,4 / Hanbit NPP #1~4 / Wolsong NPP #1
Delivery Year	2023

Supplier Information

- FNC Technology Co., Ltd.
- <https://www.fnctech.com/>
- TEL: +82-10-2667-9360
- E-Mail: kkkjs0714@fnctech.com

Maintenance
Inspection, Assessment
Other Services

301
304
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**SERVICE
& MAINTENANCE**

Maintenance



Nuclear Power Plant Routine Maintenance and Outage Maintenance (Mechanical & Electrical)

Product Description:
OES realizes customers' satisfaction through enhanced performance and reliability based on professional manpower, advanced maintenance technology, and accumulated track records.
We inspect operating mechanical and electrical facilities daily, and perform outage maintenance, during which power plant facilities and equipment are thoroughly disassembled, inspected, and restored to normal operation.

- Specification:**
- American Society of Mechanical Engineers(ASME)
 - Korea Electric Power Industry Code(KEPIC)
 - American Society for Testing & Materials(ASTM)
 - American Welding Society(AWS)

Domestic Track Records				
Main Client	KHNP			
Project Name	Hanul NPP #3,4 1000MW*2	Hanbit NPP #3,4 1000MW*2	Hanul NPP # 1 ~ 6 Intake System 950MW*2/ 1000MW*4	Kori NPP #2~6 Intake System 650MW*1/ 950MW*2/ 1000MW*2
Delivery Year	2017 ~ Present	2024 ~ Present	2021~2024	2021~2023

Supplier Information

- Optimal Energy Service Co., Ltd.
- <http://www.oes.kr>
- TEL: +82-10-9883-9296
- E-Mail: achilleus1989@oes.kr

Nuclear Power Plant Commissioning Maintenance

Product Description:
We contribute to a secure facility condition during commercial operation by performing maintenance work during commissioning, which is the final step of power plant construction. We also carry out routine maintenance in order to efficiently and stably manage facilities after installation is completed until commercialization.

- Specification:**
- American Society of Mechanical Engineers(ASME)
 - Korea Electric Power Industry Code(KEPIC)
 - American Society for Testing & Materials(ASTM)
 - American Welding Society(AWS)

Domestic Track Records			
Main Client	KEPCO KPS	KEPCO KPS	KEPCO KPS
Project Name	Shin-Kori NPP #1~2 1000MW*2	Saeul NPP #1,2 1400MW*2	Shin-Wolsong NPP #1~2 1000MW*2
Delivery Year	2009~2012	2011~2019	2010~2015

Overseas Track Records	
Client (Country)	KEPCO KPS (UAE)
Project Name	Barakah NPP #1~4 1400MW*4
Delivery Year	2015 ~ 2024

Supplier Information

- Optimal Energy Service Co., Ltd.
- <http://www.oes.kr>
- TEL: +82-10-9883-9296
- E-Mail: achilleus1989@oes.kr

Maintenance



O&M (Operation & Maintenance)

Product Description:
With proven O&M expertise in Korea's nuclear power sector, GEUMHWA is expanding globally—ranging from industrial wastewater treatment in Vietnam to large-scale sewage O&M projects—contributing to clients' environmental policies and sustainable growth.

- Specification:**
- Continuously detects valve leakage in high-pressure, high-temperature systems using AE (Acoustic Emission) technology.
 - Piezoelectric sensors capture both low and high-frequency elastic waves and transmit them to the analysis system.
 - Features include real-time leak monitoring, 3D valve map display, 2-year data logging per valve, and early leak detection to prevent accidents and reduce maintenance costs.
 - Applicable to various valve types such as control, shut-off, safety, and check valves.

Domestic Track Records		
Main Client	KHNP	Other Company
Project Name	NPP	Saeul NPP #3

Overseas Track Records	
Client (Country)	UAE
Project Name	Barakah NPP #1~4

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.
- www.geumhwawts.co.kr
- TEL: +82-2-6011-2618 / +82-2-6011-2823
- E-Mail: jae32@geumhwawts.co.kr
lrj0404@geumhwawts.co.kr

O&M Service

Product Description:
Leveraging state-of-the-art equipment and specialized personnel, we strive to optimize the operation and maintenance of power generation facilities. OES provides O&M services for nuclear power plant water treatment systems and TPPS.

- Specification:**
- American Society of Mechanical Engineers(ASME)
 - Korea Electric Power Industry Code(KEPIC)
 - American Society for Testing & Materials(ASTM)
 - American Welding Society(AWS)

Domestic Track Records			
Main Client	KHNP		
Project Name	Hanbit NPP Water Treatment System #1~6 950MW*2/ 1000MW*4	Wolsong NPP Water Treatment System #1~6 700MW*4, 1000MW*2	Oseong CCPP GT 183MW*3, ST 284MW*1
Delivery Year	2019 ~ Present	2014~2019	2025 ~

Supplier Information

- Optimal Energy Service Co., Ltd.
- <http://www.oes.kr>
- TEL: +82-10-9883-9296
- E-Mail: achilleus1989@oes.kr

Maintenance



Reactor Vessel Post Welding Heat Treatment

Product Description:

- Reactor Vessel Post Welding Heat Treatment

Specification:

- 1400MW Nuclear Units
- 1000MW Nuclear Units

Domestic Track Records	
Main Client	Doosan
Project Name	Saeul NPP #3,4
Delivery Year	2016

Supplier Information

- Gilsang Engineering Co., Ltd
- TEL: +82-10-9337-8047
- E-Mail: kwj@gilsang-eng.com



Steam Generator Post Welding Heat Treatment

Product Description:

- Steam Generator Post Welding Heat Treatment

Specification:

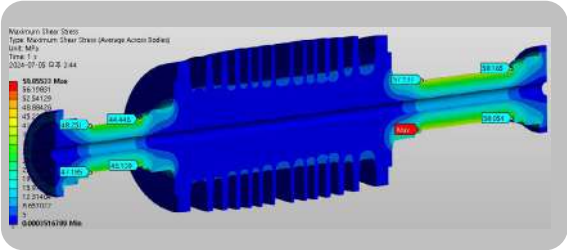
- 1400MW Nuclear Units
- 1000MW Nuclear Units

Domestic Track Records	
Main Client	Doosan
Project Name	Saeul NPP #3,4
Delivery Year	2016

Supplier Information

- Gilsang Engineering Co., Ltd
- TEL: +82-10-9337-8047
- E-Mail: kwj@gilsang-eng.com

Inspection, Assessment



Automatic NDE Services and Life Assessment for TBN Rotor

Product Description:

- TBN Rotor Center Hole: AUT, MT, VT (industrial endoscope)
- TBN Rotor Outer Surface: MT, VT, ECA
- TBN Rotor Wheel/Bucket: AUT, PAUT
- TBN Rotor: Life Assessment by Finite Element Method

Specification:

- ASME Sec.V, KEPIC ME and TBN Manufacturer's Manual

Domestic Track Records	
Main Client	KHNP
Project Name	NDE for TBN Rotor
Delivery Year	2020~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)

Supplier Information

- Korea Industrial Testing Co., Ltd.
- www.kitco.co.kr
- TEL: +82-10-5282-7899
- E-Mail: hak2004@daum.net



Eddy Current Examination for the Tubes of Main Condenser and Heat Exchanger

Product Description:

- ECT for the Tubes of Main Condenser and Heat Exchanger:
- Detection of defects such as pit, dent, wall loss, wear, and crack

Specification:

- ASME Sec.V, KEPIC ME and Manufacturer's Manual

Domestic Track Records	
Main Client	KHNP
Project Name	ECT for Condenser Tube
Delivery Year	2001~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)

Supplier Information

- Korea Industrial Testing Co., Ltd.
- www.kitco.co.kr
- TEL: +82-10-5282-7899
- E-Mail: hak2004@daum.net

Inspection, Assessment



No. 33 Extra-Large Constant Temperature and Humidity Chamber

Product Description:
This product is an environmental test chamber used for thermal aging, thermal cycling, and temperature-humidity tests. It precisely controls conditions within a temperature range of -60 to 120°C and a humidity range of 20 to 95% R.H.

Specification:

- Temperature: -60 ~ 120 °C
- humidity 20 ~ 95 % R.H.

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com



Non-Destructive Examination Services for Nuclear Power Plants and Various Industrial Sectors

Product Description:
ANSCO specializes in pre-service and in-service NDE for nuclear facilities, including inspections of piping, vessels, and steam generators using techniques such as UT, PAUT, TOFD, and ECT. We also provide advanced services such as FOSAR and guided wave testing for hard-to-access areas. Beyond nuclear, our expertise extends to aerospace and industrial applications, including HDPE and underground piping systems.

Specification:

- ASNT Level III(ECT: 20, UT: 22, MT: 19, PT: 4, VT: 17, LT: 3, NRT: 1, RT: 5), QDA(ECT): 28, PD(UT): 37
- ISO EN Level III(UT: 2, PT: 3, MT: 3, VT: 1)
- PQ Certificates for Non-destructive Testing company registered on KHNP's qualified supplier list(7 items)
- PQ Certificates for NDE Service for ASME Sect.III and KEPIC MN/SN items including PSI & ISI (Doosan)
- PQ Certificates for Special Processes for Aircraft Engines(Hanwha)

Supplier Information

- ANSCO
- <http://www.ansco.kr/>
- TEL: +82-42-820-2011
- E-Mail: kyd321@ansco.kr

Inspection, Assessment



Oven Chamber

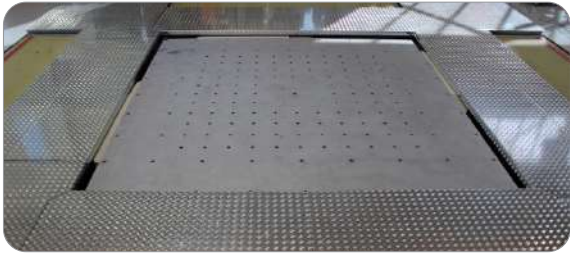
Product Description:
This product is used for thermal aging tests. It is capable of precisely controlling temperatures within the range of 60 to 300°C.

Specification:

- Temperature: 60 ~ 300 °C

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com



RIG1

Product Description:

- Heavy-duty 6DOF system for large-scale seismic simulation.
- Supports high payloads (15 tons) with balanced velocity and stroke.
- Ideal for structural and equipment qualification tests.

Specification:

- Table Size: 4m x 4m
- Max Load: 1,000 kN (Z)
- Max Velocity: 1.6 m/s (Z, X)
- Max Acceleration: 2 g (15 ton)
- Max Stroke: 400 mm (all axis)

Domestic Track Records	
Main Client	Hyundai
Project Name	Seismic Test Service for AFP Motor Terminal Lugs of Shin-Hanul NPP #1,2 and Saeul NPP #3,4
Delivery Year	2020

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com

Inspection, Assessment



RIG2

- Product Description:**
- Mid-scale 6DOF test system for general seismic or vibration testing.
 - Moderate payload (4 tons) and acceleration capability.
 - Suitable for medium-sized equipment or component testing.
- Specification:**
- Table Size: 2.5m x 2.5m
 - Max Load: 520 kN [Z]
 - Max Velocity: 1.2 m/s
 - Max Acceleration: 6 g (2 ton)
 - Max Stroke: 320 mm [Z, X]

Domestic Track Records	
Main Client	Doosan
Project Name	Equipment Verification for MCR Console and TimeSync Cabinet of Shin-Hanul NPP #3, 4
Delivery Year	~2027

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com



RIG3

- Product Description:**
- Single-axis V&H shaker for dynamic testing in two directions.
 - Compact with high acceleration (10 g) for lightweight payloads.
 - Used for component-level or packaging vibration tests.
- Specification:**
- Table Size: V 1.5m² / H 1.2m x 2m
 - Max Load: 250 kN [V]
 - Max Velocity: 2.0 m/s [H]
 - Max Acceleration: 10 g (500 kg)
 - Max Stroke: 400 mm

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com

Inspection, Assessment



RIG4

- Product Description:**
- Small-scale 6DOF system with very high acceleration (up to 30 g).
 - Optimized for small, lightweight components or electronics.
 - Compact size allows precision testing in tight lab spaces.
- Specification:**
- Table Size: 0.8m x 0.8m
 - Max Load: 160 kN [Z]
 - Max Velocity: 2.0 m/s
 - Max Acceleration: 30 g (100 kg)
 - Max Stroke: 250 mm [X]

Domestic Track Records	
Main Client	Doosan
Project Name	Equipment Verification for MCR Console and TimeSync Cabinet of Shin-Hanul NPP # 3, 4
Delivery Year	~2027

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com



RIG5

- Product Description:**
- Large 6DOF system with extended table size (3m x 5m).
 - High stroke and load capacity, ideal for large equipment.
 - Best suited for industrial seismic and durability simulations.
- Specification:**
- Table Size: 3m x 5m
 - Max Load: 1,260 kN [Y]
 - Max Velocity: 1.6 m/s [Z]
 - Max Acceleration: 3 g (15 ton)
 - Max Stroke: 400 mm (all axis)

Domestic Track Records	
Main Client	Hyundai
Project Name	Seismic and Environmental Qualification for 480V Load Center Replacement at Kori NPP #3~4 and Hanbit NPP #1~2
Delivery Year	2026

Supplier Information

- SGS Korea Co., Ltd.
- www.sgs.com/ko-kr
- TEL: +82-31-240-6680
- E-Mail: Jacky.song@sgs.com

Inspection, Assessment



RMRT

Product Description:

The insulation resistance of a standby motor should be measured and managed periodically for reliability. However, repetitive operation and maintenance can cause a gap in the tulip contactor, increasing contact resistance, which may lead to human accidents during manual measurement. RMRT enables failure prediction, improves facility reliability, and prevents accidents by allowing remote measurement of insulation resistance.

Specification:

- Measures insulation resistance remotely (2kV/5kV) to prevent accidents during manual measurement.
- Composed of a signal processing module and relay box; supports measurement range up to 2 GΩ.

Domestic Track Records	
Main Client	KHNP
Project Name	Kori/ Wolsong/Hanbit/Hanul NPP
Delivery Year	2010/2011/2010/2010

Supplier Information

- ORBIS Co., Ltd.
- www.orbis1.co.kr
- TEL: +82-31-739-6100
- E-Mail: shlee1@orbis1.co.kr



Turbine Valve Actuator Prediction Diagnostic Test Equipment (TVAT)

Product Description:

Actuator Prediction Diagnostic Solution
It was previously impossible to diagnose the performance of the hydraulic actuator of a turbine valve—one of the core devices that control the amount of evaporator supplied to turbines in nuclear and thermal power generation—without separating it from the system. However, the current Performance Prediction Diagnostic Tester (TVAT) for Turbine Valve Actuators has been improved to make such diagnosis possible without disassembly.

Specification:

- Model: MR/TVAT-10-180
- Dimension: 1200*1100*1750mm
- Weight: 700Kg
- Pressure, Capacity: 5~200bar, 10lpm
- Main Power: 380~480vac

Domestic Track Records	
Main Client	KHNP
Project Name	Turbine Valve Actuator Prediction Diagnostic Test Equipment
Delivery Year	2018, 2023, 2024

Supplier Information

- Future Automation Co.
- www.servokorea.co.kr
- TEL: +82-51-316-5650
- E-Mail: mac@servokorea.co.kr

Inspection, Assessment



VLMS

Product Description:

Valve internal leakage can result from foreign materials between the valve body and seat, frequent operation damage, or fatigue cracks in the stem, packing, and welds. This leads to flow loss and reduced thermal efficiency, causing potential operational hazards. Leakage is detected through level checks, pressure tests, temperature/humidity measurements, and acoustic or probe inspections.

Specification:

- Continuously detects valve leakage in high-pressure, high-temperature systems using AE (Acoustic Emission) technology.
- Piezoelectric sensors capture both low and high-frequency elastic waves and transmit them to the analysis system.
- Features include real-time leak monitoring, 3D valve map display, 2-year data logging per valve, and early leak detection to prevent accidents and reduce maintenance costs.
- Applicable to various valve types such as control, shut-off, safety, and check valves.

Domestic Track Records	
Main Client	KHNP
Project Name	Shin-Kori/Wolsong/Hanul/Shin-Hanul NPP
Delivery Year	2009/2010/2010/2017

Supplier Information

- ORBIS Co., Ltd.
- www.orbis1.co.kr
- TEL: +82-31-739-6100
- E-Mail: shlee1@orbis1.co.kr

Other Services



RCA Access Control System

Product Description:

The smart safety control system of the nuclear power plant Radiation Control Area (RCA) which allows only authorized workers to enter based on the work permit information after two-step identity verification using a TLD and biometric authentication (fingerprint or hand vein), and blocks unauthorized access.

Specification:

- Power: 100V-240V / 50Hz-60Hz
- Dimension (W x H x D mm): 1,400 x 1,000 x 300
- EPD Reader: Selectable according to EPD communication method between RF / IR
- Biometric information Recognition system (select one)
 - Fingerprint: Optical Sensor, USB type interface
 - Hand Vessel: Contactless infrared sensor, Interface Ethernet / RS232 / RS485
- Barcode Scanner: 1D/2D Radial Form, effective distance 47~216 mm
- Industrial PC: CPU-Intel Core™ i7, 3.4GHz, RAM-4GB, SSD: 120GB
- Monitor: 5 Inch LCD Infrared Type, Screen Ratio 4:3, Resolution 1024 x 768
- Wing height: Adjustable between 1000 mm and 1800 mm

Domestic Track Records			
Main Client	KHNP	KORAD	KAERI
Project Name	Wolsong NPP #2, etc.	Surface Disposal Facility	Isotope Utilization Center
Delivery Year	2014~2024	2020	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	ENEC (UAE)
Project Name	Barakah NPP #1~4	Training Center
Delivery Year	2016	2018

Supplier Information

- U2NG Co.,Ltd.
- www.u2ng.co.kr
- TEL: +82-10-9702-0414
- E-Mail: jsh@u2ng.co.kr

Other Services



Total Management For RP&RW

Product Description:

- Investigate the status of Treatment Facilities or Sites
- Establishment of Radiation Controlled Area
- Radionuclide Analysis
- Estimated Exposure Dose and Shielding Calculation
- Obtain processing plans and associated licenses
- Decontamination and Disposal of Radioactive Waste
- Transportation
- Storage
- Submit Radiation Safety Management Report

Supplier Information

- Hana Nuclear Power Engineering. Co.,Ltd.
- www.hananpe.co.kr
- TEL: +82-70-4035-1439
- E-Mail: 72022048@hananpe.co.kr



ANNEX



Company	Introduction	Page Number
Aceplant	Aceplant provides specialized piping design and 3D plant modeling services using advanced tools, supporting efficient construction across nuclear, thermal, and chemical sectors. With a focus on precision and client collaboration, the company delivers clash-free layouts and high-value outcomes.	293
ANSCO	ANSCO specializes in non-destructive testing (NDT) for nuclear power plants, offering ultrasonic, eddy current, and FOSAR inspections to ensure operational safety. With global experience and in-house R&D, it develops ISO-certified technologies and patented tools, including remotely operated systems for high-radiation environments.	202, 305
Asian Power & Energy Corp. (APEC)	APEC specializes in hydroelectric power, renewable energy, and power transmission systems. It provides integrated solutions for green growth and next-generation power networks such as Smart Grids, utilizing small hydro, solar, wind, and biomass energy sources.	217, 262
APROGEN	APROGEN I&C is Korea's leading industrial insulation company, providing design-to-installation solutions for nuclear, thermal, petrochemical, and offshore facilities. It offers specialized insulation like NUKON for reactor containment buildings and FOAMGLAS for tanks and piping, supporting efficient and safe energy infrastructure.	195, 228
AUTOSYS	AUTOSYS specializes in vibration and seismic monitoring technologies for critical infrastructure, including nuclear power plants and municipalities. Its systems are widely deployed across Korea and now extend to marine-based SMRs. The company is advancing AIoT-based sensing to enable predictive monitoring and real-time diagnostics.	265, 269
BioCrete	BioCrete develops advanced ceramic materials based on magnesia phosphate complex technology, specializing in cold-weather construction solutions. With NEP and excellent procurement certifications, it delivers eco-friendly, high-performance products known for durability, fast curing, and strong adhesion even at ultra-low temperatures.	288
BMT	BMT specializes in precision fittings and valves for nuclear power systems, with ASME N/NPT/NS and KEPIC-MN certifications ensuring high quality and compliance. Its products are designed for instrumentation and fluid control lines. Recent deliveries include flexible hoses for the Barakah Nuclear Power Plant in the U.A.E.	173, 175, 221

Company	Introduction	Page Number
Bokuk Electric	Bokuk Electric has been a key player in South Korea's power generation industry since 1961, offering system design, manufacturing, installation, and commissioning services. It supplies AC generators, power packages, cogeneration systems, and ESS to diverse sectors, meeting international standards for both main and emergency power solutions.	245
Boowon BMS	Boowon BMS specializes in mechanical rebar splicing with its BMS BAR-COUPLER, used in landmark structures like Burj Khalifa, Incheon Bridge, and nuclear power plants worldwide. Its proprietary technologies enhance constructability, seismic resistance, and efficiency. The company is Korea's only coupler manufacturer certified by UK CARES and KEPIC.	149, 150
Bumhan Industries	Bumhan Industries supplies high-pressure air compressors for nuclear power plants and various industrial sectors, delivering stable performance under extreme conditions. Its products meet rigorous domestic and international nuclear standards. Recognized for technological excellence, the company also serves shipbuilding, marine, and plant industries.	155, 156
Cambridge Filter Korea	Cambridge Filter Korea specializes in air filtration systems for semiconductors, pharmaceuticals, hospitals, and nuclear power facilities. It ensures top-tier quality through rigorous testing and operates a safety and health management system rooted in employee participation and regulatory compliance.	168, 169
Corenet	Corenet specializes in instrumentation and control systems for nuclear power plants, with proven expertise in safety-grade equipment, monitoring systems, and automation projects. Backed by U.S. technical support, it has supplied key systems to Hanul and Hanbit NPPs and now contributes to smart factory initiatives through PLC-based automation solutions.	261, 270
CW-Hydro	CW-Hydro specializes in high-pressure, high-efficiency industrial pumps and holds ISO 9001 certification and Korea's first KS mark approval for pumps. Its products serve key sectors such as nuclear and thermal power, refineries, and steel mills.	196
Daewoo Bolt	Daewoo Bolt specializes in galvanized bolts for steel towers, railways, and foundation structures, exporting products such as H/T, T/S, A325, and A193 bolts. Recognized in both domestic and global markets, the company ensures high quality through continuous R&D and rigorous quality control.	148, 149, 152

Company	Introduction	Page Number
Dong-A Bestech	Dong-A Bestech is a global component manufacturer supplying over 3,000 products to industries including nuclear, shipbuilding, and electronics. With production bases in Korea, China, and Vietnam, it ensures quality, cost, and delivery competitiveness through continuous innovation and site-responsive service. The company was recognized with the 2024 National Quality Circle Grand Prize.	172, 257, 258, 259, 261
Dongin Engineering	Dongin Engineering is an innovative thermal insulation company leading the industry with its advanced, sustainable technologies. Known for its patented RAPID system, the company delivers high-performance insulation solutions for nuclear and industrial facilities, offering reusability, precision, and extreme temperature resistance. Dongin continues to pioneer next-generation insulation with a focus on efficiency, safety, and environmental responsibility.	231
Dongsan Rolling	Dongsan Rolling is a precision metal processing company with over 35 years of experience, trusted by major Korean conglomerates for its integrated production system. Led by founder Beom-Rang Seo, the company developed Korea’s first high-precision “Three-Point Under Rail Slide” using cold rolling technology, offering superior surface quality and dimensional accuracy for premium appliances.	229
Dongsuh Industry	Dongsuh Industry specializes in high-quality sealing products for nuclear and thermal power plants, designed for high-temperature, high-pressure environments. With 80% market share in Korea, it is a certified supplier to all major domestic power companies and is expanding globally with products known for reliability, performance, and fast customer response.	188, 189, 191, 192, 193
DONGSUNG Energy Saving Solution	DONGSUNG Energy Saving Solution develops technologies to reduce industrial energy use, including the OPC-M for motor load control and the DST Venturi Steam Trap. These solutions lower electricity and steam consumption. The company supports cost savings, competitiveness, and carbon neutrality.	194, 250
Dongyang Corrosion Engineering	Dongyang Corrosion Engineering (DYCE) specializes in corrosion control and cathodic protection, offering ISO-certified, end-to-end solutions backed by over 50 years of expertise. With in-house manufacturing and global project experience, DYCE is recognized for its reliability, precision, and innovation.	244, 269
Doosung Cotech	Doosung Cotech specializes in lifting equipment for power plants, supplying customized overhead cranes, gantry cranes, and hoists. It has delivered key crane systems—including polar and turbine building cranes—for Saeul NPP #3, 4.	160, 162

Company	Introduction	Page Number
Ecopowertec	Ecopowertec specializes in insulation materials for high-temperature equipment in nuclear, thermal, and industrial plants. Its fire-safe solutions, applied in major domestic facilities and global projects such as Egypt’s El Dabaa Nuclear Power Plant, ensure safety and performance. With ISO-certified systems and customized 3D design, Ecopowertec delivers reliable, high-quality products worldwide.	236
enesG	enesG specializes in power plant performance testing and diagnostics, including thermal and nuclear facilities, and has developed real time monitoring systems and analysis software to support stable and cost-effective operation. Building on experience at KEPCO Research Institute, the company also provides energy-saving solutions and IT based engineering services, driving digital transformation in the power sector through continuous R&D.	222
Enersys	Enersys develops and manufactures automatic testing equipment for the power industry, including systems for circuit breakers and ESFAS performance evaluation. Since 2017, it has supplied KEPCO and power plants with solutions for safe, efficient maintenance and condition assessment. The company continues to advance its technology through innovation and field expertise.	283, 284
Flotron	Flotron specializes in fluid measurement and control products such as flow meters, metering systems, and valve actuators for industries including oil & gas, water, and shipbuilding. It developed a Class A AOV for nuclear power, recognized as an innovative product in 2022 and registered as a KHNP supplier. The AOV enables remote and emergency control, especially in explosion-proof environments.	219
Flowserve KSM	Flowserve KSM specializes in mechanical seals, auxiliary devices, and seal oil systems, backed by 45 years of continuous R&D and innovation. With world-class quality management and production capabilities, the company has established itself as a global leader in sealing technology.	190
FNC Technology	FNC Technology provides integrated engineering solutions across the nuclear sector, drawing on over 25 years of in-house expertise. Its services include thermal-hydraulic and DEC analyses using advanced safety codes, as well as comprehensive Probabilistic Risk Assessment for both internal and external hazards. FNC supports safe plant operations through risk monitoring and Risk-Informed applications.	205, 267, 291, 298
Future Automation	Future Automation developed the world’s first diagnostic test equipment (TVAT) for turbine valve hydraulic actuators, enabling predictive maintenance and enhancing power plant reliability. The TVAT system is widely applied in NPPs, TPPs, and CCPPs. Certified as a New Excellent Product (NEP) and K-Innovative Product (K-IP), it is actively expanding in the domestic power sector.	223, 309

Company	Introduction	Page Number
G2 Power	G2 Power provides total solutions in heavy electric equipment and renewable energy, integrating AI-based smart grid technology for real-time power management and energy efficiency. Recognized with NEP, NET, and other certifications, the company leads South Korea’s smart grid sector. It continues to innovate through AI and new technologies aligned with the Fourth Industrial Revolution.	250, 252, 255, 256
Gana Steel	Gana Steel specializes in seamless pipe distribution with strong stock capacity and a wide supply network. It maintains trusted partnerships with Nippon Steel and SEAH CSS, ensuring reliable and timely service.	194, 195
Geumhwa WTS	Geumhwa WTS, founded in 1959, is a pioneer in water and wastewater treatment with decades of experience and technological advancement. Backed by a strong R&D track record, the company continues to innovate and pursue global leadership in the water treatment industry.	205, 208, 209, 212, 214 302
Gilsang Engineering	Gilsang Engineering specializes in heat treatment for critical nuclear power plant components, including reactors and steam generators. As the only KEPIC-certified heat treatment company in Korea, it has supported major domestic and international projects, including SMR prototypes and component replacements. The company also provides welding and technical services for nuclear facilities.	303
Grating Korea	Grating Korea enhances grating safety and performance through its BeeHive Bar and honeycomb structure designs. These innovations improve load resistance, prevent slips, and minimize gaps to avoid wheel entrapment, ensuring structural stability and drainage. They also reduce visual discomfort for pedestrians in high-altitude or open-structure environments.	225
HANA Nuclear Power Engineering	HANA Nuclear Power Engineering provides specialized engineering services in radiation management and radioactive waste treatment, primarily for nuclear power plants. It operates a corporate research institute and environmental radioactivity analysis center to enhance technological capabilities. Committed to becoming a comprehensive radiation service provider, it upholds strong professional standards and continuous innovation.	292, 312
HANADAPCO	HANADAPCO specializes in blast-proof doors, waterproof gates, and architectural components for nuclear power plants and large-scale infrastructure projects. With ISO 9001 certification, patented technologies, and an in-house R&D center, the company is a trusted supplier to KHNP and Doosan Enerbility. It has also expanded internationally with a UAE branch supporting nuclear projects.	203, 217, 230

Company	Introduction	Page Number
Hanshin Machinery	Hanshin Machinery, founded in 1969, is a leading South Korean air compressor manufacturer with over 50 years of expertise. Trusted by KHNP and KEPCO, it has supplied high-reliability compressors to major nuclear projects including the UAE Barakah NPP and Saudi Arabia’s Tanajib IPP. Its globally certified AL2 and CDH2 series deliver proven performance for critical applications.	154
HANVIT Industries	HANVIT Industries specializes in hydraulic machinery and system engineering, offering customized solutions based on extensive technical expertise. As a registered KHNP supplier with partnerships across Korea’s six major power companies, the company is recognized for its reliability and tailored engineering capabilities.	196, 220
Hi Air Korea	Hi Air Korea is a leading supplier of HVAC packages for marine, offshore, and industrial applications, headquartered in Gimhae, South Korea. Since 1988, the company has specialized in AHUs, chillers, ventilation systems, and packaged air conditioners, delivering high-quality, integrated HVAC solutions through continuous innovation and customer-focused service.	163, 165, 166, 167, 179~187, 251
Hyorim E&I	Hyorim E&I specializes in intake systems and water/wastewater treatment facilities for public and industrial sectors. With over 30 years of experience, the company offers durable, efficient, and eco-friendly solutions, and has delivered more than 100 projects in Korea and abroad, including in Saudi Arabia, Vietnam, and Kuwait.	208, 209, 215, 216,
Hyundai Heavy Industries Turbomachinery	Hyundai Heavy Industries Turbomachinery specializes in pumps and compressors, delivering customized solutions backed by over 47 years of experience and 3,000+ pump references. It operates the world’s largest vertical pump test facility and collaborates globally through repair shops and agents. The company leads eco-friendly innovation with cryogenic pump development using LNG, ammonia, and hydrogen.	153, 200
Hyundai Steel	Hyundai Steel supplies advanced steel materials through cutting-edge technologies, supporting diverse industries with differentiated and high-performance products. Committed to innovation and value creation, the company aims to build new industrial ecosystems beyond conventional steel. It delivers optimized solutions that exceed client expectations under the vision of Engineering the Future Beyond Steel.	226, 232, 235
ILSUNG HISCO	ILSUNG HISCO provides manufacturing solutions for the oil, gas, and power sectors, recognized globally for its engineering excellence and trusted partnerships. With expanded operations in the U.S., it has delivered key projects with Venture Global, Woodfibre LNG, and PEMEX. The company focuses on innovation and sustainable growth to meet diverse industry needs worldwide.	211, 213

Company	Introduction	Page Number
iNewtek	iNewtek develops high-reliability industrial panel PCs, including dustproof, fanless, and explosion-proof models, as well as embedded touch panels. It was the first in Korea to produce 3.5-inch and Mini ITX industrial SBCs, contributing to import substitution and exports for nuclear and automation systems. The company focuses on HMI-based automation to enhance productivity and quality.	268
Innose Tech	Innose Tech is an engineering company specializing in seismic safety assessment, qualification, and design for nuclear facilities and critical infrastructure. With experience in government and industry-supported projects, it leads in structural and seismic engineering. The company also engages in international collaboration to advance disaster mitigation technologies.	294, 295
JAC Coupling	JAC Coupling has specialized in power transmission couplings since 1977, providing high-quality, customized solutions for clients such as Posco, Hyundai Steel, and SMS Group. Its products ensure efficient power transfer, absorb vibration and noise, accommodate misalignment, and prevent overloading, earning trust in both domestic and global markets.	151, 152
JM Motors Pump	JM Motors Pump has specialized in maintaining auxiliary equipment at power plants across Korea, including cranes, conveyor systems, and electrical systems. It also manufactures overhead cranes for nuclear facilities and firefighting equipment. With experience at Barakah, Shin-Kori, and Wolsong NPPs, the company offers custom crane solutions backed by extensive technical documentation.	157, 159, 197
Join Trading	Join Trading is a regional distributor of Japan's OLYMPUS OPTICAL, specializing in advanced inspection, measurement, and analysis equipment. With over 35 years of experience, it is committed to customer-first service and integrity, continuously sharing cutting-edge global technologies with clients.	283
JRMS	JRMS specializes in fire detection and protection systems, with proven expertise in nuclear and seismic fire protection applications. Its technology has been applied to KHNP facilities and base-isolated buildings at key institutions. Certified by UL, FM, and KFI, JRMS is a registered KHNP supplier expanding its presence at home and abroad.	233, 234
KOASIS	KOASIS specializes in mechanical design engineering and R&D for nuclear power plants, focusing on thermal, structural, fatigue, and seismic analysis of key components such as pressure vessels, piping, and valves. With extensive experience in Korea's nuclear sector, the company delivers design and qualification reports to ensure structural integrity and operational safety.	292, 294

Company	Introduction	Page Number
Korea Industrial Testing Co.	Korea Industrial Testing has provided non-destructive examination (NDE) services for construction and maintenance in sectors such as shipbuilding, energy, and nuclear power. Its advanced technologies include automated inspections, AI-based defect detection, and robotic systems for pipe and tank integrity, ensuring safety and quality across critical infrastructure.	304
Korea Nuclear Engineering	Korea Nuclear Engineering specializes in comprehensive radioactive waste treatment, including sludge and cement solidification. It has provided sludge solidification services to all Korean nuclear power plants since 2018 and exported systems to Jordan. Backed by in-house R&D, the company leads innovation in radioactive waste management with globally recognized expertise.	204
Korea Nuclear Technology	Korea Nuclear Technology (KNT) specializes in nuclear safety equipment, notably hydrogen risk management systems such as PAR and HMS. With proven performance in domestic and overseas projects like Barakah NPP, KNT ensures reliability through rigorous testing and strong R&D. The company collaborates closely with KHNP, KEPCO, and KAERI.	210, 226
Korea Radiation Shield Engineering	Korea Radiation Shield Engineering specializes in radiation shielding systems, non-ferrous metal casting, and precision machining, with certified welding and shielding material development. With over 33 years of experience, the company has supported 32 nuclear power units and research facilities, supplying equipment across nuclear, thermal, and hydro power sectors.	147, 162, 207, 213, 214, 218, 225, 230
Kumoh Heavy Industries	Kumoh Heavy Industries specializes in crane manufacturing, delivering high-quality products with optimal lead times and strong price competitiveness. Guided by a customer-first philosophy, the company supports the advancement of Korea's and the global manufacturing industries in the evolving digital era.	158, 211
KwangMyung Electric	Since 1995, KwangMyung Electric has evolved from a switchgear manufacturer into a global provider of smart grid and intelligent power IT solutions. With certified, customizable products and expertise in nuclear, thermal, and renewable energy, the company ensures flexible manufacturing, ISO-backed quality, and compliance with international standards, such as IEC 61439, IEC 62271, and IBC.	253, 254, 255, 256, 257
Kyelim Polycon	Kyelim Polycon specializes in polymer concrete manufacturing and R&D, backed by 14 patents. Its products offer exceptional structural integrity, maintaining performance for over 300 years in underground and disposal environments.	287

Company	Introduction	Page Number
MJ TSR	MJ TSR is a leading manufacturer of industrial rubber products and lining solutions, with over 50 years of experience since its founding in 1973. It specializes in seals, gaskets, rubber/resin lining, and high-frequency pipe bending, exporting to over 10 countries. With certified facilities in Busan, Ulsan, and Qingdao, the company combines advanced technology with strong global performance.	189, 227
MYTEC	MYTEC is expanding into the nuclear power sector with KEPIC Q-class certification and a focus on high-tech equipment such as radiators, plate-type heat exchangers, and heaters. It has supplied components to Korean NPPs as well as overseas projects in the UAE and Slovenia. The company continues to invest in R&D and engineering capabilities to enhance its offerings.	177, 178
NAC	NAC specializes in producing charcoal, charcoal filters, and air cleaning units for removing radioactive and harmful gases. Its products are used in air purification systems at nuclear power plants, research institutes, and hospitals. Backed by continuous R&D and proven technology, the company is committed to delivering high-quality, reliable solutions.	168, 170, 288
Nambuk Electric	Nambuk Electric, founded in 1974, specializes in explosion-proof electrical equipment for the oil, gas, and nuclear sectors. It holds a 100% market share in Korea for underwater and emergency lights used in nuclear plants and has supplied products to the UAE's Barakah NPP project. The company is distinguished by its ability to produce both IEC and NEC standard-compliant products in one facility, backed by global certifications.	246, 249
Optimal Energy Service (OES)	OES specializes in maintenance services for power and industrial plants, offering routine, outage, and commissioning support with decades of field expertise. Since entering the global market in 2015, the company has expanded internationally while focusing on quality, technology development, and customer satisfaction.	301, 302
ORBIS	ORBIS has specialized in instrumentation and control (I&C) for power plants, expanding into electrical and mechanical solutions. It provides maintenance services for nuclear and thermal plants, supported by patented monitoring and diagnostics technologies. With a focus on reliability and technical innovation, the company aims to grow as a globally specialized engineering group.	295, 309, 310
Pine C&I	Pine C&I specializes in large-scale data consolidation and analytics, enabling digital transformation for AI, digital twins, and metaverse technologies. The company developed the world's first nuclear-specific digital twin solution in collaboration with KHNP, enhancing Korea's nuclear industry competitiveness. Pine C&I is actively seeking global partnerships to advance data-driven innovation.	284, 298

Company	Introduction	Page Number
Prime Corporation	Prime Corporation is Korea's first venture-registered company in the electric systems field, specializing in design, supervision, manufacturing, and construction. It supplies corrosion protection technologies and facilities to sectors including nuclear and thermal power, desalination, petrochemical, and LNG storage. The company is committed to technical excellence and customer satisfaction.	240, 241, 242, 243, 244, 262
RTP Korea	Founded in 1968, RTP began operations as a division of Computer Products, Inc., and in July of 1997, RTP Corp. became a privately held company. For its first twenty-seven years in business, RTP provided high-performance data acquisition systems to the worldwide nuclear market and I/O front-end subsystems for minicomputer driven data acquisition and control systems at some of the world's largest industrial companies. These process control applications were typically characterized as being located in harsh environments, yet with demanding requirements to provide accurate analog measurements under extreme environmental and EMF/RFI conditions.	265
Samil Industry	Samil Industry, established in 1979, is a Korean manufacturer specializing in level gauges, sight glasses, and flow elements, particularly for petrochemical and power industries. Known for its magnetic and high-pressure two-color gauges, the company is approved by global clients like Bechtel and Petronas, and domestic entities including KEPCO. Certified with ISO 9001, SAMIL delivers reliable, high-quality solutions and system packages.	277, 280, 281
Samyoung Fitting	Samyoung Fitting, established in 1989, specializes in forged fittings and flanges for high-pressure piping systems, serving domestic and global markets in construction, plant, and nuclear sectors. Renowned for technical expertise and reliability, the company aims to expand into petrochemical, wind power, and industrial machinery while maintaining its commitment to quality and customer value.	173
SeAH CSS	SeAH CSS specializes in high-performance alloy materials such as stainless steel, nickel, and titanium alloys, supported by a fully integrated production system. As a key supplier to the nuclear industry, it provides critical materials for major components and actively develops advanced alloys for next-generation reactors and fuel storage. SeAH CSS is recognized for its reliability under extreme conditions and its strategic role across the nuclear value chain.	224
SEAH S.A.	SEAH S.A. is a specialized engineering firm providing industrial automation and nuclear fuel handling systems, with a long-standing partnership with Schneider Electric. It supplies key equipment to major industrial and nuclear clients, including fuel transfer systems for Shin-Kori and Shin-Hanul NPPs. The company is actively expanding into SMR infrastructure and domestic localization of nuclear technologies.	161, 206
Seoheung MCO	Seoheung MCO specializes in the manufacturing and maintenance of customized valves for critical energy infrastructure, including NPPs and TPPs. As a certified maintenance provider for KEPCO subsidiaries, the company is recognized for its technical expertise and develops advanced, application-specific valve solutions focused on durability, safety, and efficiency.	221

Company	Introduction	Page Number
Seolin	Seolin specializes in metal bending for various industrial applications, including ships, pressure vessels, storage tanks, and structural frames. With extensive experience and trusted expertise, the company has contributed to Korea’s key industrial sectors and continues to support national growth through precision and reliability.	212
SGS Korea	SGS Korea is the world’s leading inspection, testing, and certification company, with a global network of over 2,600 offices and 97,000 professionals. SGS Korea, established in 1955, provides integrated services across industries and is a key nuclear equipment qualification body, offering the broadest scope of specialized testing in Korea. Backed by over 130 years of global expertise, it supports clients like KHNP, Doosan Enerbility, and Hyundai Heavy Industries.	305~308
Shin Shin Machinery	Shin Shin Machinery is a leading Korean manufacturer of specialized pumps for nuclear power plants, including centrifugal, vertical, and gear pumps. Registered as a critical nuclear equipment supplier since 1997, it supplies all Korean NPPs and overseas projects like the UAE. Backed by 56 years of expertise, the company ensures reliability through rigorous testing and is recognized for its ESG-driven innovation and product development.	198~201
Smart Valve Company	Smart Valve Company is a leading Korean valve manufacturer specializing in plant-use safety relief valves, and the first in Korea to obtain ASME UV and V Stamps. With KEPIC certification, it supplies Q-class valves to domestic and overseas nuclear power plants. The company continues to invest in advanced industrial valve technology following its spin-off from Shinwoo Valve in 2013.	174, 220, 223
SNT Energy	SNT Energy specializes in HRSGs, surface condensers, and air-cooled heat exchangers, with global operations including a subsidiary in Saudi Arabia. It has delivered major projects for clients like GE and Siemens and supplied surface condensers to Shin-Hanul NPP #1, 2. Backed by strong in-house engineering and stable finances, SNT delivers turnkey thermal solutions worldwide.	157, 207
Solge Corporation	Solge Corporation, based in Daegu, South Korea, specializes in advanced lubrication management solutions, including real-time oil condition monitoring, purification, and contamination control. Its core products—EZ-Series sensors, oil purifiers, and premium breathers—enhance equipment reliability and reduce maintenance costs. With innovative technology and global reach, Solge supports sustainable industrial operations worldwide.	206, 275, 276, 278, 279, 282
Solux	Solux supplies advanced LED lighting systems for nuclear power plants, including radiation-resistant luminaires capable of withstanding up to 4×10 ⁵ Gy. As a KHNP-qualified supplier, it delivered the full LED lighting system for Saeul NPP #3, 4, replacing traditional light sources in high-radiation environments with proven technology.	247, 248

Company	Introduction	Page Number
Sungsan Tools	Sungsan Tools specializes in manufacturing carbide cutting tools such as drills, end mills, reamers, and special tools for both domestic and international markets. With advanced equipment and accumulated expertise in special tool production, the company delivers high-quality, customized solutions through continuous development and strict quality control.	218, 219
TaeHwa Kalpa Seal	TaeHwa Kalpa Seal specializes in sealing products and compressed sheets, operating a major manufacturing facility in Busan for wide non-asbestos sheets and gaskets. Backed by ISO and international certifications, the company delivers high-quality, competitive products through advanced technology and rigorous quality management.	190, 192
Taejung Industry	Taejung Industry specializes in waterproofing and anti-corrosion coatings, with over 30 years of experience and certifications including NET and KHNP Qualified Supplier. Its flagship WRC-100 series is a solvent-free ceramic epoxy coating with strong adhesion to rusted or submerged surfaces. With 4,000+ projects completed, the company enhances energy efficiency and actively expands through global partnerships.	287
Tae Sung Industrial Systems	Tae Sung Industrial Systems manufactures copper-based components for high-temperature, high-pressure environments and supplies key parts for nuclear power applications. Certified as a qualified supplier for Doosan Enerbility in 2024, it offers reliable solutions backed by expertise in dissimilar metal welding.	171, 174, 258
TaeYang Engineering	TaeYang Engineering provides comprehensive design engineering and technical support for nuclear, thermal, and chemical plants, including piping, mechanical, electrical, and I&C systems. It has extensive domestic and overseas project experience, notably with UAE Barakah nuclear power plant and multiple Korean nuclear power plants. The company also develops 3D/VR content and digital twin systems to enhance plant design and operation.	246, 296
TK Corporation	TK corporation is a global supplier of butt weld pipe fittings with extensive experience and the industry's largest manufacturing capacity. Its products serve diverse sectors including oil & gas, nuclear, and shipbuilding, and are designed for extreme conditions such as high pressure, high temperature, and cryogenic environments.	176
TMC	TMC is a global leader in marine and offshore plant cables, specializing in energy and information transmission products that meet current and future market demands. Committed to technological excellence and user-focused solutions, TMC strives to deliver top-tier client satisfaction worldwide.	239

Company	Introduction	Page Number
TS Nexgen	TS Nexgen is a trading and distribution company specializing in high-quality electronic components and industrial materials. Through global sourcing, timely delivery, and tailored solutions, it enhances supply chain efficiency and product value. The company prioritizes reliability, customer satisfaction, and long-term partnerships.	164
Turbolink	Turbolink, established in 2001, specializes in fluid film bearings for high-speed rotating machinery in power generation, oil and gas, and marine sectors. The company provides customized solutions for turbines, generators, compressors, and pumps, emphasizing reliability and precision. Through continuous engineering development, Turbolink aims to be a trusted partner in bearing technology.	147, 148
U2NG	U2NG specializes in radiation-controlled area safety management systems and software, including access control and dose meter storage solutions. Since 2011, it has supplied its products to 14 Korean nuclear power plants and the UAE’s Barakah plant. Recognized by the Public Procurement Service in 2019, U2NG aims to advance smart nuclear plant operations through 4th Industrial Revolution technologies.	270, 271, 273, 274, 311
U-chang Industries	U-chang Industries, established in 1989, is a technology-intensive SME specializing in ultra precision machining for nuclear, gas, and marine power systems. As a core supplier to Doosan Enerbility, it manufactures turbine components and APR1400 reactor parts. With 36 years of expertise and dedicated R&D, U-chang ensures top-tier quality through advanced machining capabilities.	171, 202
Wesco Electrode	Wesco Electrode, founded in 1993, is a global leader in electrochemical electrode technology, specializing in industrial electrodes and turnkey electrolytic systems. With over 30 years of expertise, it serves sectors including steel and copper foil for secondary batteries. Backed by in-house R&D and a global presence, WESCO delivers innovative, customized solutions worldwide.	241
WISE Control	WISE has over 50 years of expertise in pressure, temperature, gas, flow, and level measurement solutions. With eight specialized divisions and a global distributor network, the company serves diverse industries including energy, semiconductors, pharmaceuticals, and petrochemicals. WISE is committed to continuous innovation, quality improvement, and customer satisfaction through integrated design, manufacturing, and service systems.	280, 281
Woojin	Woojin, established in 1980, specializes in industrial measuring instruments with a focus on quality and customer satisfaction. It has led the localization of steel and nuclear power plant measurement technologies, and now offers solutions in flow systems, automation, diagnostics, and advanced materials. Backed by Korea’s first measurement research institute, WOJIN continues to deliver precise and reliable products.	267, 268, 278, 279

Company	Introduction	Page Number
WOONYOUNG	WOONYOUNG is a leading manufacturer of electronic control systems, offering a broad range of products including transformers, relays, harmonic filters, and protection devices for power and automation applications. With strong investments in technology, talent, and innovation, the company aims to become a global leader in the 21st-century power electronics industry.	260
Yong Sung Electric	Yong Sung Electric manufactures electric and electronic control devices such as switches, relays, and timers, with proven reliability in critical applications including nuclear power. Backed by international certifications like ISO 9001 and KEPIC-EN, the company combines over 40 years of expertise with ongoing R&D to serve the industrial automation sector.	251, 252, 259
Youho Electric Industrial	Youho Electric Industrial, established in 1979, specializes in heavy electric equipment with over 46 years of power technology expertise. The company has led localization efforts in Korea's power industry and holds 58 patents as of 2025. Through global outreach and technical partnerships with firms like HITACHI and GE, YUHO aims to strengthen its global presence and be a trusted international partner.	266, 272
Youl Systems	Youl Systems specializes in engineering IT solutions for nuclear and plant piping design, digital twin implementation, and VR/AR/XR platforms. With 35 years of expertise, the company delivers scalable, high-performance 3D solutions for power plants and EPC projects. It aims to integrate AI for enhanced predictive maintenance and intelligent operations by 2026.	297
Youngjin Techwin	Youngjin Techwin specializes in the processing of nuclear power cycle system components, having contributed to localization efforts since the 1990s. Established in 2003, the company has manufactured parts for Saeul NPP #3, 4 and is preparing for Shin-Hanul NPP #3, 4. It is also involved in the development and fabrication of NuScale SMR prototype components.	197, 227
Yujinco Metal	Yujinco Metal, established in 2000 and based in Busan, specializes in metal fasteners and machine parts for nuclear, thermal, wind power, marine, and defense sectors. Certified under KEPIC MN/SN, the company has developed technologies such as hydraulic coupling bolts and automatic nut processing devices. It supplies major clients including Doosan Enerbility, DSME, Unison, and GE Power, while promoting a people-centered workplace culture.	151

KOREAN NUCLEAR SUPPLIERS

Cover image of Saeul Nuclear Power Plant Units 1–4. Courtesy of KHNP.
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