

KHNP-KNP BUSINESS CATALOGUE



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A Trusted and Reliable Partner in the Global Energy Market

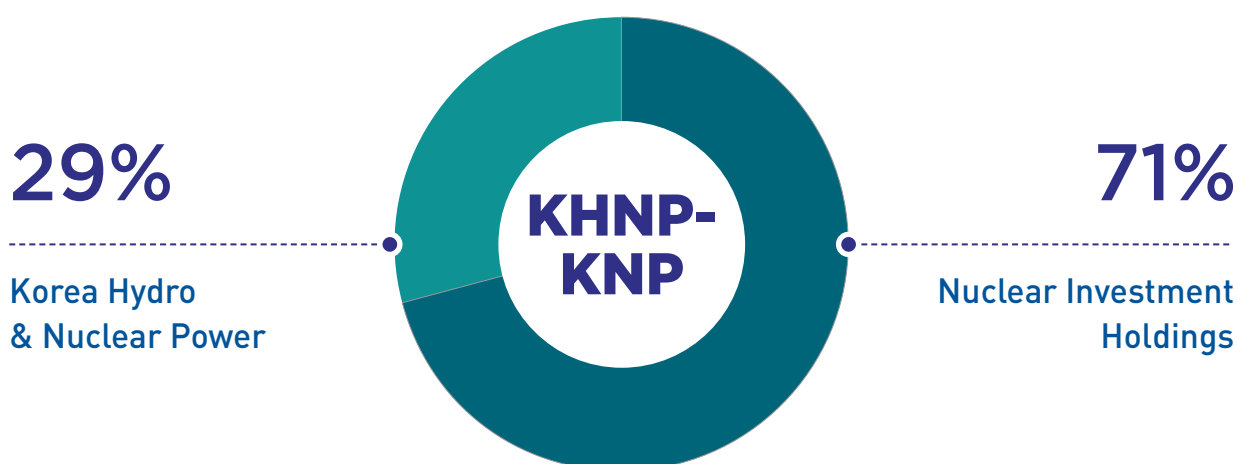
WHO WE ARE

KHNP-KNP is a company jointly established by Korea Hydro & Nuclear Power (KHNP) and the **domestic power equipment industry to deliver Korea's competitive power generation** and energy-related equipment, inspection, and maintenance services to overseas energy markets.

As Korea's leading Provider, KHNP-KNP will do its best to promote the mutual interests of domestic and overseas partners in the power plant, oil & gas, and shipbuilding sectors through our supply chain to use Korea's quality machinery and equipment.

OUR SHAREHOLDERS

KHNP-KNP is a special purpose company founded to support the export of nuclear power plant equipment manufactured by Korean SMEs. It was jointly funded by Korea Hydro & Nuclear Power Co., Ltd., which operates 26 nuclear power plants in Korea, and 41 SMEs specializing in nuclear power plant equipment (mechanical, electrical, and instrumentation)



Nuclear Investment Holdings



WHAT WE DO

KHNP-KNP delivers optimal solutions for customers through collaboration with public enterprises, major EPC companies, and private companies across Korea's power and energy sectors specializing in nuclear power plant equipment (mechanical, electrical, and instrumentation)

TRADER

KHNP-KNP has signed agreements with over 300 Korean companies for overseas marketing and sales, providing excellent equipment, inspection, and maintenance services in the power and energy sectors to international clients.

DEVELOPER

KHNP-KNP offers a variety of solutions and services that meet customer needs, ranging from simple equipment supply to performance diagnostics and facility improvements.



CO-WORKER

KHNP-KNP strives to study the diverse characteristics of its customers and provide optimal solutions. It offers customized services such as technology transfer, establishment of joint ventures, M&A, and joint technology development.

BUSINESS AREA

KHNP-KNP delivers tailored solutions for customers through collaboration with public enterprises, leading EPC companies, and private firms across Korea's power and energy sectors.

Equipment & Service Provider

KHNP- KNP exports materials and equipments that are using for the construction and operation of foreign power plants in collaboration with small and medium-sized enterprises in the domestic energy sector.



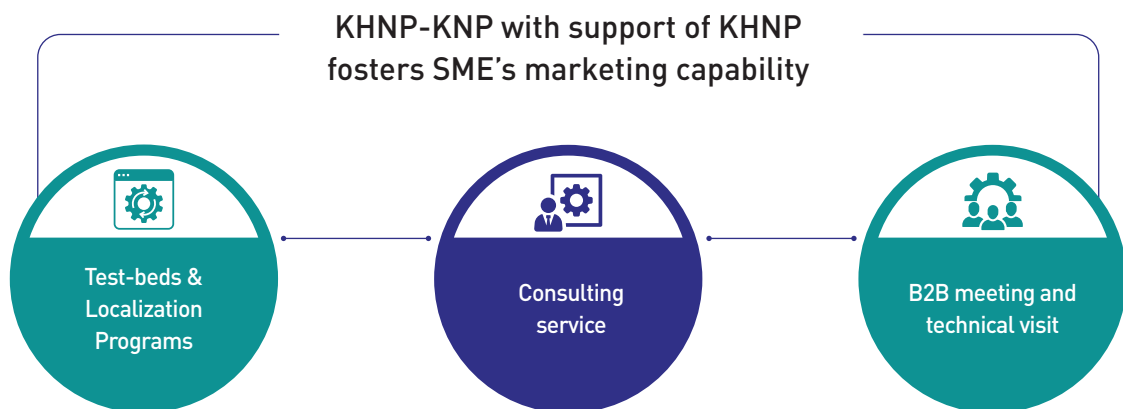


Maintenance Service

We do O&M service for Power Plant



Building the marketing capacity of SMEs



CONTACT US.

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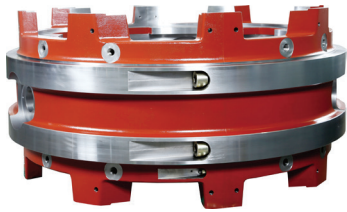
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System, Facility	068
Turbine	084
Valve, Actuator	086
Etc.	093



MECHANICAL

Bearing



Housing of Journal Bearing

Product Description:

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

Specification:

- External Diameter: $\Phi 1,000 \sim 2,000\text{mm}$

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



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
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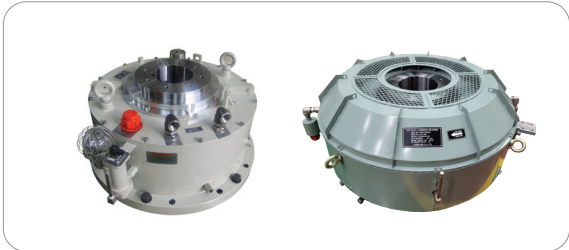
Overseas Track Records

Client (Country)	Siemens Energy (Germany)	KOBELCO (Japan)	Torishima Pump (Japan)
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Supplier Information

- Turbolink Co., Ltd.

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

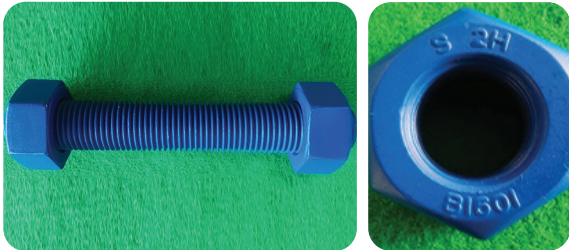
Domestic Track Records			
Main Client	HD Hyundai Electric	Hyosung	Korea Power Plants

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

Supplier Information

- Turbolink Co., Ltd.

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:

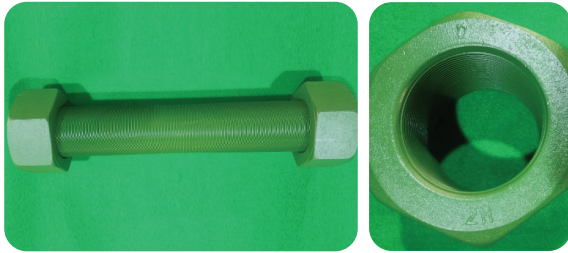
- A193 B7 Stud Set
- Stud: A193 B7, 7/8" - 9UNC x 8"
- Nut: A194 2H, 7/8" -9UNC

Overseas Track Records	
Client (Country)	USA
Delivery Year	2024

Supplier Information

- Daewoo Bolt Co., Ltd.

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.



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.

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:

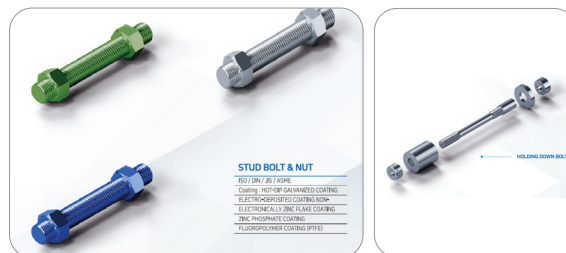
- BMS Terminator D10, D12, D13, D16
- BMS Terminator D19, D20, D22, D24
- BMS Terminator D25, D28, D32, D35
- BMS Terminator D36, D38, D41, D43
- BMS Terminator D51, D57

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.



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

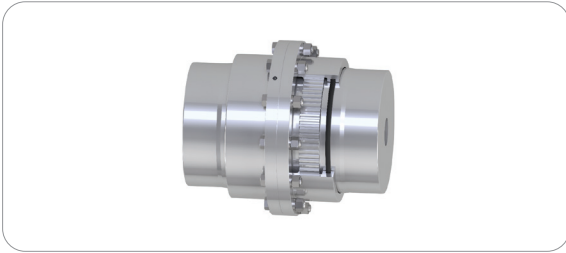
Domestic Track Records			
Main Client	Doosan	KHNP	KHNP
Project Name	Qassim 1 STG/Taiba 1 STG	Saeul NPP #3,4 Cap Screw	Shin-Hanul NPP #1,2 Parallel Pin
Delivery Year	2025	2024	2024

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.

Bolt, Nut, Coupling



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

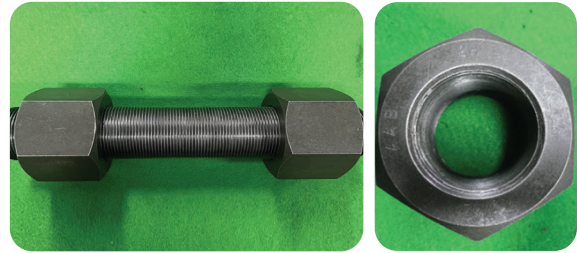
Main Client	POSCO	HJSC	Hyundai
Project Name	Gwangyang 3-1RCL ROLL	The Phase 2-6	1000 Ton Press Crane
Delivery Year	2021	2025	2021

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.



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.

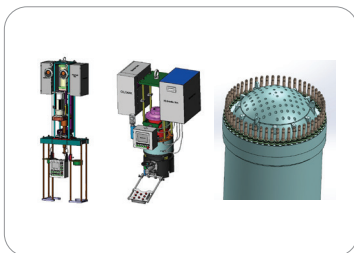
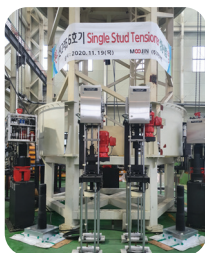
Specification:

- 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.

Bolt, Nut, Coupling



SST (Single Stud Tensioner)

Product Description:

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 the development of 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

Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #1,2 / #5,6
Delivery Year	2012/ 2023
Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP 1~4
Delivery Year	2018

Supplier Information

- Moojin Keeyeon Co., Ltd.



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

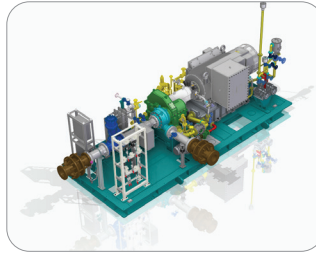
Domestic Track Records			
Main Client	Doosan	Unison	Hyundai
Project Name	5.5MW Offshore	4MW Onshore	2MW Onshore
Delivery Year	2024	2024	2025

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.

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.

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.



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.

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.

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.

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.



Deaerator

Product Description:

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 Biomass	Gangneung TPP	Goseong 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
Delivery Year	2024	2024	2022

Supplier Information

- Energyen Corporation

Condenser, Deaerator



Surface Condenser

Product Description:

The condenser is a large shell-and-tube type heat exchanger. Its main function is to condense the steam coming from the steam turbine.

Energyen 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
Delivery Year	2020	2019	2018

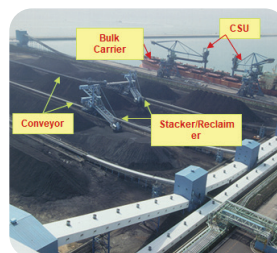
Overseas Track Records

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

Supplier Information

- Energyen Corporation

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.

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 Industrial Co.,Ltd.

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~

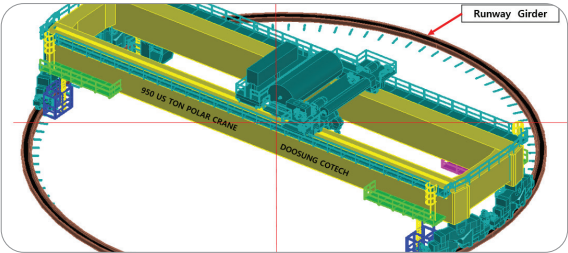
Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP
Delivery Year	2020~

Supplier Information

- JM motors Pump Co.,Ltd.

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

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)
 - SPCS (Spreader Position Control System)
 - CAS (Chassis Alignment System)
 - LCMS, RCMS (Crang Monitoring System)
 - SPSS (Stack Profile Scanning System)
 - CNRS (Container Number Recognition System)
 - CLPS (Chassis Lift Prevention System)
 - TOS, Remote Manager

Domestic Track Records

Main Client	HMM	PCTC	Sunkwang
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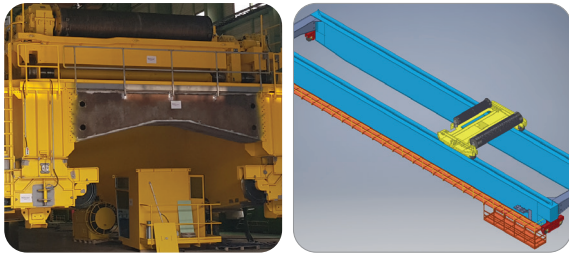
Overseas Track Records

Client (Country)	Singapore	Hyosung
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Supplier Information

- SEAH S.A.

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)

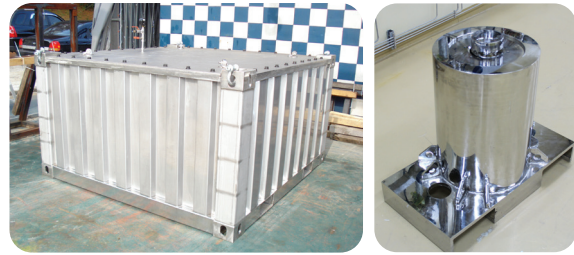
Domestic Track Records

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

Supplier Information

- Doosung Cotech

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

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	Saeul NPP #3,4 M254	Saeul NPP #3,4 M254
Delivery Year	2011~2018	2016~

Supplier Information

- Hi Air Korea Co., Ltd.

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:

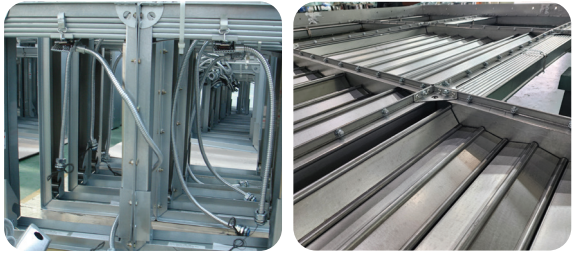
The Control Damper is constructed from high-strength galvanized or stainless steel for corrosion resistance and long-term durability. Blade types include airfoil or flat blades, with parallel or opposed blade operation, depending on airflow requirements. It is available in various sizes and configurations, 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.



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.

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	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.

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.

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.

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.



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)

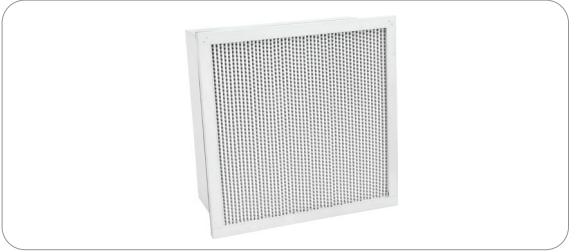
Domestic Track Records

Main Client	KHNP
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Supplier Information

- Cambridge Filter Korea Co.,Ltd.

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.



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.

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.



Radwaste Filter

Product Description:

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	Shin- Kori NPP #5,6	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

Supplier Information

- Jeongwoo Industrial Machine Co., Ltd.

Fan, Filter



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

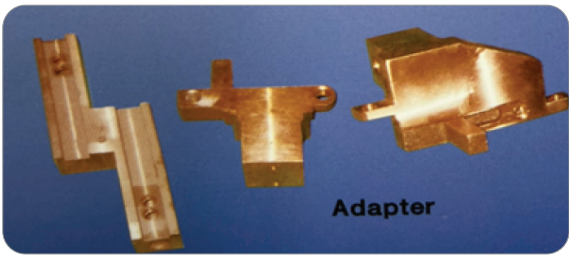
Domestic Track Records			
Main Client	KHNP	KINS	IBS
Project Name	EOF	EOF	RAON
Delivery Year	2018	2017	2020

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.

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.

Fitting, Flange



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.



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.

Fitting, Flange



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.



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.

Fitting, Flange



Forged Fittings

Specification:

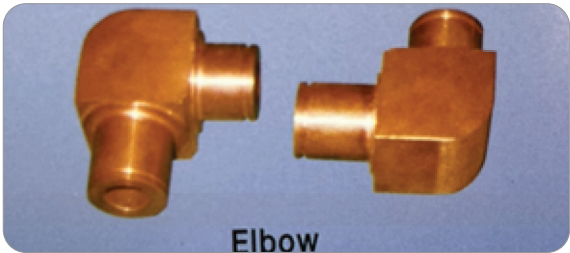
- Designed as per ASTM, ASME, BS, JIS, ANSI, MSS, etc.
- Material: Stainless steel, Carbon steel, Alloy steel & other Non-ferrous metal
- HS Code: 730792

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.



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
- Reference Document: G155B3518P0002 B50A402B

Domestic Track Records	
Main Client	Doosan
Delivery Year	2024

Supplier Information

- Tae Sung Industrial Systems Co.,Ltd.

Fitting, Flange



Strainer

Product Description:

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"

※ 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)
ProjectName	Barakah NPP #1~4
DeliveryYear	2016~2018

Supplier Information

• Jeongwoo Industrial Machine Co., Ltd.

Fitting, Flange



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.)



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.

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

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

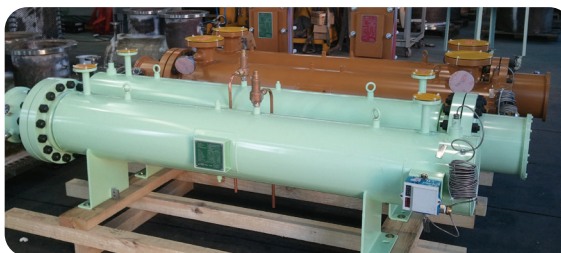
Domestic Track Records			
Main Client	Hanwha Engine	HD Hyundai Heavy Industry	Hanwha Engine
Project Name	Saeul NPP #3,4 AACDG	Saeul NPP #3,4 EDG	Shin- Hanul NPP #1,2 EDG
Delivery Year	2022	2022	2017

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

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

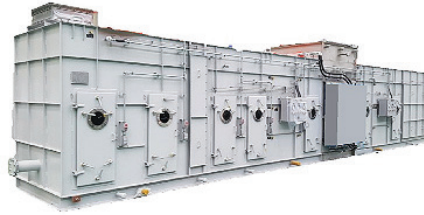
Overseas Track Records

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

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 separator
 - 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 μ m 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.

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.

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.

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.

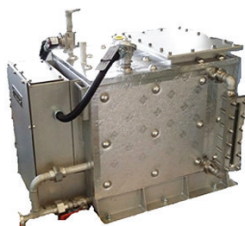
Domestic Track Records

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.

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.

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.

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.

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.

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

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

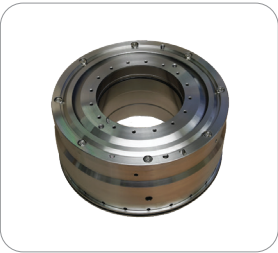
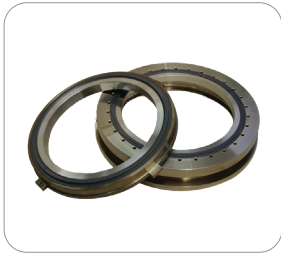
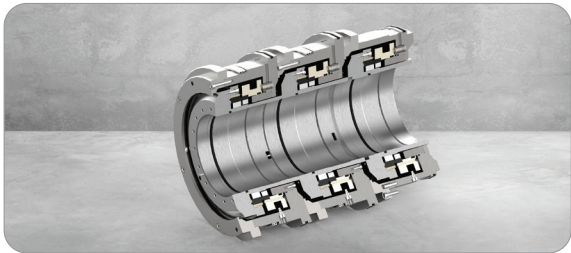
Domestic Track Records			
Main Client	Ulsan TPP	Samcheok TPP	Hanul NPP
Delivery Year	2025	2024	2024

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.

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.

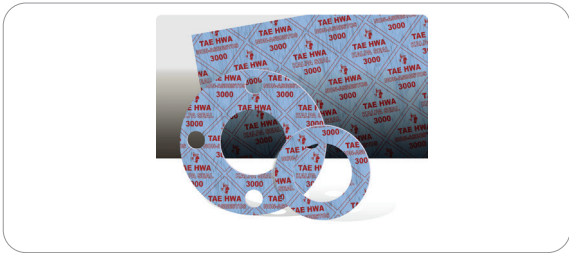
Specification:

- 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.



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

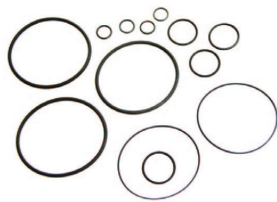
Domestic Track Records			
Main Client	Samsung	KHNP	Hanhwa
Delivery Year	2024	2024	2024

Overseas Track Records		
Client (Country)	Hudong (China)	Shitanoe (Japan)
Delivery Year	2024	2024

Supplier Information

- Taehwa Kalpa Seal Co., Ltd.

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.



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 Refineries (Vietnam)	Bang Pakong TPP (Thailand)
Delivery Year	2025	2025	2025

Supplier Information

- Dongsuh Industry Co., Ltd.

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.

Spiral Wound Gasket

Product Description:

A spiral-type gasket is an 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

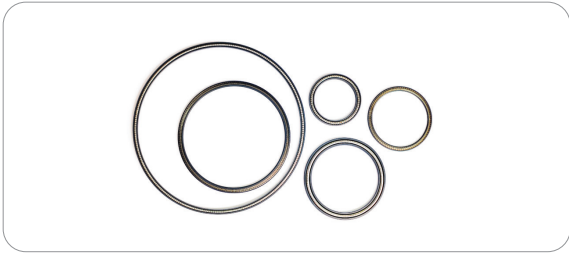
Domestic Track Records		
Main Client	Lotte Chemical	S-Oil
Delivery Year	2024	2024

Overseas Track Records		
Client (Country)	Hudong (China)	Matex (Japan)
Delivery Year	2024	2024

Supplier Information

- Taehwa Kalpa Seal Co., Ltd.

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

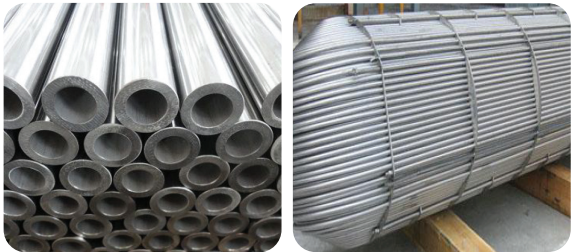
Domestic Track Records			
Main Client	Taeon TPP	Kori NPP	Boryeong TPP
Delivery Year	2025	2025	2025

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.

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.

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.

Pipe, Tube



Expansion Joint

Product Description:

An expansion joint is a flexible connector designed to absorb movements effectively caused by external factors such as thermal expansion, contraction, vibration, installation misalignment, and seismic activity, while safely containing the fluid within piping systems.

It is manufactured in various types and sizes according to design conditions, including pressure, temperature, fluid type, service life, and installation environment.

An expansion joint is a flexible connector used to absorb movement from thermal changes, vibration, misalignment, or seismic activity while sealing in fluid within a piping system. Types include metal expansion joints for high-temperature and high-pressure use, non-metal types for flexible, low-pressure environments, and rubber joints for effective shock and vibration absorption in HVAC, drainage, and water treatment systems.

Specification:

- **Metal Expansion Joint:** 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-metallic Expansion Joint:** Non-metallic 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:** 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	Saeul NPP #3,4	Saeul NPP #3,4
Delivery Year	2020~2021	2020~2022	2020~2021

Overseas Track Records

Client (Country)	Barakah NPP (UAE)
ProjectName	Barakah NPP
DeliveryYear	2014~2018

Supplier Information

- UnisonHKR Co.,Ltd.

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:

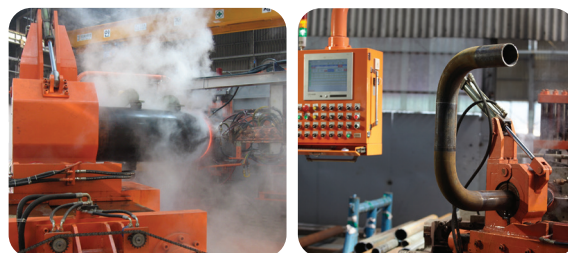
- Material Composition: 100% Inorganic Cellular Glass
- Compressive Strength: Minimum 600 kPa, in accordance with ASTM C165
- Water Absorption: 0% (no moisture absorption) with a fully sealed cell structure
- Fire Resistance Rating: Class A (non-combustible), in accordance with ASTM E84, providing zero 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



Induction Bend

Product Description:

Induction Bends are used for NPPs and various kinds of power plants. By utilizing precision pipe bending, induction bends can replace conventional fittings, reducing welding joints and enhancing 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

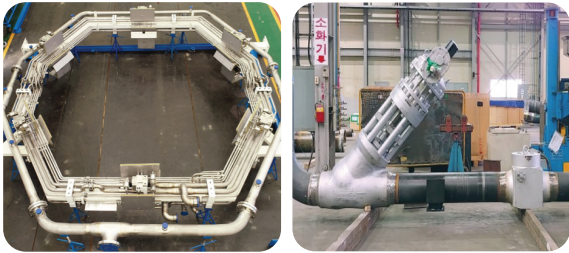
Overseas Track Records

Client (Country)	BORSIG (Qatar)	Barakah NPP (UAE)	GE Vernova (Poland)
Project Name	Ras Laffan	Barakah NPP #1,2,3,4	Ostroleka CCPP
Delivery Year	2025	2018	2023

Supplier Information

- Sung Il Co.,Ltd.(SIM)

Pipe, Tube



Shop-Fabricated Piping

Product Description:

Shop-fabricated Piping consists of semi-finished products to minimize the installaion and fabrication of pipes at sites and shorten the construction period. With our facililties 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
- Process: Every process of fabrication provided in one-stop solution.
- Material: New fabrication plant is under construction to increase fabrication capacity and shorten inland transportation in Busan.

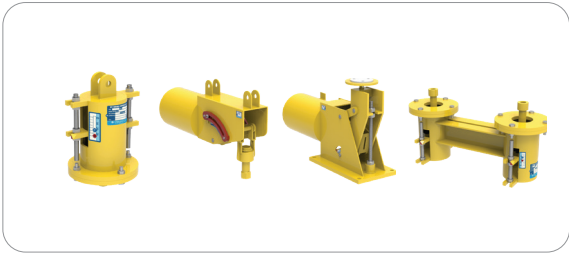
Domestic Track Records			
Main Client	KHNP	BHI	Samsung
Project Name	Shin-Hanul #3,4	CGN Daesan	Meghna Ghat
Delivery Year	On going	2024	2022

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

Supplier Information

- Sung Il Co.,Ltd.(SIM)

Pipe, Tube



Spring Support

Product Description:

Hanger and support systems are essential safety components designed to support and protect piping systems from internal and external forces, including self-weight, thermal expansion, fluid vibration, and seismic loads. They include variable and constant spring hangers for accommodating thermal movement, hydraulic snubbers for controlling dynamic loads, and cold supports for cryogenic applications down to -196 °C. These solutions ensure reliable performance and maintain the structural stability of piping in various plant conditions.

Specification:

- Variable Spring Hanger & Support: 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 Hanger & Support: 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 Snubber: 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.
- Cold Support: 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.

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

Domestic Track Records		
Client (Country)	Barakah NPP (UAE)	Jordan
Project Name	Barakah NPP	JRTR
Delivery Year	2014~2020	2016

Supplier Information

- UnisonHKR Co.,Ltd.

Pipe, Tube



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.

Pump



API 610 Centrifugal Pumps

Type:

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

Application:

- Oil & Gas production crude oil transportation from wellheads Water injection services for enhanced oil recovery Produced water handling Booster pumps for oil pipelines
- 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)
- Power generation boiler feedwater pumps (high-pressure, high-temperature) condensate extraction pumps Cooling water circulation Auxiliary services in thermal and nuclear plants
- Pipeline services crude oil and refined product pipeline transport Booster and terminal pumps Long-distance transportation with high reliability requirements
- Offshore & marine seawater injection/desalination systems Firewater pumps Produced water treatment Offshore platform utilities
- 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
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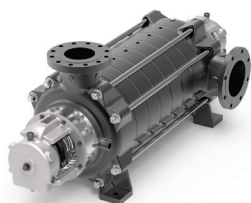
Overseas Track Records

Client (Country)	ARAMCO (Saudi Arabia)	INA	ENAP
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Supplier Information

- Handol Pumps Limited

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.



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.

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

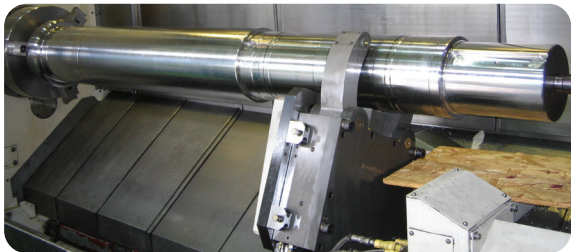
Specification:

- 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.



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:

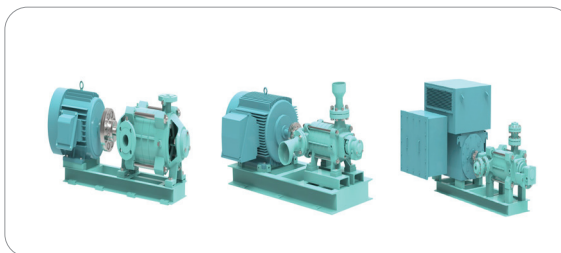
- Component for Reactor Coolant Pump of a 1.4GW (Gigawatt) Facility

Domestic Track Records	
Main Client	Doosan
Project Name	Shin-Hanul NPP #1,2

Supplier Information

- Youngjin Techwin Co.,Ltd.

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

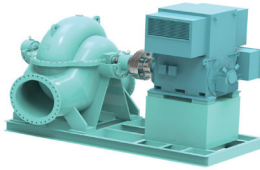
Overseas Track Records

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.

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

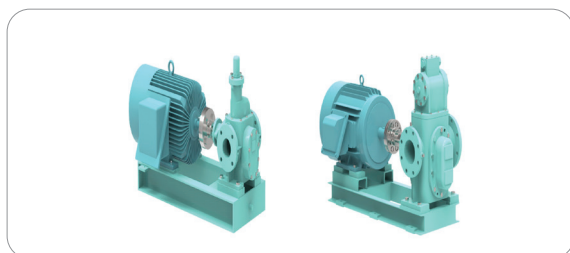
Domestic Track Records			
Main Client	KHNP	KHNP	KHNP
Project Name	Saeul NPP #1,2 Centrifugal Pump (M212)	Fire Pump & Drive Equipment for Shin-Hanul NPP #1,2(M258)	Saeul NPP #3,4 Safety-Class Centrifugal Pump (N202)
Delivery Year	2011	2013	2021

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.

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.



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.

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

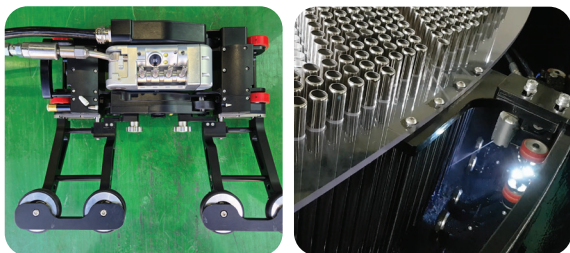
Overseas Track Records

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.

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:

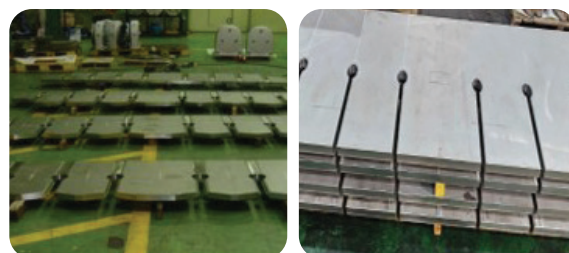
- Sludge Cleaning Equipment for Insertion into the Annular Space of OPR1000 and APR1400 Steam Generators (S/G)
- Nozzle: 4 units, Operating Pressure: 150~180 bar, Flow Rate: 120 lpm
- Movement Method: Robot adheres to the inner wall using the magnetic force of permanent magnets
- Cleaning Range: Full upper tube sheet area of S/G accessible, Nozzle Specifications: PAN ($\pm 35^\circ$) / TILT ($\pm 65^\circ$)
- 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



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.

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.



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:

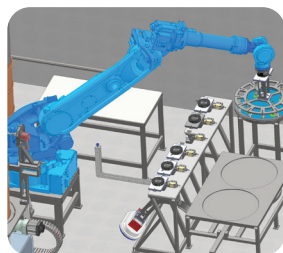
- ANSI / BHMA A 156
- Door Locking System / Exit Device, Mortise lock, Gear Latch, Handle etc.
- Door closer, Hinge, Anchor etc.
- UL 10B/10C, UL 752 Level 4, Level 5

Domestic Track Records	
Main Client	Samsung C&T Corporation
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.

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.

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.

System, Facility



Condenser Tube Cleaning System & Debris Filter

Product Description:

The Condenser Tube Cleaning System (CTCS) is a simple, closed-loop ball recirculation system. A non-clogging pump transports sponge rubber balls from an inline ball recirculation unit and injects them into the inlet water flow of the shell-and-tube condenser. The balls are forced through the condenser tubes by differential pressure, cleaning the tube surfaces. Screens located downstream of the tubes remove the balls from the main cooling water flow and return them to the pump for recirculation or collection.

The Debris Filter (DF) is designed to effectively prevent fouling caused by fibrous, coarse, and marine-life debris larger than the designated filter size. By removing debris from the cooling water inlet flow, tube fouling and plugging are 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 (customizable depending on debris type)
- Housing Material: Corrosion-resistant steel
- Temperature Range: Up to 80°C
- Control System: Programmable Logic Controller (PLC)
- Additional Options: Safety valve integration, Filter Optimization Control Program

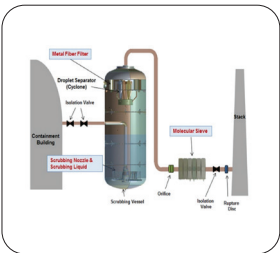
Domestic Track Records			
Main Client	KHNP	POSCO E&C	Hyundai Engineering
Project Name	Saeul NPP #3,4	Pulau Indah CCPP	Datan ADD-ON CCPP No.7
Delivery Year	2018-2020	2023	2022

Overseas Track Records			
Client (Country)	Siemens (Germany)	Wood (Spain)	ENEC (UAE)
ProjectName	Rybnik CCPP	Palu-3 CFPP	Barakah NPP
DeliveryYear	2024	2022	2014-2017

Supplier Information

- Jeongwoo Industrial Machine Co., Ltd.

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.

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.

System, Facility



EX-DRI

Product Description:

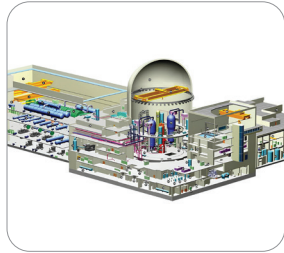
EX-DRI is a heavy-duty vacuum dehydration system designed to remove free, emulsified, and dissolved water from lubricants and hydraulic fluids. Its high-efficiency vacuum chamber and multi-stage filtration ensure optimal fluid cleanliness and extended equipment life. Ideal for power plants and industrial 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 (B>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



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.

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 CCGP	Gumi CCGP	Namyangju CHPP
Delivery Year	2026	2024	2026

Overseas Track Records	
Client (Country)	ARAMCO (Saudi Arabia)
Project Name	Cogen CCGP
Delivery Year	2013

Supplier Information

- SNT Energy Co.,Ltd.



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

System, Facility



HYP0 (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.

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

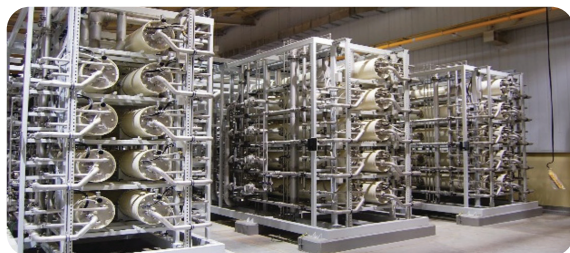
Overseas Track Records

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.

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
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Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.



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

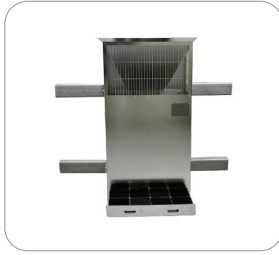
Overseas Track Records

Client (Country)	MWSS(Philippines)
Project Name	Bulacan WTP
Delivery Year	2018

Supplier Information

- Hyorim E&I Corp.

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°C
- 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.



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

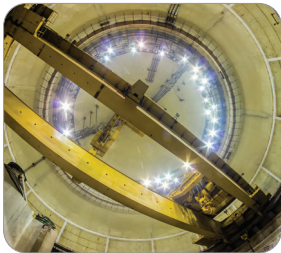
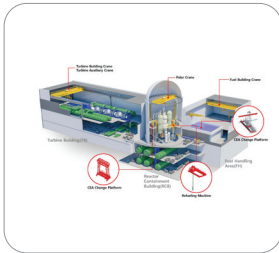
Overseas Track Records

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

System, Facility



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.

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

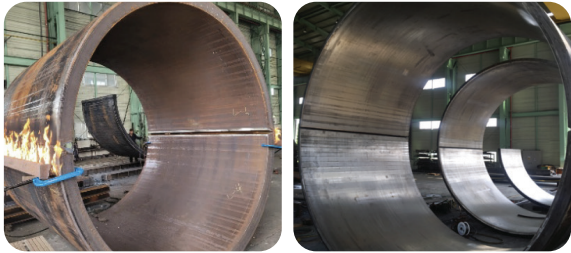
Domestic Track Records		
Main Client	KOSPO	KHNP
Project Name	Samcheok TPP	Hanul NPP

Overseas Track Records			
Client (Country)	Turkmenistan	Uruguay	Morocco
Project Name	Petrochemical Plant	Power Plant	Combined TPP

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.

System, Facility



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)
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Supplier Information

- Seolin Co., Ltd.



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

System, Facility



Solid Waste Compactor

Product Description:

- Services: Compression of radioactive waste
- Characteristics: Automatic 3-stage compression function

Specification:

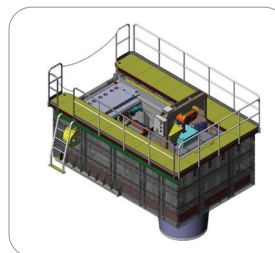
Basic 30 ton compression force (compression force can be changed)

Domestic Track Records

Main Client	KHNP
Project Name	Solid Waste Compactor
Delivery Year	2019

Supplier Information

- Korea Radiation Shield Engineering



SWS (Shielded Work Station)

Product Description:

SWS (Shielded Work Station) is equipment used in CANDU-type NPPs 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

Domestic Track Records

Main Client	KHNP
Project Name	Wolsong NPP #3,4
Delivery Year	2008

Overseas Track Records

Client (Country)	Cernavoda(Romania)	Qinshan(China)
Project Name	Cernavoda NPP #2	Qinshan Phase III 1&2
Delivery Year	2013	2008

Supplier Information

- Moojin Keeyeon Co., Ltd.

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.



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

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.

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.

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:

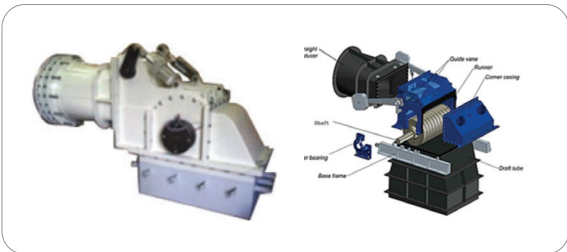
- ANSI / BHMA A 156
- Door locking System / Exit Device, Mortise lock, Gear Latch, Handle etc.
- Door closer, Hinge, Anchor etc.
- UL 10B/10C, Air Leakage Test, Blast Test
- KEPIC SWS - MT

Domestic Track Records	
Main Client	Samsung C&T
Project Name	Saeul NPP #3,4
Delivery Year	2024

Supplier Information

- HANADAPCO., Ltd.

Turbine



Cross Flow Hydro Turbine

Product Description:

A small hydropower generation system using an impulse turbine, applicable to general rivers (freshwater).

Specification:

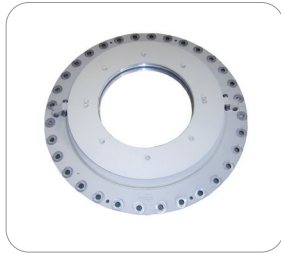
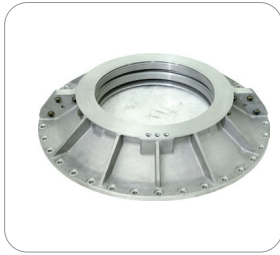
- Power Output: Approximately 300 kW
- Reaction Turbine
- Designed for Medium Head and Medium Discharge Conditions
- Single Regulation via Distributor Control

Domestic Track Records	
Main Client	POSCO E&C
Delivery Year	2024

Supplier Information

- Asian Power & Energy Corp.

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

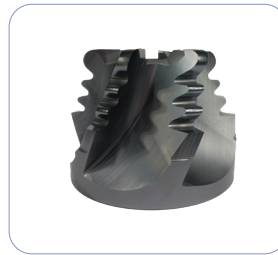
Main Client	Doosan
Delivery Year	1996~

Overseas Track Records

Client (Country)	GE Vernova	GE Energy Parts	Toshiba Energy
Delivery Year	2002~	2002~	2005~

Supplier Information

- Korea Radiation Shield Engineering



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

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

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

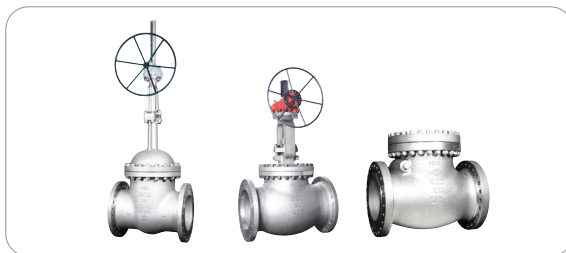
Domestic Track Records			
Main Client	LG Chemical	POSCO	Lotte Chemical
Project Name	Daesan	Kwangyang	Daesan
Delivery Year	2024	2024	2023

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.

Valve, Actuator



Cast Steel Valve(Gate, Globe & Check Valve)

Product Description:

- A gate valve is characterized by a sliding wedge that is moved by an actuator perpendicular to the flow direction. It is primarily used as a stop valve to fully open or close the flow. It is suitable for slurries, viscous fluids, etc. It has a small pressure drop when fully open and provides a tight seal when fully closed.
- A globe valve is used where throttling, or both throttling and shutoff, are required. It may also be used for on-off service. However, due to the high pressure drop, such applications are limited to cases where the valve is normally closed and the pressure drop is not significant.
- A check valve is designed to open automatically under forward flow and to close under reverse flow in horizontal or vertical (upward flow only) piping runs. It has the advantage of a low pressure drop and is therefore well suited for high-velocity applications.

Several trim combinations available for various services Straight-through port design offers good flow with minimal frictional loss and turbulence Cast steel valve is suitable for applications requiring strength, shock resistance, elongation, and heat resistance

Specification:

- Type: Cast Steel Valve (Gate, Globe, and Check Valve)
- Material: Carbon Steel, Alloy Steel, Stainless Steel, Duplex Stainless Steel, Special Alloy Steel, ASME SA designated materials
- Class Rating: 150LB ~ 4500LB & Special
- Size: Gate Valve: 1/2" ~ 92"
Globe Valve: 1/4" ~ 36" / Check Valve: 1/2" ~ 60"

Domestic Track Records

Main Client	KHNP, KPECO, 5 Power companies & major EPCs, S-oil, etc.
Project Name	Shin-Hanul NPP #1, 2, Shin-kori NPP #5, 6, Shin-Seochon TPP, S-oil RUC, GS-Caltex MFC, etc.
Delivery Year	2015-2019

Overseas Track Records

Client (Country)	ENEC, Aramco, ADNOC, Petrofac, Dosa, Tecnicas, Kawasaki, CTCL, Tokyo Gas, etc.
Project Name	Barakah NPP 204, P206 B, P209, Rabigh Phase II Petrochemical CP1, Jubail Export Refinery Package 5B, RRW, RE, etc.
Project Name	2021

Supplier Information

- PK Valve Co., Ltd.

Valve, Actuator



Control Valve

Product Description:

- 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

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

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

Supplier Information

- YPP Corporation



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.

Valve, Actuator



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.)

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.

Valve, Actuator



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

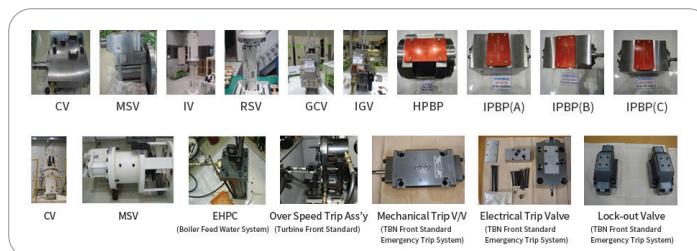
Domestic Track Records	
Main Client	KEPCO's subsidiaries
Project Name	Samcheonpo TPP
Delivery Year	2023

Overseas Track Records	
Client (Country)	NS2PC (Vietnam)
Project Name	Test-Bed
Delivery Year	2024

Supplier Information

- Seo-heung MCO

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, CCGP 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
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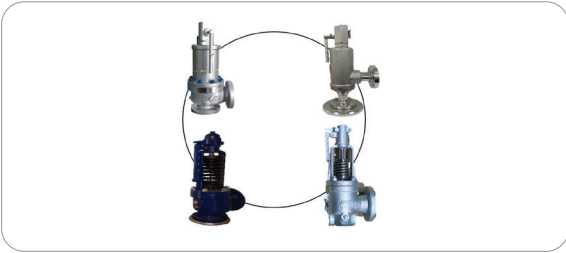
Overseas Track Records

Client (Country)	MHPS (Japan)
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Supplier Information

- enesG Co., Ltd.

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

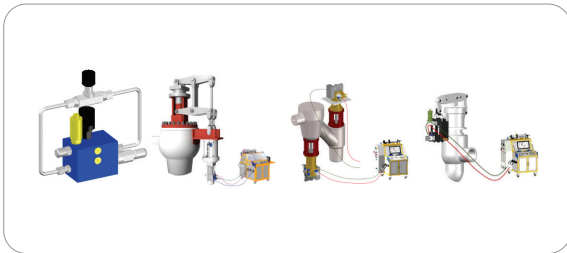
Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4
Delivery Year	~2024

Supplier Information

- Smart Valve Company(SVC Inc.)

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

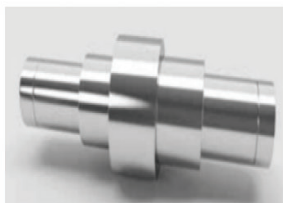
Domestic Track Records

Main Client	KHNP
Project Name	Turbine Valve Actuator Prediction Diagnostic Test Equipment
Delivery Year	2018, 2023, 2024

Supplier Information

- Future Automation Co., Ltd.

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.

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:

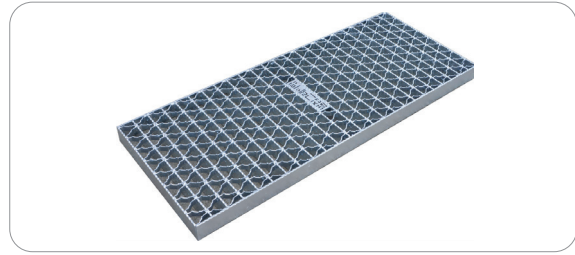
- RI Hot Cell
- Medical Hot Cell
- GMP Class A
- GMP Class B
- GMP Class C

Domestic Track Records

Main Client	KAERI
Project Name	RI Glove Box
Delivery Year	2017

Supplier Information

- Korea Radiation Shield Engineering



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.

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

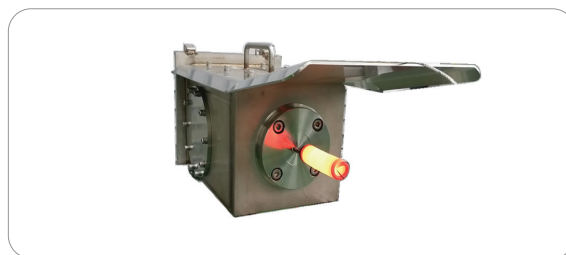
Specification:

- 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



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

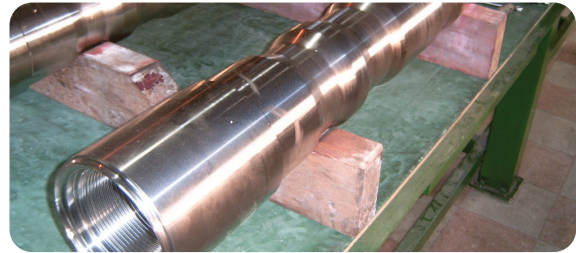
Domestic Track Records	
Main Client	KHNP
Project Name	Saeul NPP #3,4
Delivery Year	2021

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.

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

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.

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 griego 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

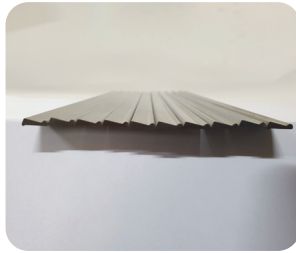
Overseas Track Records

Client (Country)	Barakah NPP (UAE)
Project Name	CP-P2 Insulation 1~4
Delivery Year	2014~2022

Supplier Information

- APROGEN I&C, inc

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)

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:

- Electric 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.



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:

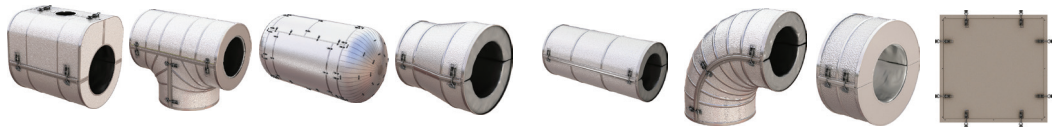
- Lead Shielding Door
- Concrete Shielding Door
- PE Shielding Door

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

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℃ to 1,100℃.
- 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.

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

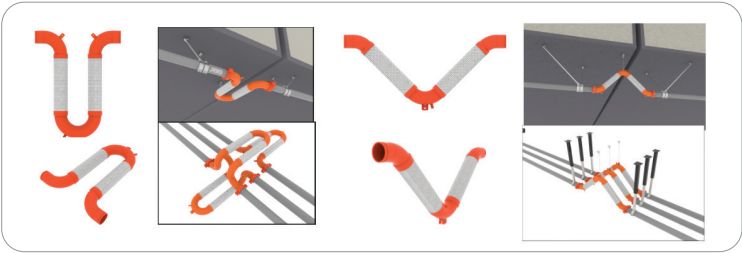
Domestic Track Records			
Main Client	Daewoo E&C	Hyundai E&C	Hyundai E&C
Project Name	Shin-Wolsong NPP #1,2	Shin-Hanul NPP #1,2	Shin-Hanul NPP #3,4
Delivery Year	2006-2010	2012-2016	2025-

Overseas Track Records	
Client (Country)	Hyundai E&C (UAE)
Project Name	Barakah NPP
Delivery Year	2011-2017

Supplier Information

- Hyundai Steel

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,

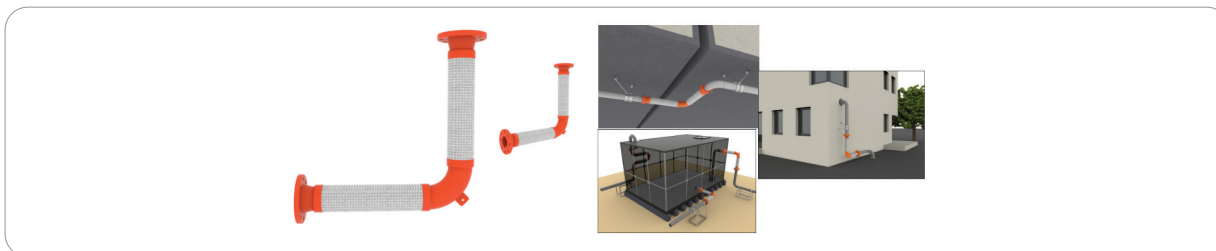
Domestic Track Records		
Main Client	Hanwha E&C	KHNP
Project Name	Hanwha Global N-1	Nuclear Rescsarch Complex
Delivery Year	2024	2025

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.

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): $\pm 25\text{mm}$ $\pm 51\text{mm}$, $\pm 102\text{mm}$, $\pm 203\text{mm}$, $\pm 305\text{mm}$, $\pm 406\text{mm}$, $\pm 610\text{mm}$,

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.

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	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

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.

Battery, Charger	109
Cable, Probe	109
Cathodic Protection, Electrode	110
Generator	115
Light	116
Panel	120
Switch, Circuit Breaker	122
Switchgear, MCC	123
Terminal Block, Terminal Lug	127
Transformer	129
Etc.	133



ELECTRICAL

Battery, Charger



Battery Charger

Product Description:

It consists of a rectifier, choke, alarm, and protection circuits.

When supplied with 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

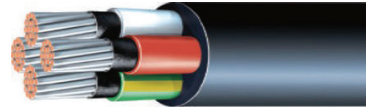
Description	Phase	Voltage	Stability
Input	1Ø or 3Ø	120VAC~480VAC	±10%
Output	1Ø or 3Ø	120VAC~480VAC	±2%

Description	Frequency	Capacity
Input	50/60Hz	800kVA Max.
Output	50/60Hz	

Supplier Information

- International Electric Co., Ltd.

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.

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	ECOSET	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

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.

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

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

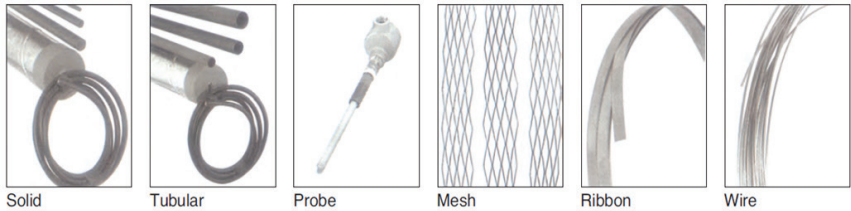
Overseas Track Records

Client (Country)	Ilshin	Doosan Enerbility
Project Name	PHU MY3 U/G Pipe	Amata TPP #4, 5
Delivery Year	2024	2018

Supplier Information

- Prime Corporation

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

Cathodic Protection, Electrode



Pt-Ti Anode

Product Description:

- Coating Thickness(micro-inches): 100~300
- Consumption rate(kg/A-yr): 6×10^{-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

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 Ecoengineering	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.

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.



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.

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.



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.

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.

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 1×10^4 Gy ~ TID 8×10^5 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	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.

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

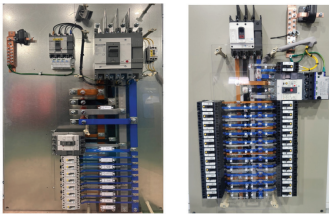
Domestic Track Records			
Main Client	KHNP	KHNP	KEPCO E&C
Project Name	Operating NPPs	Shin-Hanul NPP #3, 4	ARA
Delivery Year		2025	2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP #1~4

Supplier Information

- Nambuk Electric Co.,Ltd.

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.

Local/Aux Control Panel

Product Description:

- 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	Hanul Maintenance Workshop(KHNP)	Hanbit NPP #3,4(KHNP)
Project Name	Control console HVAC & Other	Local Control Station 125vds. Co
Delivery Year	2024	2024

Supplier Information

- YPP Corporation

Panel



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 Taean 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.



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.

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.



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.

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.



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.

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.



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.

Switchgear, MCC



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.



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 Expansión Subestación Centro de Operaciones 138/12.5kV	Sal de Oro Power Supply System
Delivery Year	2022	2024	2022

Supplier Information

- KwangMyung Electric Co., Ltd.

Switchgear, MCC



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.



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

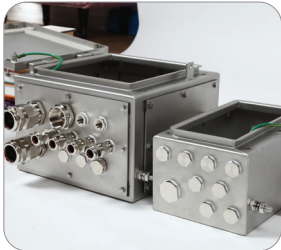
Overseas Track Records

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.

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.



Terminal

Product Description:

Provides electrical connection points; supports stable current flow with high conductivity and reliability.

Specification:

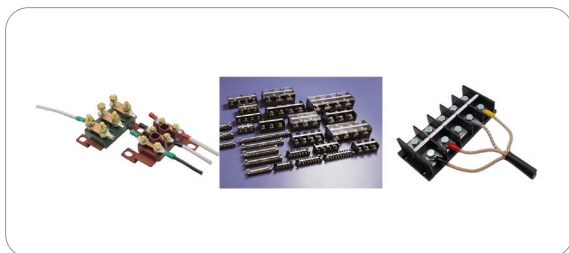
- Certification: UL, LR, DNV.GL, TUV

Domestic Track Records	
Main Client	Doosan
Delivery Year	2024

Supplier Information

- Tae Sung Industrial Systems Co., Ltd.

Terminal Block, Terminal Lug



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.



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.

Terminal Block, Terminal Lug



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.

Transformer



Automatic Voltage Regulator (Regulating Transformer)

Product Description:

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
Input	1Ø or 3Ø	120VAC~480VAC	±10%
Output	1Ø or 3Ø	120VAC~480VAC	±2%

Description	Frequency	Capacity
Input	50/60Hz	800kVA Max.
Output	50/60Hz	

Supplier Information

- International Electric Co., Ltd.

Transformer



Cast Resin Transformer

Product Description:

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

Supplier Information

- International Electric Co., Ltd.



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.

Transformer



Distribution Transformer

Product Description:

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

Supplier Information

- International Electric Co., Ltd.



Pad-Mount Transformer

Product Description:

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 10MVA - 36kV

Supplier Information

- International Electric Co., Ltd.

Transformer



Power Transformer

Product Description:

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

Supplier Information

- International Electric Co., Ltd.



Step Voltage Regulator

Product Description:

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.

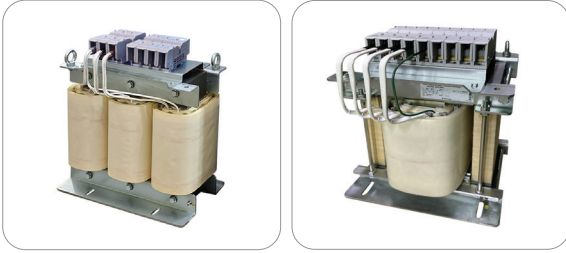
Specification:

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

Supplier Information

- International Electric Co., Ltd.

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.

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.

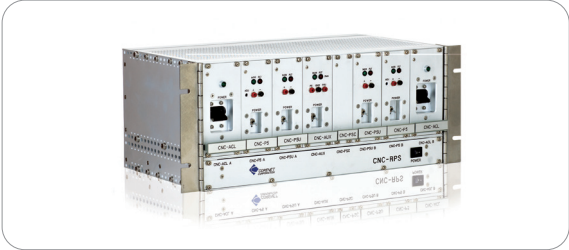
Specification:

- 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℃

Supplier Information

- Dong-A Bestech Co., Ltd.

Etc.



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

Inverter

Product Description:

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
Input	1Ø or 3Ø	120VAC~480VAC	±10%
Output	1Ø or 3Ø	120VAC~480VAC	±2%

Description	Frequency	Capacity
Input	50/60Hz	800kVA Max.
Output	50/60Hz	

Supplier Information

- International Electric Co., Ltd.

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



Rectifier (Oil Type)

Product Description:

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

Specification:

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

Description	Phase	Voltage	Stability
Input	1Ø or 3Ø	120VAC~480VAC	±10%
Output	1Ø or 3Ø	120VAC~480VAC	±2%

Description	Frequency	Capacity
Input	50/60Hz	800kVA Max.
Output	50/60Hz	

Supplier Information

- International Electric Co., Ltd.

Etc.



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.



UPS

Product Description:

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
Input	1Ø or 3Ø	120VAC~480VAC	±10%
Output	1Ø or 3Ø	120VAC~480VAC	±2%

Description	Frequency	Capacity
Input	50/60Hz	800kVA Max.
Output	50/60Hz	

Supplier Information

- International Electric Co., Ltd.

Control & Monitoring System	139
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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.



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

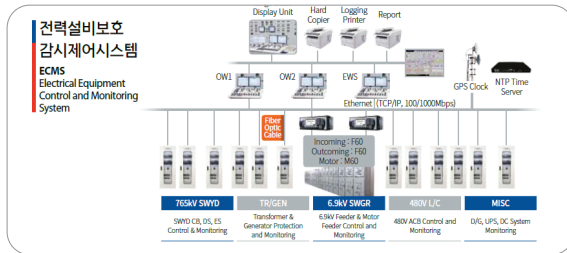
Overseas Track Records

Client (Country)	SK Ningbo, Malaysia Nuclear Research Reactor, Jordan Research Reactor, PEMEX, SHARON
Project Name	ESD, F&G, PICS etc

Supplier Information

- RTP Korea

Control & Monitoring System



ECMS (Electrical Equipment Control and Monitoring System)

Product Description:

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	Samrangjin PSPP(KHNP)	Saeul NPP #3,4 (KHNP)
Project Name	ECMS	Control&Protection relay panel
Delivery Year	2019	2019

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

Supplier Information

- YPP Corporation



Functional Integrated Excitation Controller for Generator (KDR-100)

Product Description:

Equipped with DSP and IGBT semiconductors, the KDR-100 digital excitation control system performs accurate and rapid calculations, with a maximum current output of up to 20 ADC.

Automatic Voltage Regulator (AVR) / Manual Voltage Regulator (MVR) / Over Excitation Limit / Under Excitation Limit / V/Hz Limit / Reactive Current Compensation / Excitation Diode Monitor / Bus Voltage Matching / Island Area Power Plant Operation

Specification:

- Dimension: 200*190*300
- Weight: 10kg
- Rated voltage: 220 VAC
- HS Code: 8537.10-9000

Domestic Track Records	
Main Client	KEPCO
Project Name	Island Area PowerPlant KDR-100
Delivery Year	2019

Supplier Information

- E2S Co.,Ltd.

Control & Monitoring System



Generator Excitation System Test Simulator (RTS-7000)

Product Description:

This equipment can test the excitation system under the same operating conditions as a generator by generating simulated power signals without driving the generator or turbine.

It enables comprehensive testing and evaluation of the functional performance of the generator's automatic voltage regulator (AVR).

AVR/MVR Operation Test / AVR PT Loss Test / AVR Raise/Lower Test / V/Hz Limit Test / OEL/UEL Test / PSS Test

Specification:

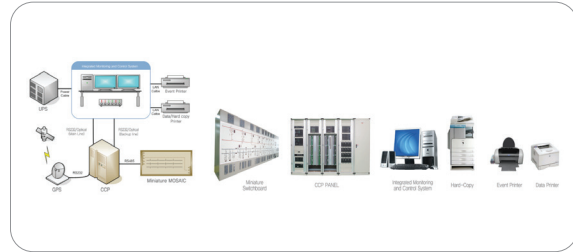
- Dimension: 553*600*625
- Weight: 60kg
- Rated Voltage: 220Vac
- HS Code: 8537102000

Domestic Track Records

Main Client	KHNP
Project Name	Wolsong NPP
Delivery Year	2019

Supplier Information

- E2S Co.,Ltd.



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.

Control & Monitoring System



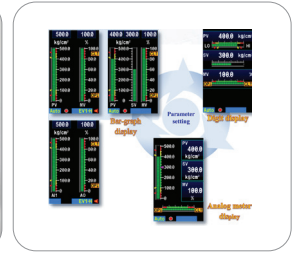
Multi-Purpose Aerosol Control System

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.



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: $\pm 0.2\%$ of full span (at reference condition)

Domestic Track Records

Main Client	KHNP
Project Name	Kori, Hanbit NPP
Delivery Year	2006 ~

Supplier Information

- WOOJIN INC

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): $\pm 0.2\%$ of full span(mV, VDC, mV), $\pm 0.5\%$ of full span(TC, RTD)
- Analog Output: 4 ch / mA, VDC / range: 0 ~ +10VD, 0 ~ +20mA / Accuracy: $\pm 0.2\%$ 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

- WOOJIN INC



OPERASYSTM-1400 (DCS, Distributed Control System)

Product Description:

OPERASYSTM-1400, Woori Technology's flagship product, is built on industry-standard VME-BUS hardware and equipped with a high-speed CPU. It is a highly reliable controller capable of executing high-speed control tasks in as little as 10 milliseconds, with redundancy for key components. As a versatile, multi-functional, and open system, it can be freely configured based on plant size and supports flexible interfaces 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	Shin-Kori NPP #5,6 DCS Diagnostic Equipment	Shin-Hanul NPP #3,4 DCS
Delivery Year	2023	2027 (Expected)

Supplier Information

- Woori Technology Inc.

Control & Monitoring System



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.



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.

Control & Monitoring System



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.



VibLow7000

Product Description:

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)	MVSACMEI TECHNOLOGIES (India)
Delivery Year	2022	2024	2024

Supplier Information

- NADA Co., Ltd.

Control & Monitoring System



VMS (Vibration Monitoring System)

Product Description:

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

Domestic Track Records

Main Client	KHNP	KHNP	KHNP
Project Name	Chuncheon & Cheongpyeong Hydroelectric Generator VMS	Cheongsong Pumped Storage VMS	Yecheon Pumped Storage 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
Delivery Year	2024	2024	2024

Supplier Information

- NADA Co., Ltd.

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 $\pm$ 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



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.

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

Domestic Track Records			
Main Client	KHNP	KHNP	KAERI
Project Name	Hanul NPP #3	Hanbit NPP #3	Isotope Utilization Center
Delivery Year	2011	2019	2017

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	NAVY	KORAD
Project Name	Naval Maintenance Depot	Radioactive Waste Storage Facility
Delivery Year	2022	2023

Supplier Information

- U2NG Co., Ltd.

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:

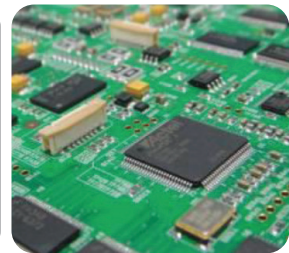
- Capable of simultaneously receiving dozens of AC/DC signal channels.
- Records data in milliseconds before and after a fault occurs.
- Automatically estimates the location of the fault.
- Allows configuration and data analysis via a web browser over the Internet/Intranet.
- Enables precise operation 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.



Field Programmable Gate Arrays Diverse Protection System

Product Description:

It reliably protects the power plant by shutting down the reactor and turbine, and activating the auxiliary water supply system in the event of a protection system failure.

After implementing the design using basic logic elements such as AND/OR gates and flip-flops, the components are interconnected to perform logic operations.

In addition, the simple structure facilitates easy hardware development.

Specification:

- Size: (W)482.8mm x (H)177mm x (D)342mm
- Operating 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

Supplier Information

- Woori Technology Inc.

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.

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.

Indicator, Sensor



Averaging Pitot Tube Flowmeter(SAP-810)

Product Description:

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
- Turndown Ratio: 5:1

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

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

Supplier Information

- Seojin Instech Co., Ltd.

Indicator, Sensor



Displacement Type Level Transmitter (Model: DT-420)

Product Description:

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	Shin-Kori NPP 5&6	Yeongdong TPP	Ulsan CHPP
Delivery Year	2023	2024	2024

Overseas Track Records

Client (Country)	Barakah NPP (UAE)	Vietnam
Project Name	Shin-Wolsong NPP #1, 2 (N201)	Thai Binh TPP #2
Delivery Year	2023	2024

Supplier Information

- Seojin Instech Co., Ltd.

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% @ $\leq 20^\circ\text{C}$ and $\geq 70^\circ\text{C}$
- 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



Electromagnetic Flowmeter
(Model: SMF)

Product Description:

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 $\pm 0.5\%$ 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: 5 $\mu\text{S}/\text{cm}$
- Accuracy: $\pm 0.5\%$ F.S ($\pm 0.2\%$ of rate, 0.1m/s-option)
- Communication: HART, RS-485, TMS, USB

Domestic Track Records

Main Client	SK Chemicals	EWP
Project Name	N/A	Dangjin TPP
Delivery Year	2024	2024

Supplier Information

- Seojin Instech Co., Ltd.

Indicator, Sensor



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



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

Indicator, Sensor



Ferro Mon Sensor

Product Description:

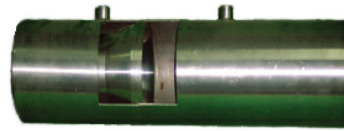
The Ferro Mon Sensor continuously monitors ferrous wear debris in lubricants using magnetic flux technology. It detects real-time iron particle concentration to identify abnormal wear at an early stage. Ideal for gearboxes and rotating equipment, it enhances predictive maintenance and reduces downtime.

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



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~

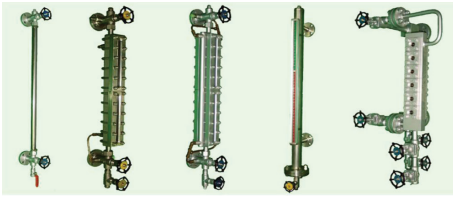
Overseas Track Records

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.

Indicator, Sensor



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.P.P.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.



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: 1 μ m
- 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

Indicator, Sensor



Magnetic Float Level Switch
(Model: SMC-7)

Product Description:

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 VAC / 0.6 A 125 VDC, 5 A 250 V AC / 0.5 A 125 VDC
15 A 250 VAC / 1 A 125 VDC

Domestic Track Records			
Main Client	KHNP	DAEWOO E&C	Hyundai
Project Name	Shin-Kori NPP #5,6	Shin Sejong CCPP	Ulsan CHPP
Delivery Year	2022	2024	2024

Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	Saudi Arabia
Project Name	Barakah NPP #1~4	Jafurah CHPP
Delivery Year	2023	2024

Supplier Information

- Seojin Instech Co., Ltd..



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:

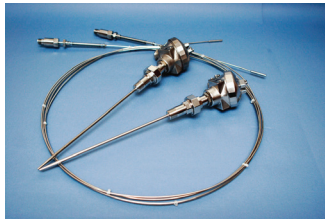
- Size: 6 inch, 3.5 inch
- Seismic Category: I, II (Q,A,S Quality Class)
- Bar Display: Full color TFT-LCD Type, Tri-color (Red/ Yellow/Green)
- Digit Display: Full color TFT-LCD, Green color
- Accuracy: 0.01% of full span ± 1 count (at reference condition)
- Power: Line Voltage 120VAC, 60Hz(Free Voltage)

Domestic Track Records	
Main Client	KHNP
Project Name	Kori, Saeul, Hanbit, Hanul, Wolsong NPP
Delivery Year	2011 ~

Supplier Information

- WOOJIN INC

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(PT100Ω): 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



Orifice Assembly (SOP)

Product Description:

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	Shin-Kori NPP # 5,6	Shin-Kori NPP # 5,6
Delivery Year	2024	2024

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

Supplier Information

- Seojin Instech Co., Ltd.

Indicator, Sensor



Particle Counter for Laboratory

Product Description:

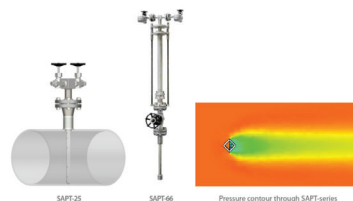
Particle Counter for Laboratory uses laser light scattering to detect and count particles suspended in lubricants or hydraulic fluids. It provides real-time contamination analysis based on ISO 4406, NAS 1638, or SAE AS 4059. Widely used in critical industries, it ensures fluid cleanliness for equipment protection and reliability.

Specification:

- Light Source: Semiconductor Laser
- Measurement Range: 1 μ m-100 μ m
- Sensitivity: 1 μ m (ISO4402) or 4 μ m(c) (ISO11171)
- Measuring Channel: 16 Channels, setting any particle size within 1 μ m-100 μ m
- 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



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.P.P.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.

Indicator, Sensor



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.



Radar Type Level Transmitter (SR-100)

Product Description:

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

Supplier Information

- Seojin Instech Co., Ltd.

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.



Speed Sensor and Acceleration Sensor Diagnostic System

Product Description:

Check the integrity of the sensors (displacement, vibration and speed) used with large-scale rotary equipment such as power plant turbine, high-pressure pump

- Speed Pickup Sensor - Measure sensitivity by velocity
- Displacement Sensor - Measure sensitivity by distance
- Speed/acceleration Sensor - Measure sensitivity by frequency change

Domestic Track Records

Main Client	Korea East-West Power
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Supplier Information

- Realgain. Co., Ltd.

Indicator, Sensor



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.



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.

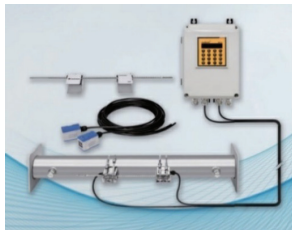
Specification:

- Measures: Relative Humidity (RH%), Total Water (ppm), Temperature (°C), RUL (%)
- Relative Humidity Resolution: 0.01%
- Relative Humidity Display Range: 1~100%
- Relative Humidity Accuracy: $\pm 2\%$ @20~70°C, $\pm 3\%$ @ $\leq 20^\circ\text{C}$ and $\geq 70^\circ\text{C}$
- Absolute Water Resolution: 1ppm
- Absolute Water Display Range: 0~50,000ppm / 0~100,000ppm / 0~200,000ppm
- Total Water Accuracy: Typical calibrating measuring oil: $\pm 100\text{ppm}(\pm 0.01\%)$, Typical no calibrating measuring oil: $\pm 1000\text{ppm}(\pm 0.1\%)$
- 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

Indicator, Sensor



Ultrasonic Flow Meter

Product Description:

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.

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: $\pm 1\%$ (for flow rates over 0.5 m/s)
- Temperature:
 - Std.: $-30 \sim 90^{\circ}\text{C}$
 - Max.: $-30 \sim 160^{\circ}\text{C}$
- Fluid Compatibility: Suitable for liquids, gases, and slurries
- Output: 4-20mA, RS-485 Modbus communication

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

Supplier Information

- Seojin Instech Co., Ltd.



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: $0^{\circ}/45^{\circ}$ 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: $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- 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

Indicator, Sensor



VENTURI (Model: SVT)

Product Description:

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	Shin-Kori NPP #5, 6	Nuclear Fusion
Delivery Year	2024	2020

Supplier Information

- Seojin Instech Co., Ltd.



Videoscope

Specification:

- Scope dia.: $\Phi 4\text{mm}$ or 6mm x Length: $2,000 \times 10,000\text{mm}$
- 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

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:

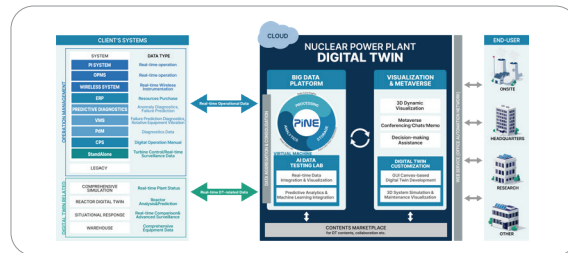
- 231(H) × 433(W) × 517(D)mm, depending on socket size
- 25kg, depending on socket weight

Domestic Track Records

Main Client	KHNP
Project Name	Kori, Wolsong, Hanul, Hanbit NPP
Delivery Year	2021~2025

Supplier Information

- Enersys Co., Ltd.



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.

Etc.



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.



IP Page Phone Systems

Product Description:

The IP page phone system is operated on network environment and 1 page channel and 10 call channels, and the IP paging broadcast zone can be easily expanded. Also provides remote function for monitoring, control and upgrade for IP Page Phone.

Specification:

- 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 x 4 Port (Fiber port: Option)

Supplier Information

- Ilshin EDI Co., Ltd.

Etc.



IPHS-2000W
(Indoor Wall Type)

IP Page Phone Systems

Product Description:

The IP page phone system is operated on network environment and 1 page channel and 10 call channels, and the IP paging broadcast zone can be easily expanded. Also provides remote function for monitoring, control and upgrade for IP Page Phone.

Specification:

- 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 x 4 Port (Fiber port: Option)

Supplier Information

- Ilshin EDI Co., Ltd.



IPHS-2000WO
(Outdoor Wall Type)

IP Page Phone Systems

Product Description:

The IP page phone system is operated on network environment and 1 page channel and 10 call channels, and the IP paging broadcast zone can be easily expanded. Also provides remote function for monitoring, control and upgrade for IP Page Phone.

Specification:

- 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 x 4 Port (Fiber port: Option)

Supplier Information

- Ilshin EDI Co., Ltd.

Etc.



ExHS-IP Series
(Explosion Proof Type)

IP Page Phone Systems

Product Description:

The IP page phone system is operated on network environment and 1 page channel and 10 call channels, and the IP paging broadcast zone can be easily expanded. Also provides remote function for monitoring, control and upgrade for IP Page Phone.

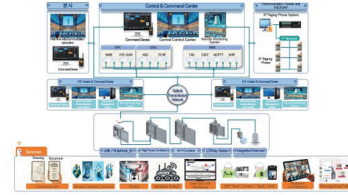
Specification:

- 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 x 4 Port (Fiber port: Option)
- Explosion proof certificate:
 - Ex d IIB+H² T6 (Gas)
 - Ex tD A21 T85°C (Dust)

Supplier Information

- Ilshin EDI Co., Ltd.

The world's first nuclear power plant-specific
The nuclear power plant specific wireless communication network system is self-integrating network that allows PS-LTE, or 4G-LTE, and 5G-LTE frequencies. It consists of a Core Network (EPC, UDC, MGS) and an ACCESS network (RU (Routers, BS), along with high-power combiners, Wi-Fi Combiners, splitters, and integrated antennas.



Wireless Communication System for Nuclear Power Plants

Product Description:

- 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 NPPs.
- 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-Fi6 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 NRC Reg. Guide 1.180 Rev. 1 and MIL-STD-461E standards

Supplier Information

- Ilshin EDI Co., Ltd.



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.

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.



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.

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

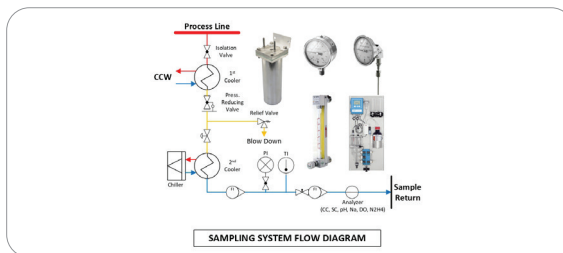
Domestic Track Records			
Main Client	KHNP	Hi Air Korea	KAERI
Project Name	Charcoal	Saeul NPP #3,4	Charcoal 1,000(Kg)
Delivery Year	2024	2024	2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)
Project Name	Barakah NPP Carbon
Delivery Year	2020

Supplier Information

- NAC Co., Ltd.

Etc.



Sampling System

Product Description:

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

Supplier Information

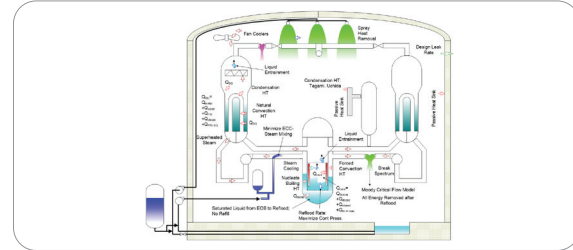
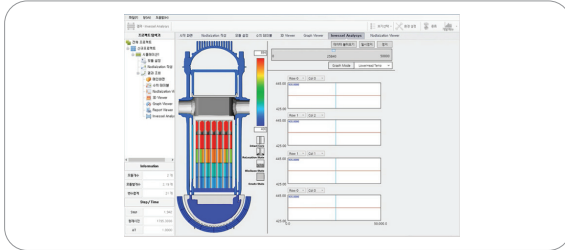
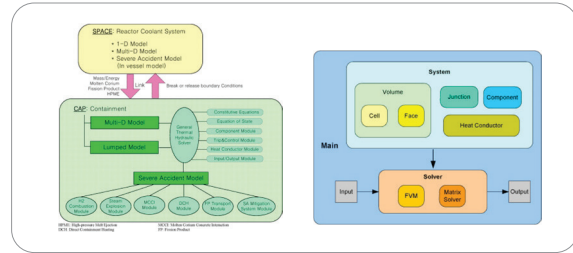
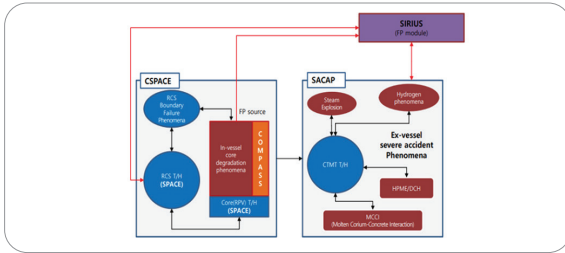
- YPP Corporation

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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.

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)

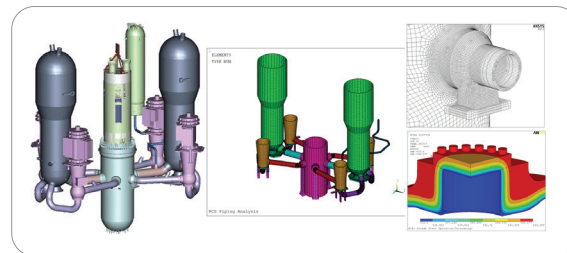
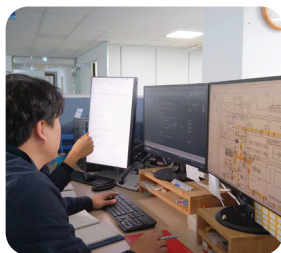
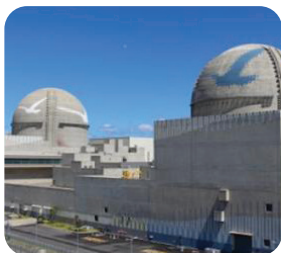
Specification:

- Three-Phase Flow Field Model (Gas, Continuous Liquid, & Droplets)

Supplier Information

- FNC Technology Co., Ltd.

Nuclear, Mechanical



Design Engineering for Nuclear Power Plant

Product Description:

- Registered provider of Q-class design provider for KHNP
- Design improvements for operating NPPs and detailed design for Korean and 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, Shin-Kori #5,6	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)	Barakah NPP (UAE)
Project Name	Detail design for Barakah NPP	Detail design for Barakah NPP
Delivery Year	2011~2025	2011~2018

Supplier Information

- KOCEN Co., Ltd.

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.

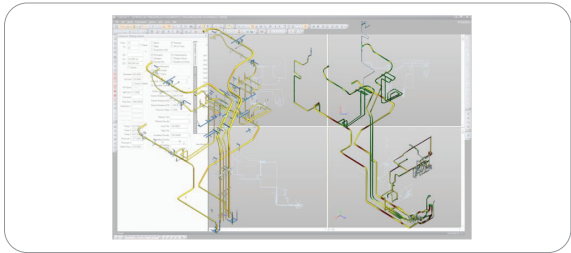
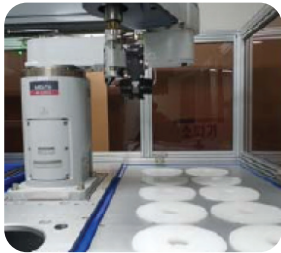
Design reports include tentative sizing and opening reinforcement calculations, as well as all analytical calculations and evaluations needed to verify the structural integrity of the component or structure.

Domestic Track Records			
Main Client	Doosan	Moojin Keeyoon	Hyundai
Project Name	Hanbit NPP #1	Kijangro	Hanbit NPP #3,4 SGR
Delivery Year	2024	2026	2021

Supplier Information

- KOASIS Inc.

Nuclear, Mechanical



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.

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:

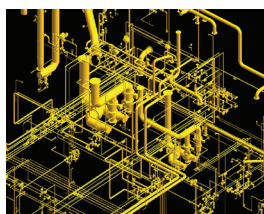
- Stress evaluation for thermal, pressure, seismic, and sustained load conditions
- Analysis performed using CAESAR II (Hexagon) and AutoPIPE (Bentley Systems)
- Verification of support loads, nozzle loads, and expansion joint behavior
- Reports tailored to project documentation standards and client 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.

Nuclear, Mechanical



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

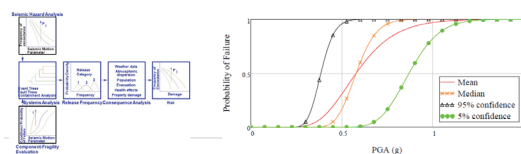
Main Client	Doosan Enerbility	
Project Name	Shin-Hanul NPP #3,4 TBN	Shin-Hanul NPP #1,2 TBN
Delivery Year	2017	2014

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.



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

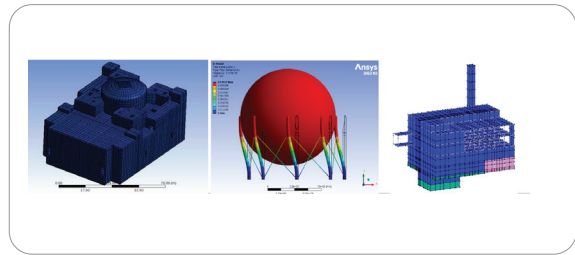
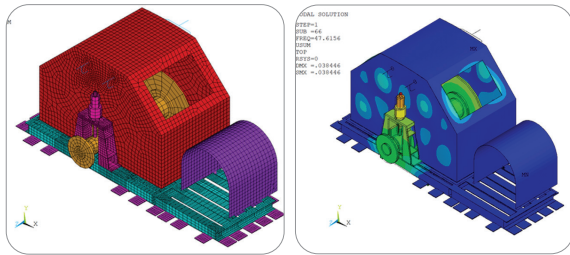
Domestic Track Records

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.

Nuclear, Mechanical



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.

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:

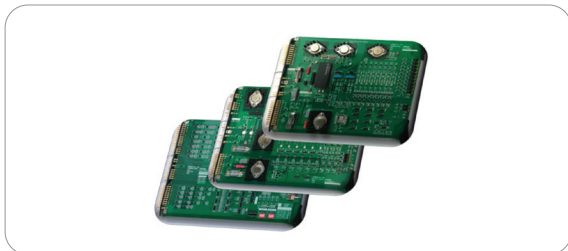
- Structural design of concrete structures & steel structures
- Seismic qualification of equipment & structures
- Soil-Structure Interaction analysis
- Dynamic identification testing
- Seismic isolation design & vibration control

Domestic Track Records		
Main Client	KHNP	KOGAS
Project Name	Qualification Test of CEA	LNG tank design
Delivery Year	2022	2024

Supplier Information

- Innose Tech Co., Ltd.

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.

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

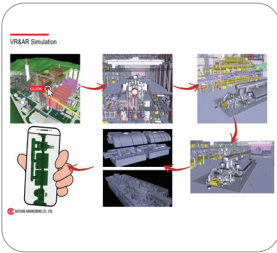
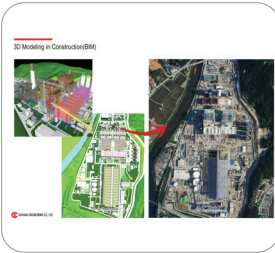
Overseas Track Records

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.

Other Services



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.

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.

Other Services



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:

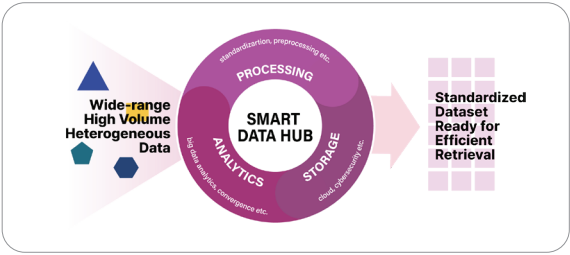
- Operate and visualize the entire unit 3D model of a NPP unit in a web environment.
- Integration of the 3D model with the construction schedule and progress management system allows for comprehensive visualization and simulation of construction data.
- A self-developed tracking algorithm provides accurate 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.

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

Other Services



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.

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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.

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.

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

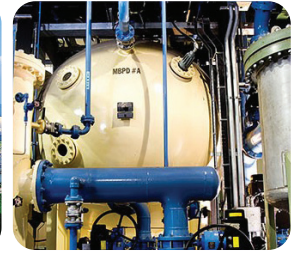
Main Client	KHNP	Other Company
Project Name	NPP	Saeul NPP #3

Overseas Track Records

Client (Country)	UAE
Project Name	Barakah NPP #1~4

Supplier Information

- Geumhwa Water Treatment Service Co., Ltd.



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.

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



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

Inspection, Assessment



Actuator Diagnostic Test Block Module (DBM)

Product Description:

- Actuator Diagnostic Testing & Hydraulic Fluid Filtration Solution

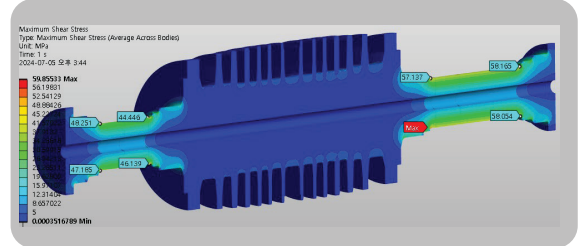
Specification:

- Model: MR/DM-ETS-01
- Dimension: 250*70*260mm
- Material: SUS304, AL60**
- Pressure: ~250bar
- 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.



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

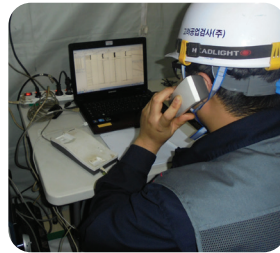
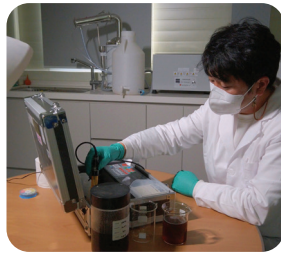
Domestic Track Records	
Main Client	KHNP
Project Name	NDE for TBN Rotor
Delivery Year	2020~2025

Overseas Track Records	
Client (Country)	Barakah NPP (UAE)

Supplier Information

- Korea Industrial Testing Co., Ltd.

Inspection, Assessment



Concrete Quality Test for Nuclear Power Plant

Product Description:

- Extensive experiences in testing and quality control of concrete materials for nuclear power plants and radwaste disposal facilities in all Korean nuclear power plants and UAE Barakah NPPs as a Korea's No.1 provider.
- 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	Quality surveillance for all Korean NPPs
Delivery Year	1999~2025

Overseas Track Records

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

Supplier Information

- Kocen Co., Ltd.

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)
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Supplier Information

- Korea Industrial Testing Co., Ltd.

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.



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

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.



Power Converting Module(PCM), Power Switch Assembly(PSA) Diagnostic Equipment

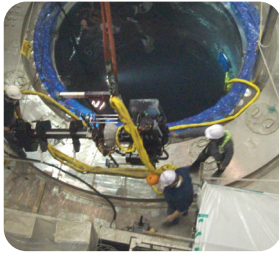
Product Description:

- Diagnose the integrity of the PCM in the power plant
- Diagnose the installed PCM without disassembly
- Test Items: The aging of SCR, Capacitor-Resistor, Sampling Resistor

Supplier Information

- Realgain.Co.Ltd

Inspection, Assessment



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

Product Description:

ISI (In-service inspection) Services of the major components and system of NPPs 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:

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

Domestic Track Records			
Main Client	Doosan	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 ~

Supplier Information

- Sae-an Engineering Corporation

Quality Surveillance for Nuclear Power Plant

Product Description:

- Quality surveillance of equipment materials, survey, inspection, expediting, and technical consulting at all Korean NPPs, the UAE Barakah NPPs and the ARA research reactor as a Korea's No. 1 provider.
- Accredited to ISO 9001, ISO 19443, 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.

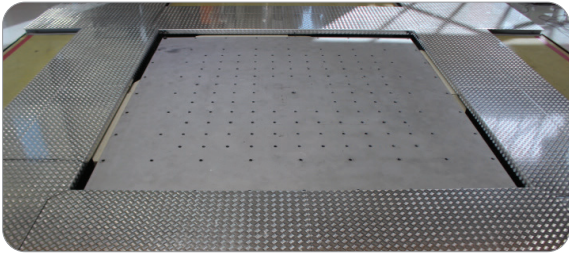
Domestic Track Records	
Main Client	KHNP
Project Name	Quality surveillance for all Korean NPPs
Delivery Year	1999~2025

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

Supplier Information

- Kocen Co., Ltd.

Inspection, Assessment



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.



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:

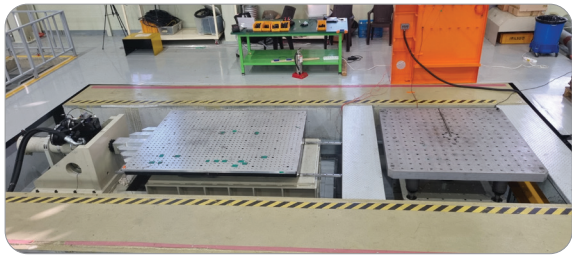
- Table Size: 2.5m x 2.5m
- Max Load: 520 kN [Z]
- Max Velocity: 1.2 m/s
- Max Acceleration: 6 g (2 ton)
- Max Stroke: 320 mm [Z, X]

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.

Inspection, Assessment



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.



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:

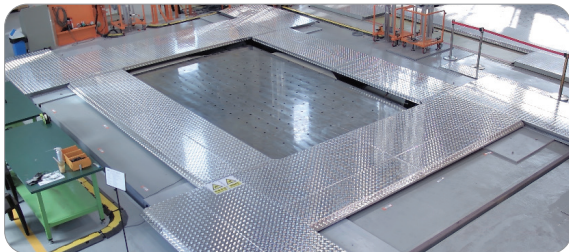
- Table Size: 0.8m x 0.8m
- Max Load: 160 kN (Z)
- Max Velocity: 2.0 m/s
- Max Acceleration: 30 g (100 kg)
- Max Stroke: 250 mm (X)

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.

Inspection, Assessment



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.



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.

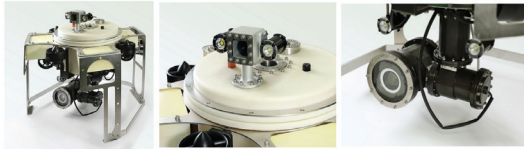
Domestic Track Records

Main Client	KHNP
Project Name	Kori/ Wolsong/Hanbit/Hanul NPP
Delivery Year	2010/2011/2010/2010

Supplier Information

- ORBIS Co., Ltd.

Inspection, Assessment



ROVINS-V1

Product Description:

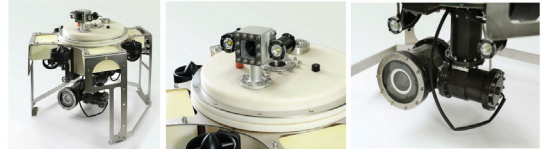
Underwater unmanned mobile robot specialized for underwater exploration and underwater inspection. Precision inspection in the water using PTZ Camera. This robot is actually applied in IRWST (In-containment Refueling Water Storage Tank) of APR1400.

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

Supplier Information

- Young Poong Ind. Co



ROVINS-V2

Product Description:

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

Supplier Information

- Young Poong Ind. Co

Inspection, Assessment



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.



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.

Quality



Document Control for Nuclear Power Plant

Product Description:

- Document control of large-scale construction and operation data for Korean NPPs, the UAE Barakah NPPs, the 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 Reading of Technical Documents
- Consulting of document control etc.

Domestic Track Records		
Main Client	KHNP	
Project Name	Document Control for most Korean NPPs	
Delivery Year	1999~2025	
Overseas Track Records		
Client (Country)	Barakah NPP (UAE)	El-Dabaa (Egypt)
Project Name	Document Control	Document Control
Delivery Year	2010~2025	

Supplier Information

- Kocen Co., Ltd.

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.

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.

KHNP-KNP BUSINESS CATALOGUE

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A stylized, light blue illustration of industrial structures, including a large dome on the left and two tall chimneys in the center, set against a pale blue background.

KHNP-KNP BUSINESS CATALOGUE

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