



# Machinery



## AHU



### Characteristic

Device that breathes in air and pushes out after cooling, heating, dehumidifying, humidifying and purifying the air.

### Main Customer

- KHNP

### Product Specification

- Flux:0~50,000 CFM
- HEATING CAPACITY:0 ~ 600 KW
- COOLING CAPACITY:0 ~ 3,000,000 BTU/H

### Certification

- ISO 9001 certification-KR
- ISO 14001 certification-KR
- OHSAS 18001 certification-KR
- KEPIC-MN/MH/EN certification-Korea Electric Association

## ACU



### Characteristic

Device that ventilates air or purifies the ambient air after filtering radioactive gas & harmful air etc. using filter.

### Main Customer

- KHNP
- ENEC
- Jordan

### Product Specification

- Air volume:0~30,000 CFM
- HEATING CAPATING:0~30 KW

### Certification

- ISO 9001 certification-KR
- ISO 14001 certification-KR
- OHSAS 18001 certification-KR
- KEPIC-MN/MH/EN certification-Korea Electric Association



## FIRE DAMPER



### Characteristic

Device that is installed in the vicinity of passing through fire compartment in duct to block flame, smoke etc. at a fire.

### Main Customer

- KHNP
- ENEC

### Product Specification

- SIZE: '6X6' ~ '84X48'
- TYPE: FL, ETL

### Certification

- ISO 9001 certification-KR
- ISO 14001 certification-KR
- OHSAS 18001 certification-KR
- KEPIC-MN/MH/EN certification-Korea Electric Association

## Air Handling unit (AHU)



### Characteristic

Provide filtered and conditioned air to maintain desired air quality according to the designed specifications using filters, cooling / heating coils and fans

### Main Customer

- KHNP
- ENEC
- China

### Technology Specification

- Air Handling Unit for Nuclear Power Plant is designed, manufactured, tested & inspected by ASME AG-1(KEPIC-MH), AHRI 410, AMCA 210 and ASHRAE 33.

### Product Specification

- Order Made

### Certification

- KEPIC-MN
- KEPIC-MH(EN)
- ASME-U
- ISO-9001
- ISO-14001
- AHRI 410
- AHRI 550

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## Air Cleaning Unit (ACU)



### Characteristic

Remove radio activated air and dust particles from air through Carbon Absorber during normal / accident conditions.

### Main Customer

- KHNP
- ENEC
- China

### Technology Specification

- Air Handling Unit for Nuclear Power Plant is designed, manufactured, tested & inspected by ASME AG-1(KEPIC-MH), AHRI 410, AMCA 210 and ASHRAE 33.

### Product Specification

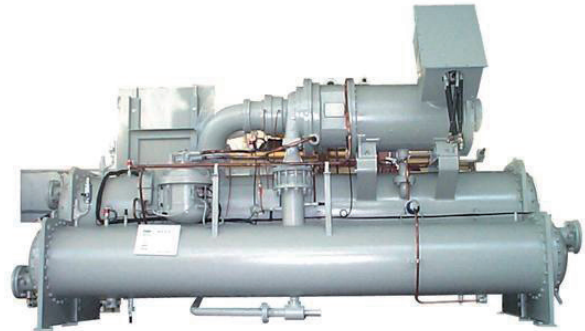
- Order Made

### Certification

- KEPIC-MN
- KEPIC-MH(EN)
- ASME-U
- ISO-9001
- ISO-14001
- AHRI 410
- AHRI 551

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## Centrifugal Water Chiller



### Characteristic

To maintain the desired temperature for all service area according to the designed specifications, provide chilled water to Air Handling Unit and equipment

### Main Customer

- KHNP
- ENEC
- China

### Technology Specification

- Air Cleaning Unit for Nuclear Power Plant is designed, manufactured, tested by ASME AG-1(KEPIC-MH), AHRI-550

### Product Specification

- Order Made

### Certification

- KEPIC-MN
- KEPIC-MH(EN)
- ASME-U
- ISO-9001
- ISO-14001
- AHRI 410
- AHRI 552



## Reactor Containment Fan Cooler (RCFC)



### Characteristic

To cool the atmosphere of reactor containment building and maintain proper ambient design condition during normal and accident condition

### Main Customer

- KHNP
- ENEC
- China

### Technology Specification

- RCFC is designed, manufactured, tested and inspected by ASME AG-1(KEPIC-MH), AHRI and AMCA

### Product Specification

- Order Made

### Certification

- KEPIC-MN
- KEPIC-MH(EN)
- ASME-U
- ISO-9001
- ISO-14001
- AHRI 410
- AHRI 553

## Air Filtration Unit (AFU)



### Characteristic

Remove radio activated air and dust particles from air through Carbon Absorber during normal / accident conditions

### Main Customer

- KHNP
- ENEC
- China

### Technology Specification

- Air Filtration Unit for Nuclear Power Plant is designed, manufactured, tested & inspected in accordance with ASME AG-1(KEPIC-MH), ASME N509, ASME N510

### Product Specification

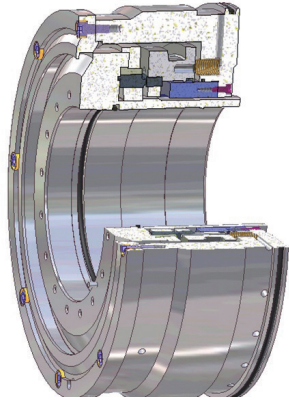
- Order Made

### Certification

- KEPIC-MN
- KEPIC-MH(EN)
- ASME-U
- ISO-9001
- ISO-14001
- AHRI 410
- AHRI 554

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## RCP for MECHANICAL SEAL



### Characteristic

RCP of standard nuclear power plant is a device circulating coolant of high temperature, high pressure between reactor and steam generator, RCP Seal plays a role of preventing coolant equipped with coolant pump.

### Main Customer

- KHNP

### Technology Specification

- Pressure: 155 Bar / Speed: 1200 rpm / Temperature: 300°C

### Product Specification

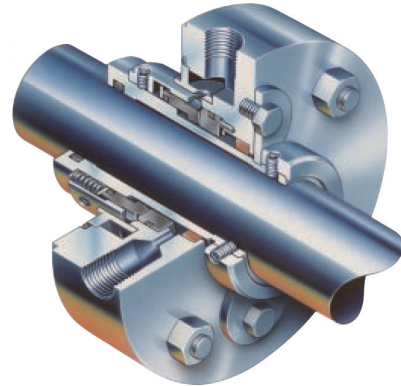
- 420 X 420 X 550(mm)

### Certification

- IAS 9100 C
- ISO 9001
- ISO/TS 16949

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## QBQ



### Characteristic

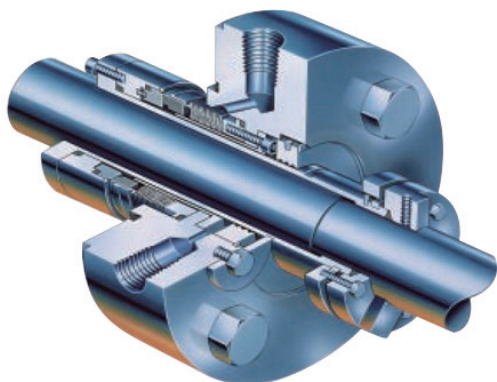
Product meeting a requirement of Single Balanced Multi-Spring Pusher Seal. API 682 TYPE A being universally used for oil refinery & chemistry industry, power plant

### Main Customer

- S-OIL
- Hyundai Oil Bank
- GS-CALTEX
- SK INNOVATION
- ARAMCO



## BXRH



### Characteristic

Product perfectly meeting a requirement of SINGLE, BALANCED, WELDED STATIONARY ALLOY 718 BELLOWS SEAL. API 682 TYPE C suitable for petrochemistry equipment of high temperature. Product that can improve corrosion resistivity & endure high speed.

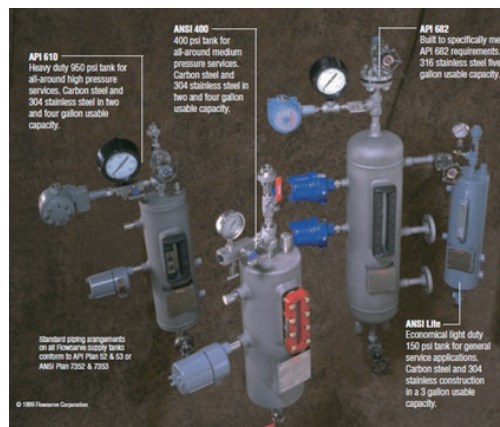
### Main Customer

- S-OIL
- Hyundai Oil Bank
- GS-CALTEX
- SK INNOVATION
- ARAMCO

### Technology Specification

- Pressure:20.7 Bar / Temperature:427°C / Speed:46m/s / SHAFT SIZE:32~146 mm

## Auxiliary device



### Characteristic

Devices such as COOLER, RESERVOIR etc. that are composed of environment able to excise an optimal performance through cooling, lubrication of M/SEAL.

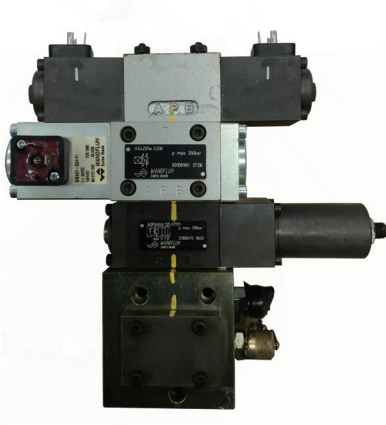
### Main Customer

- S-OIL
- Hyundai Oil Bank
- GS-CALTEX
- SK INNOVATION
- ARAMCO

### Technology Specification

- API 682 and more

## BY-PASS VALVE SYSTEM



### Characteristic

Valve system playing a role at the initial preliminary step of steam turbine operation in the process of circulating steam, heating, passing through to bypass valve and circulating, reheating as a preliminary step before operating main turbine normally in the thermal power generation.

It is composed of HPU, controller, steam valve and actuator etc. and is usually supplied to Package system.

### Main Customer

- KHNP

### Technology Specification

- 250MW, 500MW, 1000MW

### Certification

- ISO 9001 : 2011

## Intake facilities



### Characteristic

Intake facilities - as facilities taking in, screening seawater & fresh water, it is composed of COARSE & FINE screening facilities, having its THROUGH/DUAL/CENTER FLOW & DRUM SCREEN etc.

Sluice facilities - Facilities taking in/discharging/blocking off water to use water resources at the waterway for power generation water, dam & reservoir, others. Sluice facilities are composed of ROLLER GATE, RADIAL GATE, winder etc.

### Main Customer

- Korea Hydro & Nuclear Power
- Korea Western Power
- Midland Power
- Korea East-West Power
- South East Power
- Saudi Arabia, UAE (BNPP1,2,3,4), Iran, Thailand, Malaysia, Indonesia, Libya, Ghana, Algeria, Morocco

### Product Specification

- Separate designed item by business (Order Made)

### Certification

- ISO 9001:2008
- ISO 14001:2004
- OHSAS 18001:2007





## Waste water treatment facilities/ Waste water reutilization facilities



### Characteristic

Pure water treatment facilities - industrial water & pure water treatment facilities that power plant & industrial field need are applied and the various types using economic and easy-to-apply separation membrane on the strength of technology development as well as the existing ion exchange system are supplied. Seawater fresh water treatment facilities- Seawater fresh water treatment facilities using separation membrane of economic and stable reverse osmosis pressure type through technical tie-up with the world leading companies in the seawater fresh water plant field and development of joint project our country pushes ahead with to solve the water shortage problem of the world such as Middle East, Africa, Asia, Australia etc. are supplied both at home and abroad.

### Main Customer

- Songdo Cogeneration
- Hyundai Green Power
- Saudi Arabia, Kuwait, Oman, Iraq, Vietnam, Indonesia, Philippines, Libya, Cote D'Ivoire

### Technology Specification

- Registered as a vendor to overseas ordering organization (SEC/KNPC/TAKREER/ENEC etc.)

### Product Specification

- Separate designed item by business (Order Made)

### Certification

- ISO 9001:2008 / ISO 14001:2004
- OHSAS 18001:2008

## Waste water treatment facilities/ Waste water reutilization facilities



### Characteristic

Waste water facilities / waste water reutilization facilities - The various facilities treating waste water that are generated in the domestic and overseas thermal power/nuclear power plant, petrochemical and industrial plant on the basis of technology accumulated over decades of years are supplied and technology and competitiveness through technical tie-up with the global companies are being secured. Also, we possess reutilization technology able to cope with the climate change such as water shortage etc., reusing the treated water as water for use and supply not only domestically, but also extends to various parts of the world.

### Main Customer

- Korea Hydro and Nuclear Power
- Korea Western Power
- Midland Power
- Korea East-West Power
- South East Power
- Saudi Arabia, UAE (BNPP1,2,3,4,), Kuwait, Vietnam, Malaysia, Indonesia, Uzbekistan, Russia, Libya, Cote D'Ivoire

### Product Specification

- Separate designed item by business (Order Made)

### Certification

- ISO 9001:2008
- ISO 14001:2004
- OHSAS 18001:2009

## UF (Ultrafiltration Membranes) HS-50, HS-60, HMS 1023



### Characteristic

Recent advancement in the membrane filtration technology has generalized the application of the UF/MF membrane modules to water treatment system. Huviswater has developed specific technologies, know-how and insights into the pre-treatment for using UF membranes. Specially formulated hydrophilic polyethersulfone(PES) material, uniquely designed asymmetric profile with sponge-like structure and an optimized process ensure high permeate flux and quality. Low fouling property of the membrane can also reduce operating cost and plant downtime. You will enjoy a low capital and installation cost with a large membrane area per unit volume at a small footprint. After a long, dedicated research, Huviswater now produces high-quality membranes and supplies modules of various capacities to meet the customers' needs. Huvis Water membrane is used to treat ground water, surface water, waste water, and seawaters as either primary treatment or as pretreatment to RO membranes.

### Main Customer

- KHNP
- ENEC
- Turkmenistan Ethane Cracker

### Technology Specification

- Backwash Pressure < 1.5bar
- Backwash Duration : 30~60sec
- Backwash flux : 150~250 LMH
- Cleaning Chemicals : HCl, NaOH, NaOCl, Citric acid

### Product Specification

- Filtrate Flow : 2.1-5.3 m<sup>3</sup>/h~6.0 m<sup>3</sup>/h
- Filtrate SD I: < 2.5
- Filtrate Turbidity y: < 0.2NTU
- Virus : > 4log

### Certification

- ISO9001:2008
- OHSAS18001:2007
- ISO14001:2004
- ASME PP, S, U

## MDI(Membrane Deionization) MDI400H2, MDI500H1, MDI500H2, MDI500V



### Characteristic

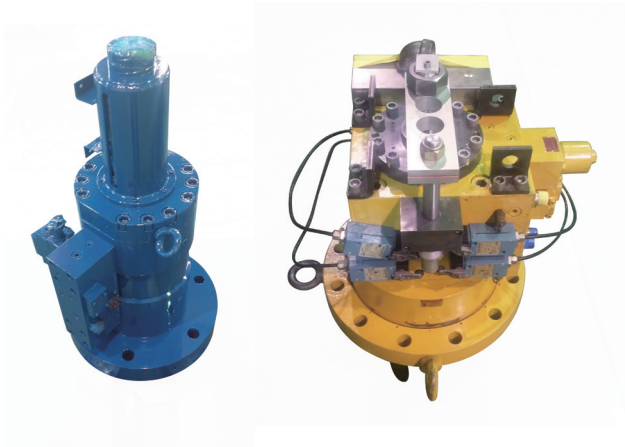
MDI is Huvis Water's electro-deionization product that consists mainly of ion exchange resins, ion exchange membrane and electrodes to produce high purity water. Unlike the conventional ion exchangers, no use of regenerating chemical, results in no regeneration wastewater, and no interruption during the service process

### Main Customer

- KHNP
- ENEC
- CCPP Project (Uruguay)



## Turbine governor actuator



### Characteristic

Steam valve actuator adjusting turbine speed. It operates hydraulic actuator by electric signal to adjust the delivery rate of valve such as 500MW, 1000MW etc.

### Main Customer

- KOWEPO(Korea Western Power Co., Ltd.)

### Technology Specification

Design conditions

- Operating Pressure: 112.5kg/cm<sup>2</sup>
- Operating Temperature: 32°C ~ 48°C
- Working fluid: Phosphate Ester system working fluid (Fyquel EHC)

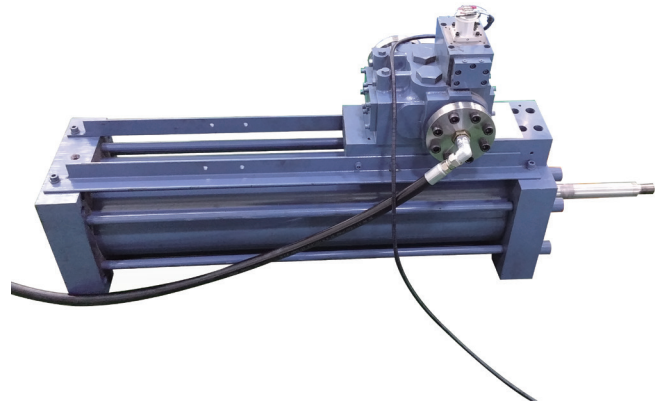
### Product Specification

- Electro Hydraulic Actuator (IV) Assay
- Specification: 5"DIA. \* 137mm
- Type: Controlling Type
- Including Dump Valve and Manifold

### Certification

- ISO 9001 : 2008

## EHPC actuator (for adjusting coolant feed water)



### Characteristic

Servo-valve installed in control valve controls the flow path supplying to actuator and pump supplying water using the delivery rate of control valve and the signal of Control Valve LVDT Feedback being required in turbine main control facilities.

### Main Customer

- KHNP

### Technology Specification

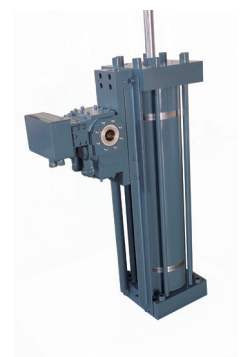
- Electro Hydraulic Power Cylinder
- Supplying Pressure: 200psig
- Rated flux: 2.7 gpm
- Maximum transferring flux: 153gpm

### Product Specification

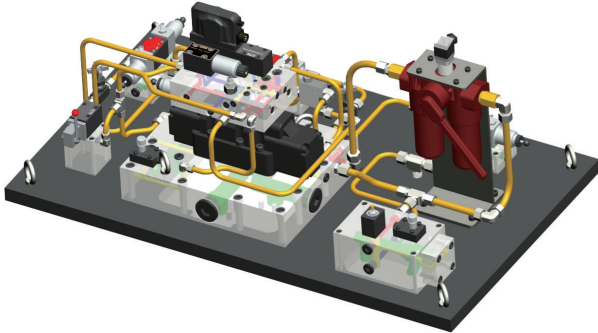
- Stroke : 267mm / 10 inch Dia.

### Certification

- ISO 9001 : 2009



## Hydroelectric governor actuator (DISTRIBUTE VALVE)



### Characteristic

Governor system that is integrated with hydraulic supply system(HPU) including pressure accumulator, distribute valve and actuator etc. (Vane motor), being applied RUNNER VANE, GUIDE VANE as a use of adjusting the speed of hydraulic turbine in the hydroelectric power.

### Main Customer

- KHNP

### Technology Specification

- Emergency triple Trip Valve
- Applicable Pressure: 14~20 bar (applicable pressure 14bar)
  - Working Pressure: 18 bar
  - Attachment Structure: Cabinet embedded

### Product Specification

- Size: 1164 (width) · 700 (length) · 470 (height) mm
- Weight: less than 500kg

### Certification

- ISO 9001 : 2010

## 600#,GL,PS,BW CF8M 10"



### Characteristic

It is used for NSSS system and it applies STAINLESS material, being used in radioactive environment condition.

### Main Customer

- KHNP
- UAE/BVPP
- USA/ WESTING HOUSE

### Technology Specification

- ASME SEC III . NB-3500 applied.
- Flux controllable GLOBE VALVE structure with high pressure.

### Product Specification

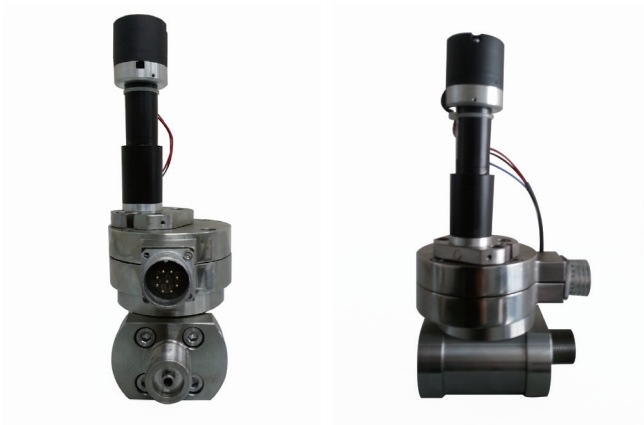
- 10"

### Certification

- ASME - N
- ASME - NPT
- ASME - NV
- ASME - NR
- KEPIC certification - MN-099
- ISO 9001:2008



## Motor driven ball valve (MOV)



### Characteristic

1. This opens a path of nuclear instrumentation detector when measuring major variables (power distribution,  $\Delta I$  and so on) of incore, but keeps to close in the normal operation.
2. This keeps the pressure boundary of chilled water system of nuclear reactor that prevent the leakage of chilled water when a guide thimble is destroyed.

### Main Customer

- KHNP

### Technology Specification

- It increased the degree of precision of opening and closing by applying Gen've Index apparatus.
- It is compatible with the existing control lines (Connector, Leakage Sensor)

### Product Specification

- Body O.D. 120(mm)\* height 278(mm)

### Certification

- KEPIC MN(MN-612)
- ISO 9001:2008

## HEPA FILTER [High Efficiency Filter]



### Characteristic

It is a part collecting dust particles of clean air system. It has 99.97% of removal efficiency to 0.3um particle.

### Main Customer

- Korea Hydro & Nuclear Power
- Korea Atomic Energy Research
- KEPCO Nuclear Fuel
- Century
- Spain
- China

### Technology Specification

- ASME AG-1 FC
- KEPIC MHB FC
- UL 586

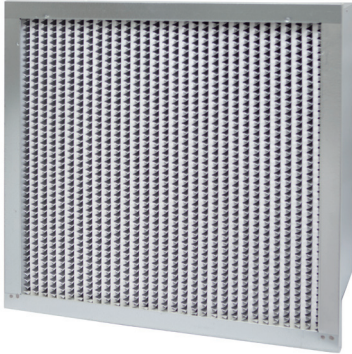
### Product Specification

- HEPA : 610X610X292(mm)[2000CFM,1500CFM]

### Certification

- ISO 9001
- ISO 14001
- certifications (fitti)

## MEDIUM FILTER [Medium Efficiency Filter]



### Characteristic

It is a part collecting dust particles of clean air system.  
It has 65%, 85% and 95% of removal efficiency by ASHRAE STD 52.1 dust spot method.  
(ASHRAE STD 52.2 MERV13, MERV14)

### Main Customer

- Korea Hydro & Nuclear Power
- Korea Atomic Energy Research
- KEPSCO Nuclear Fuel
- Century
- Spain
- China

### Technology Specification

- ASME AG-1 FB
- KEPIC MHB FB
- UL 900

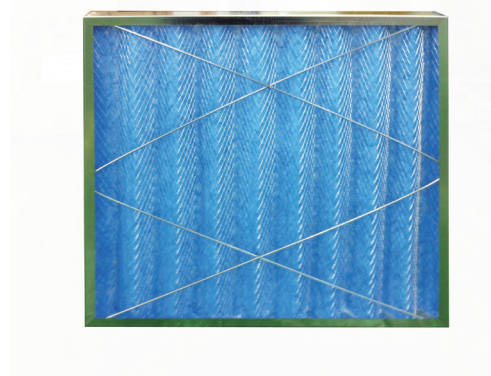
### Product Specification

- MEDIUM : 24"X24"X11-1/2"

### Certification

- ISO 9001
- ISO 14001  
certifications (fiti)

## PRE FILTER [Low Efficiency Filter]



### Characteristic

It is a part collecting dust particles of clean air system.  
It has 85% of removal efficiency by ASHRAE STD 52.1 gravimetric method.  
ASHRAE STD 52.2 (MERV 8)

### Main Customer

- Korea Hydro & Nuclear Power
- Korea Atomic Energy Research
- KEPSCO Nuclear Fuel
- Century
- Spain
- China

### Technology Specification

- ASME AG-1 FH
- KEPIC MHB FH
- UL 900

### Product Specification

- PRE FILTER: 24"X24"X2"
- PRE FILTER: 24"X24"X4"

### Certification

- ISO 9001
- ISO 14001  
certifications (fiti)



## MOISTURE SEPARATOR



### Characteristic

It is a part collecting water particles of clean air system.  
It has 99% of removal efficiency of hygroscopic moisture.

### Main Customer

- Century (BNPP)
- Hiair Korea
- Spain
- China

### Technology Specification

- ASME AG-1 FA
- KEPIC MHB FA

### Product Specification

- MOISTURE SEPARATOR : 24"X24"X4"
- MOISTURE SEPARATOR : 24"X24"X5.5"

### Certification

- ISO 9001
- ISO 14001  
certifications (fiti)

## FITTING, VALVE



### Characteristic

It is pipe fitting, adaptor for connection, and instrumentation valve and industrial valve are being manufactured and supplied based on the technical skill of adaptor for measurement.

### Main Customer

- Korea Hydro & Nuclear Power Co., Ltd.
- Hyundai Construction
- UAE BNPP PROJECT

### Technology Specification

- It certainly mounts the Front Ferrule to the Sealing Area (LOK Position).
- The inside diameter of product is processed to be smoothly curved.
- Inside the tubing line, it keeps the flow of fluid smoothly. "Tight & Smooth" and perfect Ferrules Function
- Connect Tubing and Fitting & Valve without any Leakage and Distortion of Tube Inside.

### Product Specification

- ASME B16.11 , ASME B16.9, ANSI, ASME B16.34 ETC

### Certification

- ASME N,NS,NPT

## Polar Crane



### Characteristic

As an auxiliary crane which is installed in containment building(dome) of nuclear power plant, this crane is a core facilities item being used for nuclear fuel charging.

### Main Customer

- KHNP
- ENEC

### Technology Specification

- CODE : NUREG0554 applied (SINGLE FAILURE PROOF CRANE)

### Product Specification

- Capacity : 950/90Ton
- Span : 43.6M
- Lifting : 36.9M
- Travelling Length: rotation type

### Certification

- I.S.O 9001:2008

## Overhead Crane



### Characteristic

This is a roof typed crane being the most widely used in nuclear power plant, hydroelectric power, water pump, thermal power, general industrial companies etc.

### Main Customer

- KHNP
- ENEC

### Technology Specification

- CODE : CMAA applied

### Product Specification

- Capacity : 1~950Ton
- Span, Lifting, Travelling Length : All required specifications can be accepted.

### Certification

- I.S.O 9001:2009





## Gantry Crane



### Characteristic

This crane is a type which is combined with Overhead Crane and Leg structure, being the most widely used in open storage yard or intake of nuclear power plant, hydroelectric power, water pump, thermal power, general industrial companies etc..

### Main Customer

- KHNP
- ENEC

### Technology Specification

- CODE : CMAA applied

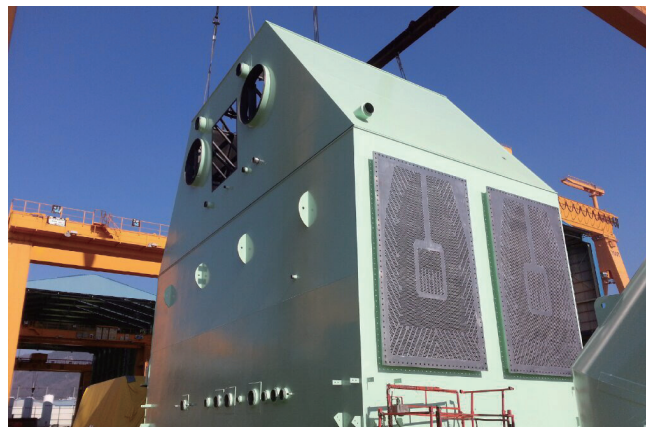
### Product Specification

- Capacity, Span, Lifting, Travelling Length : All required specifications can be accepted.

### Certification

- I.S.O 9001:2010

## Surface Condenser



### Characteristic

Surface condenser is Shell & Tube type heat exchanger condensing steam(vapor) being discharged from steam turbine of power plant generally. It forms vacuum in the condenser by condensing the steam being discharged from turbine and improves the turbine efficiency by enlarging heat head.

### Main Customer

- Korea Hydro & Nuclear Power
- Hyundai Heavy Industries

### Technology Specification

- To follow manufacturer's standard and customer's requirements based on HEI Code (Heat Exchange Institute, Standards for Steam surface condenser)

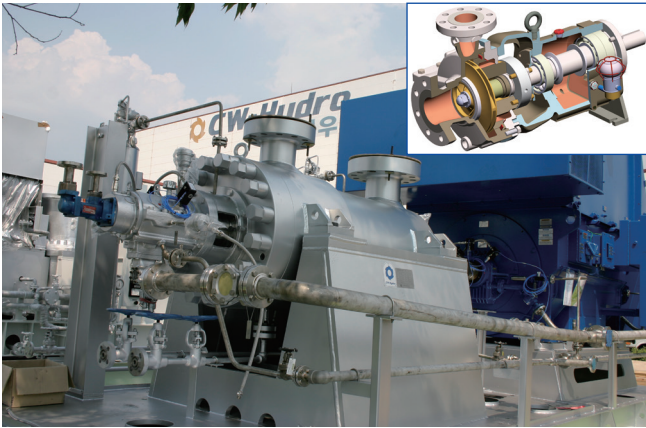
### Product Specification

- Shell type : Rectangular
- No. of shells : Single, Twin, Triple shell
- No. CW passes : One or Two pass
- Type of Tubes : Titanium, Stainless steel, Copper alloy
- Steam exhaust neck type : Down-flow, Axial flow

### Certification

- KEPIC / MN
- KEPIC / SN
- ISO9001
- ISO14001

## API 610 Process Pumps



### Characteristic

Pump for oil refinery, maximum efficiency and reliable, strong structure and complete standardization of wide scope

### Main Customer

- Hyundai Heavy Industries
- Samsung Engineering
- Hanwha E&C
- PARDIS PETROCHEMICAL Co.
- KAVEH METHANOL COMPANY

### Technology Specification

- back pull out type(API 610)

### Product Specification

- Discharge: up to 25 m<sup>3</sup>/min
- Total lift: up to 200M
- Discharge pressure: up to 52kgf/cm<sup>2</sup>G
- Maximum allowable suction pressure: up to 45kgf/cm<sup>2</sup>G

### Certification

- ISO9001:2008
- CE certified Vertical Pump and two more
- Ⓢ
- KEPIC

## ASME VIII Heat Exchanger (Shell & Tube Type) / SHC / SHFC SERIES OILCOOLER



### Characteristic

High-powered SHC, SHFC series (HEAT EXCHANGER & OIL COOLER) which was efficiently designed and manufactured by analysis, research and development of technology knowhow accumulated for the past 30 years has a high performance and high efficiency.

### Main Customer

- KHNP

### Product Specification

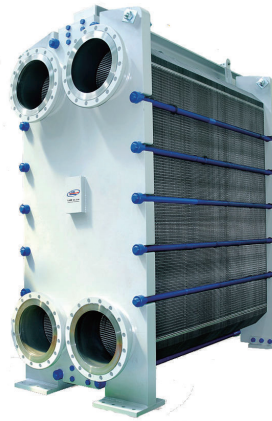
- SHC / SHFC / SAC OIL COOLER and more

### Certification

- ISO9001:2008
- ASME U.S. PP STAMP



## Plate type heat exchanger



### Characteristic

1. 3~5 times of high efficiency comparing to tubular heat exchanger
2. Compact design secures the minimum installation space.
3. Easy disassembly and assembly enable maintenance to be easy.
4. The number of plate can be increased if the heat capacity is increased during operation.

### Main Customer

- Korea Hydro & Nuclear Power
- Korea Electric Power
- Westinghouse
- Toshiba
- MES
- Sinopec
- Aramco

### Technology Specification

- Having Self developed design program (LHEX)
- HTRI verification and utilization of ANSYS for structure understanding
- Selection of heat exchanger type according to flux types and temperature / pressure conditions

### Product Specification

- Same as above

### Certification

- ISO 9001/14001, OHSAS 18001
- ASME U / U2
- KEPIC MN

## Stud bolt cleaning equipment for nuclear reactor



### Characteristic

This equipment removes foreign substances and oxidation products around the stud thread of nuclear reactor.

### Main Customer

- KHNP

### Technology Specification

- The system is simply composed with hydraulic pressure and PLC Control System, and is designed to implement visualization and fast and accurate jobs by touch screen.

### Product Specification

- Width 3625(mm)\* Length 1605(mm)\* Height 1202(mm)

### Certification

- KEPIC MN(MN-612)
- ISO 9001:2008



Plumbing





## VARIABLE SPRING HANGER CONSTANT SPRING HANGER



### Characteristic

**VARIABLE SPRING HANGER** : It has a structure of pressing a spring inside a cylinder and is called as a variable spring hanger because the reaction size of spring itself changes according to the movement of pipe position to up and down due to thermal displacement. It is used at a place having small amount of thermal displacement and has advantages of simple structure and low price. **CONSTANT SPRING HANGER** : This is same as the variable spring hanger, but has a feature that the reaction size of spring is constant even though the pipe moves to up and down by the special designed mechanical mechanism. Explaining briefly, it is called as a constant spring hanger because when the same weighted materials are put on the both scales of balanced scale the balance can be leveled. The constant spring hanger is used at main lines where there is little the change of stress to pipe or equipment.

### Main Customer

- KHNP
- ENEC

### Technology Specification

- VARIABLE : MAXIMUM AVAILABLE LOAD-24 tons
- CONSTANT : MAXIMUM AVAILABLE LOAD-40 tons

### Product Specification

- VARIABLE : VSS, VSM, VSL / No. 0~22 SIZE
- CONSTANT : CSH, CSV / No. 1~110 SIZE

### Certification

- KEPIC-MN (MN-152)
- ASME NS (N-3008)
- ISO 14001 & ISO 9001

## SWAY STRUT HYDRAULIC SNUBBER



### Characteristic

**SWAY STRUT** : This is a device that restrains any one direction of reaction but allows the other direction to move freely. It has a structure that can react to some angle of movement of piping because a spherical bearing is attached.

### Main Customer

- KHNP
- ENEC

### Technology Specification

- STRUT : MAXIMUM AVAILABLE LOAD-54 tons

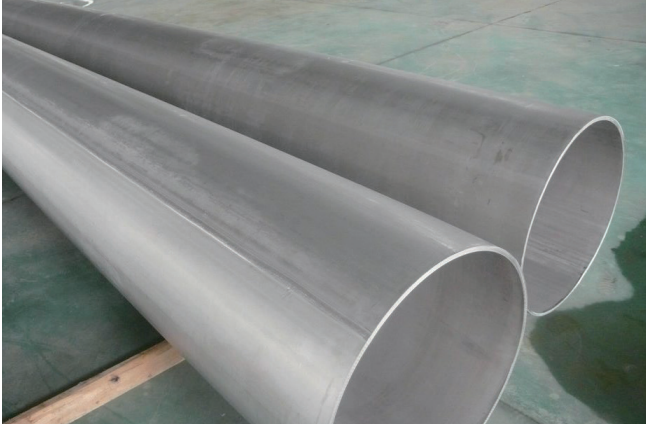
### Product Specification

- STRUT : A~No. 8 SIZE

### Certification

- KEPIC-MN (MN-152)
- ASME NS (N-3008)
- ISO 14001 & ISO 9002

## WELDED PIPE



### Characteristic

Stainless Steel : piping following SA358SA358 specification  
Carbon Steel : piping following SA672 specification

### Main Customer

- KHNP

### Technology Specification

- ASME SEC.II. PART A / ASME SEC.III.
- KEPIC MDF / KEPIC MN

### Product Specification

- SA 672 GR 60 CL22 14"~36" , SA358 GR.304 CL.1 14"~36"

### Certification

- KEPIC MN-608
- ASME NPT ( N-4418 )
- ASME NS ( N-4419 )
- ASME NA ( N-4423 )

## LATERAL



### Characteristic

Stainless Steel : Y type of piping following SA403 specification  
Carbon Steel : Y type of piping following SA234 specification

### Main Customer

- ENEC

### Technology Specification

- ASME SEC.II. PART A
- ASTM specification

### Product Specification

- Possible to supply all sizes less than 12"

### Certification

- KEPIC MN-608
- ASME NPT ( N-4418 )
- ASME NS ( N-4419 )
- ASME NA ( N-4424 )



## RUPTURE DISC



### Characteristic

The RUPTURE DISC is a part designed to be weak on purpose in the pressure system. It is a non-mechanical decrease device of over-pressure.

The system must manage the over-pressure when the pressure inside of pressure system is over. This is a safety device that protects the system safely from the over-pressure by rupturing when the pressure is over.

### Main Customer

- Korea Hydro and Nuclear Power Co., Ltd.
- Taiwan Power Company

### Technology Specification

- KS B ISO 4126
- ASME Code Sec. VIII Div.1
- API RP520
- KOSHA

### Product Specification

- REVERSE TYPE
- FORWARD TYPE
- COMPOSITE DOME TYPE
- COMPOSITE FLAT TYPE
- DIAPHRAGM TYPE

## Welding rod (Welding Materials)



### Characteristic

Stainless Steel : ER308/L, ER309/ER 316. Etc.  
Special Alloy Steel : ERNiFe-Cr-2, ERNiFeCr-2, ERNiCu,Etc.

### Main Customer

- KHNP
- Dongbu Co., Ltd.
- ENEC

### Technology Specification

- ASME SEC.II. PART C / ASME SEC.III.
- KEPIC MDW / KEPIC MN

### Product Specification

- Possible to supply the special sizes other than Standard Size

### Certification

- KEPIC MN-608
- ASME NPT ( N-4418 )
- ASME NS ( N-4419 )
- ASME NA ( N-4422 )

## Nuclear Manual Bolted Bonnet Gate Valves



### Characteristic

Forged Steel Bolted Bonnet Gate Valves

### Main Customer

- KHNP
- ENEC

### Technology Specification

- Description : ASME NB,NC,ND
- Pressure Range : 150~300 lbs
- Pressure Range : 150~300 lbs
- End Connections : BW, Flanged
- Features : OS&Y, Bolted Bonnet, Flexible
- Disc, Leak-Off Nipple, Stem Extension

### Certification

- KEPIC
- ISO 9001
- ISO 14001
- OHSAS 18001
- ASME "N"
- ASME "NPT"
- API Monogram

## Nuclear Manual Elastomeric Sealed Valves



### Main Customer

- KHNP
- ENEC

### Technology Specification

- Description : ASME NB,NC,ND
- Pressure Range : 150~300 lbs
- Size Range : NPS 1/2~4
- End Connections : SW, NPT, BW
- Features : Diaphragm (Elastomer EPDM)

### Certification

- KEPIC
- ISO 9001
- ISO 14001
- OHSAS 18002
- ASME "N"
- ASME "NPT"
- API Monogram





## DISSIMILAR ADAPTER



### Characteristic

Connectors joined by welding A105 material and A182 F316L material for DISSIMILAR JOINT

### Main Customer

- KHNP

### Product Specification

- 3/4" x 3/4" , 1/2" x 3/8" , 3/4" x 3/8" , 3/4" x 1/2" ETC.

### Certification

- KEPIC MN-608
- ASME NPT ( N-4418 )
- ASME NS ( N-4419 )
- ASME NA ( N-4425 )

## CONDENSATE POT



### Characteristic

Press transmission container for steam line

### Main Customer

- BMT

### Certification

- STAINLESS : A312 TP304 (2"~4" , S/40, S/80, 160, XXS)
- CARBON : A106 GR.B (2"~4" , S/40, S/80, 160, XXS)