

Company Profile



KORVAL

● All Cryogenic Valves (Package)

Control, Safety, Butterfly, Ball, Globe, Check, Changeover, Gate, On-Off & Manual Valve.

● APPLICATION

LNGC, FLNG, FSRU, FSU, FPSO, FGSS, NRS, REGAS SYSTEM, LNG BUNKERING, FSO, PRS

92 DASANRO, SAHA-GU, BUSAN, KOREA
TEL : +82-51-790-9700 FAX : +82-51-790-9799
EMAIL: sales@korval.co.kr, os@korval.co.kr
WEBSITE : www.korval.co.kr

SINCE 1993

■ 개요

■ 연혁

■ 본사 및 대리점 현황

■ 조직현황

■ 생산 설비 및 생산 능력

■ 고객사

■ 사업내용

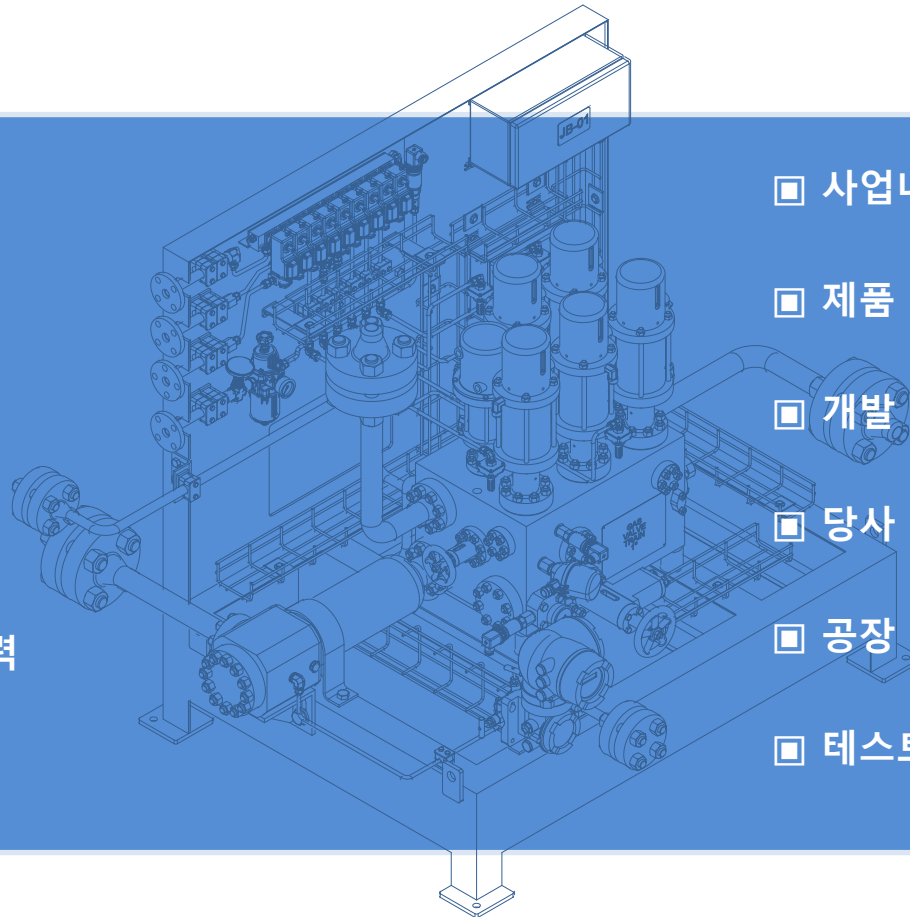
■ 제품 현황

■ 개발 현황

■ 당사 제품 적용

■ 공장 내 전경

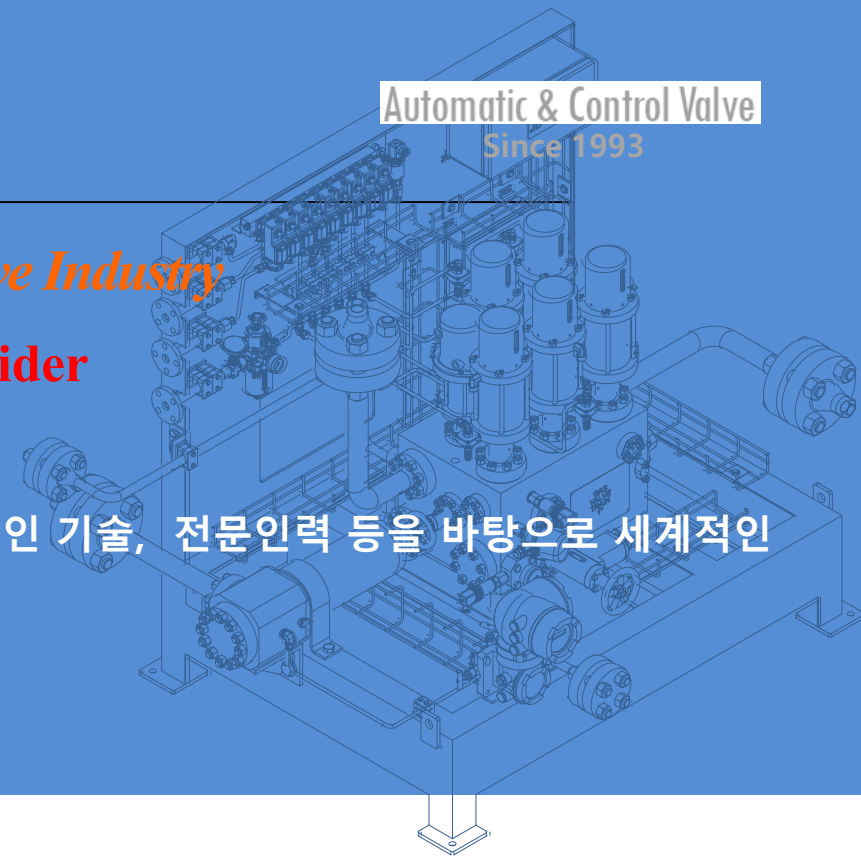
■ 테스트 설비



Leading 21st century Global Valve Industry

Professional Valve Provider

1993 년 설립된 밸브 제조 기업으로서, 32년 간 집약된 노하우, 혁신적인 기술, 전문인력 등을 바탕으로 세계적인 컨트롤 및 자동화 밸브 공급업체를 목표로 하는 기업입니다.



설계

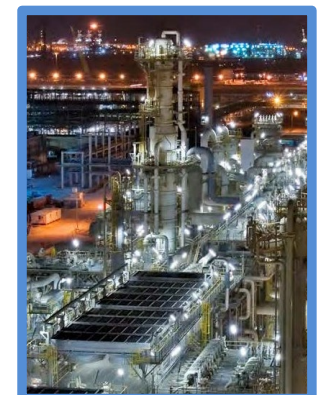
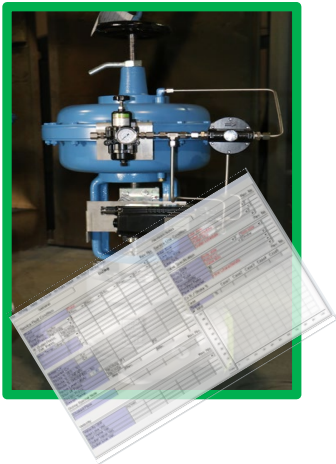
개발

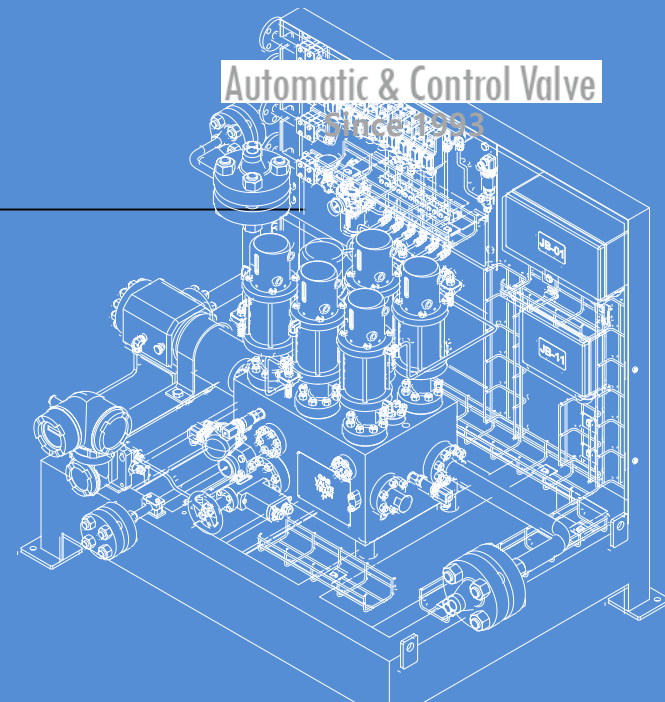
생산

검사

품질

납품





- 1993.04 회사설립
- 1995.02 국내 선박 및 엔진사에 제어 밸브를 공급
- 1998.06 ISO 9001 인증 완료
- 2009.09 ERP 도입 및 기술연구소 설립
- 2010.02 원자력 KEPIC 인증 완료
- 2012.07 화력 및 원자력 발전소 용 고압, 대형 제어 밸브를 9개 PROJECT에 공급
- 2013.12 LNG CARRIER CARGO TANK SAVETY VALVE 공급
- 2014.05 LNG 선박 / 터미널 저온 밸브 공급
- 2015.03 ME-GI ENGINE용 GAS VALVE TRAIN MAN-ES 승인완료
- 2015.11 현 공장으로 확장 이전
- 2020.08 LNG 선박 및 터미널 초저온 밸브 전세계 최대 아이템 및 사이즈 공급
- 2021.03 선박용 메인 엔진 / 발전기 용 GAS 밸브 개발 완료
- 2025.02 GAS /LNG 전문 초저온 밸브 공급업체로 성장 중



● China

RMS GROUP

TEL: +86 21 20822836 / EMAIL: justin@rmsmarineservice.com

● Singapore

Niu Bros Singapore PTE. LTD.

TEL: +65 6952 1879 / EMAIL: jeff@niubros.com.sg

● Vietnam

ACCESS Professional Vietnam Co., Ltd

TEL: +65-6250-6198 / EMAIL: andy@accessprofessional.com

● Russia

Marine system & solutions

TEL: +7-812-8713344 / EMAIL: d.ivanov@marinesolutions.ru

● Qatar

REMS (Rush Enterprise for Marine Service Co., Ltd)

TEL: +82-51-413-9730 / EMAIL: rems@rmsmarine.com

● United Arab Emirates

Power Link Electrical Equipment Trading EST

TEL: +971 2 6738604 / EMAIL: valve@pleetae.com

● United States of America

Far East Marine Service Inc.

TEL: +1-713-676-2340 / EMAIL: faremareine@aol.com

● Canada

Eco2max Inc – M3D Energy

TEL: +1-514-316-1675 / EMAIL: info@eco2max.com

● Brazil

Oilon Brasil Energia Ltda.

TEL: +55-19-3262-1881 / EMAIL: info.lactonamerica@oilon.com

● Norway

Hydraserv

TEL: +47-911-35-785 / EMAIL: ew@hydraserv.no

● Denmark

NORDAN MARINE

TEL: +45 9840-2440 / EMAIL: sales@nordanmarine.com

● Germany

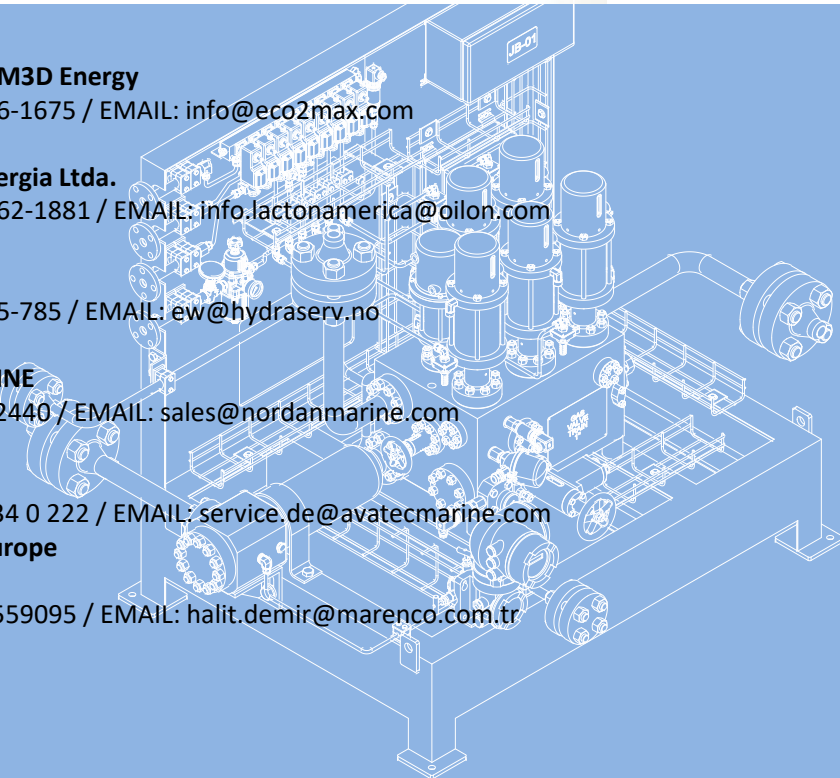
Avatec

TEL: +49 162 434 0 222 / EMAIL: service.de@avatecmarine.com

● Turkey / Europe

Marenco

TEL: +90 216 7559095 / EMAIL: halit.demir@marenco.com.tr



대표이사

전무이사

임직원	121
관리자	56
작업자	21
협력사	44

경영관리팀

영업팀

생산관리팀

구매관리팀

기술연구소

품질관리팀

경영관리 이사



회계업무

인원관리

전산관리

영업팀 상무



국내영업

해외영업

EPC 영업

생산관리이사



가공

조립

테스트

재고관리

구매팀 상무



주물

구매

재료관리

연구소장



R&D

연구&상세설계

국책관리

품질관리이사



품질보증

품질관리

품질인증

A/S관리

○주요생산설비

-제 1공장

1) 조립 작업

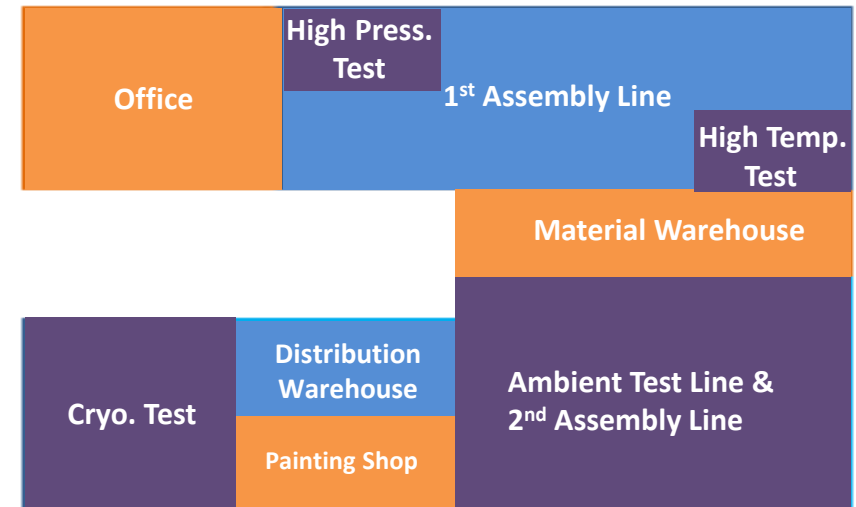
- 1st 조립 : 메인/ 발전기용 엔진 밸브
(GVT, GVU, SCR, EGR, Main valve starting Module, SRS etc.)
- 2nd 조립 : LNG 용 초저온 밸브
(Cryogenic Control , Safety, Globe, Check, Ball)

2) 테스트 및 검사

- 헬 (하이드로 테스트) , 상온 테스트, 초저온 테스트, 고온 테스트 등

3) 비상재고 및 부품 창고

▶ 1st HEADQUARTER LAYOUT



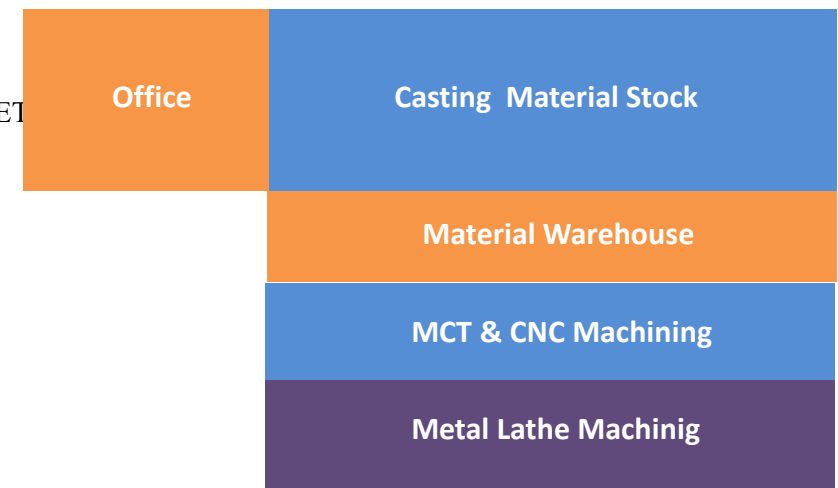
-제 2 공장_ 2nd Factory

1) 가공 센터

- 1st 가공라인 : LATHE & MILLING/BORING MACHINE, CRANE, COMPRESSOR ETC
- 2nd 가공라인 : MCT, CNC, CRANE, COMPRESSOR ETC

2) 자재 및 주조품 재고 창고

▶ 2nd MACHINE FACTORY LAYOUT



항목	가공 라인	밸브 조립 라인			액추에이터 조립 라인		검사 라인	도장 라인
		조립 1팀	조립 2팀	조립 3팀	조립 4팀			
밸브 조립 부서	▣ 바디, 몸체 가공 ▣ 디스크 및 시트 가공	▣ 제어 밸브 - 원자력 발전소 - 조선업 - 해양 ▣ 오차 수정작업 진행	▣ 제어 밸브 -버터플라이 밸브 볼밸브 글로브 체크밸브 TSIV ▣ 엔진밸브 ▣ 제품 검사	▣ 초저온 밸브 - 안전밸브 ▣ 제품 검사	▣ 유압식 액추에이터 - ROTARY - LINEAR	▣ 공압식 액추에이터 - LINEAR	▣ 유압 검사 ▣ 누설 검사 ▣ 기능 검사 ▣ 제 3 자 검사 ▣ 검사 장비 검사	▣ 도장 작업
생산 능력 (1달)	1,500 세트	500 세트	1,000 세트	400 세트	400 세트	700 세트	1,500 세트	2,000 세트
생산 능력 (1년)	18,000 세트	6,000 세트	12,000 세트	4,800 세트	4,800 세트	8,400 세트	18,000 세트	24,000 세트
총 생산능력	22,800 세트 / 1년							



국내

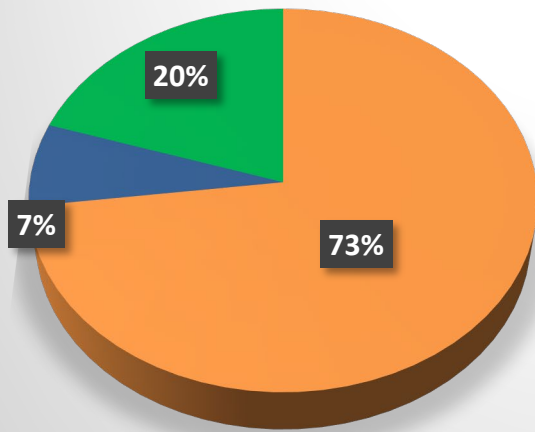


해외





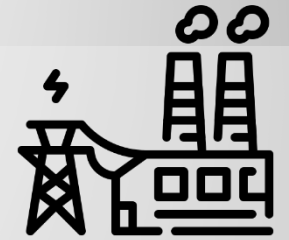
Business Industry



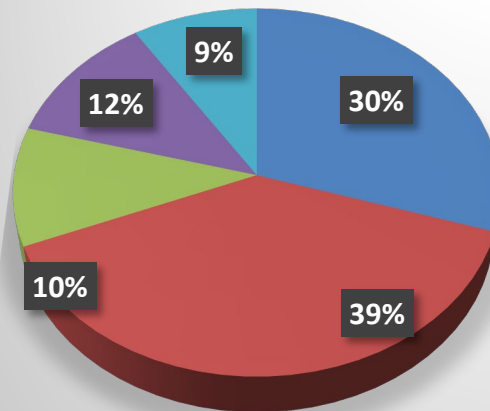
1 LNG 플랜트 및 선박

2 발전소 용 밸브

3 선박용 메인, 발전기 엔진용 밸브



Item Analysis



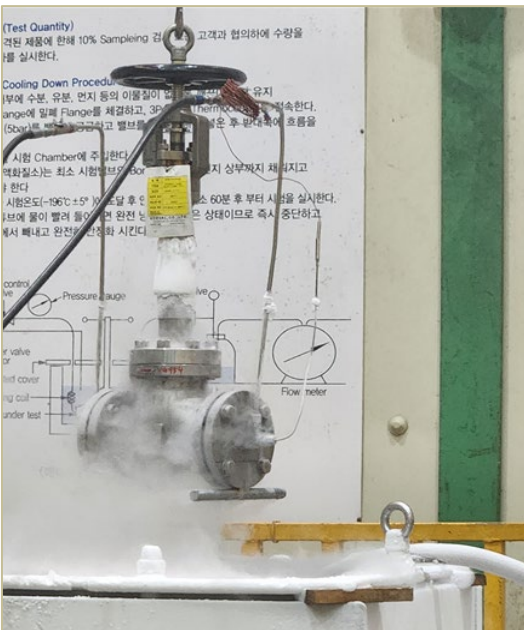
1 Cryogenic Control Valve

2 Cryogenic Safety Valve

3 Cryogenic Manual Valve

4 Valve for main/generator engine (Gas valve)

5. Control Valve (General)



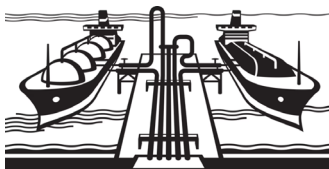
각 사업 분야별 극저온 밸브 적용

Why KORVAL ?

LNG FSRU



LNG Carrier



LNG Cargo TK



LNG Terminal



LNG Fuel Gas Supply Sys



LNG Engine



Double Block
& Bleed VV



150# 10X12" RF
Pilot operated



150# 4X6" RF
Pilot operated



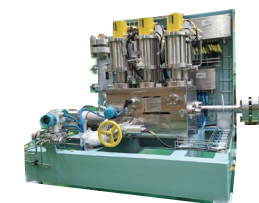
2500# 1X1 1/2" RF
Conventional



150# 2X3" RF
Conventional



900# 3/4X1" Thread
Conventional



Gas Valve Train



Pneu. Control
Angle & Glove



Pneu. B/F



Hydro. Globe



Pneu. Ball



Butterfly



Ball



Globe



Check



Safety



3Way Change
Over



Gas Valve Unit

* We can make all kind of cryogenic valve such as Control, Manual(Globe, Butterfly, Ball, Needle), GGC, Safety also

That's why KORVAL !

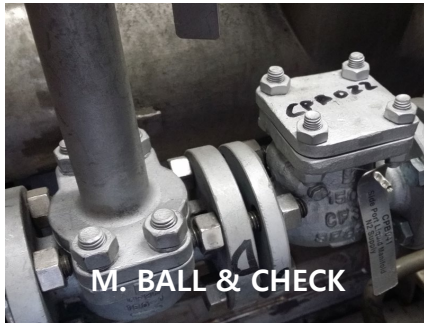


FSRU용 실제 적용 밸브

Automatic & Control Valve
Since 1993



SHOT OFF



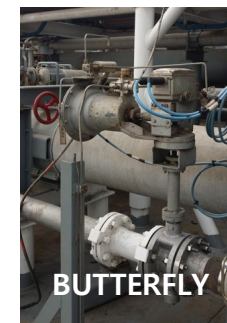
M. BALL & CHECK



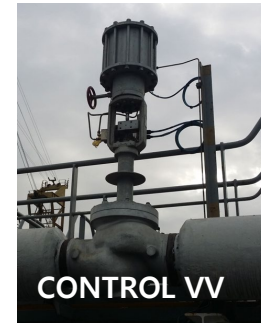
BUTTERFLY



BALL VV



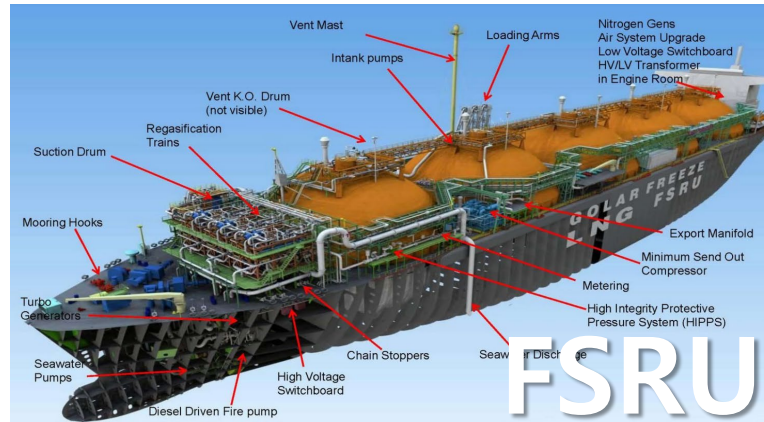
BUTTERFLY



CONTROL VV



REGASIFICATION SYSTEM



FSRU



REGASIFICATION SYSTEM



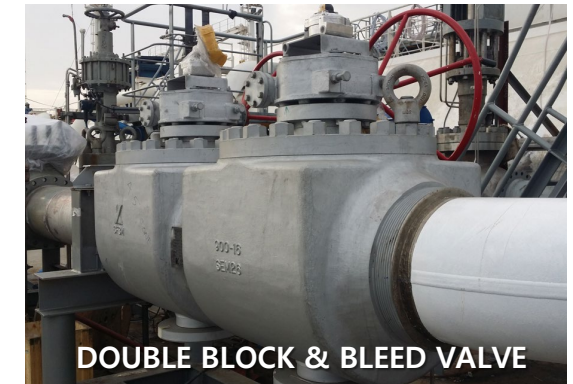
SAFETY VV



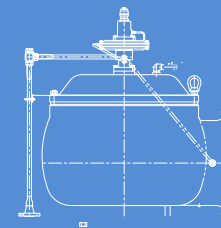
PILOT SAFETY VALVE



DBB VALVE



DOUBLE BLOCK & BLEED VALVE



▷ APPLICATION

* WE CAN SUPPLY ALL KIND OF SAFETY VALVE FOR LNG/ LPG/ LEG CARGO TANK

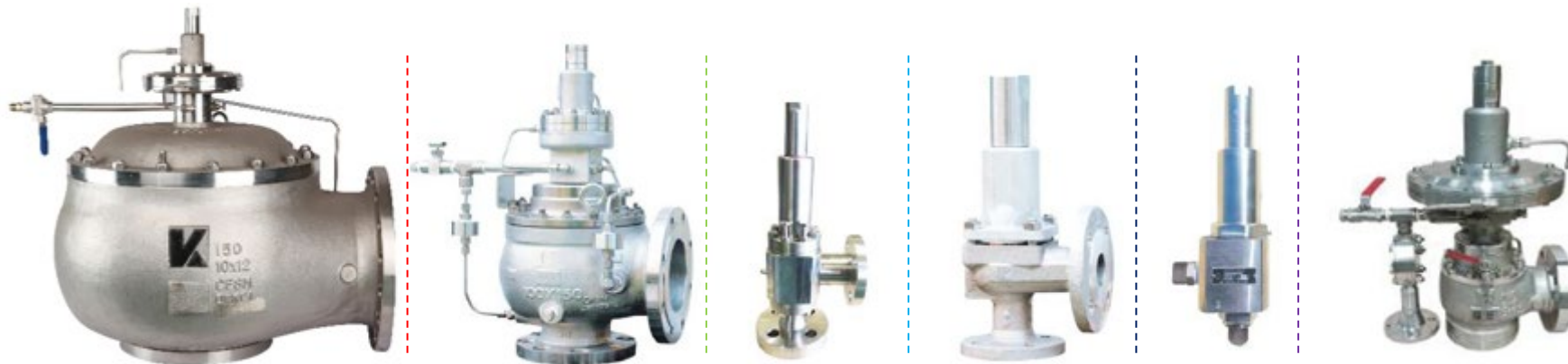
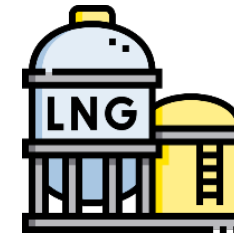
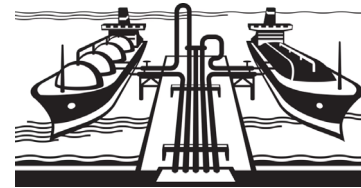
_ MARINE & OFFSHORE : LNGC, FLNG, FSRU, RV, FSU

_ LNG TERMINAL, CARGO TANK, BUNKERING STATION

_ ONSHORE : LNG POWER PLANT, LNG TERMINAL, AIR GAS, OXYGEN PLANT

Cryogenic safety relief valve

- Pilot operated, Conventional type
- Class 150 to 2500
- Size ½ x 1" ~ 12" X 16"
- New IGC Code, API520, API526, ASME16.34



Code: ASME/API

■ Size : 1/2x1" ~ 12x16"

■ Rating: 150# ~ 2500#

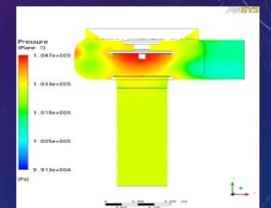
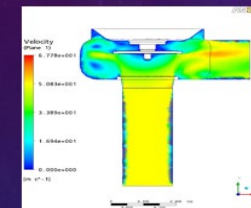
Material: A216 WCB/A351 CF8M



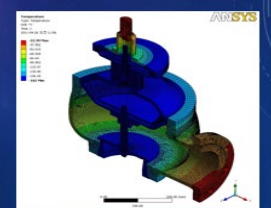
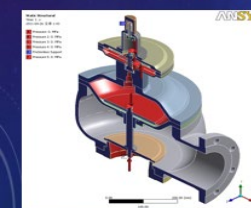
Specification

- Standard : ASME, API
- Size : 1/2 x 1" ~ 12 x 16"
- Rating : 150 ~ 2500#
- Design Temperature : -196~80°C
- Material : Stainless Steel

Flow Analysis(6x6inch / 0.03Bar)



Heat Transmission Analysis



▷ITEM

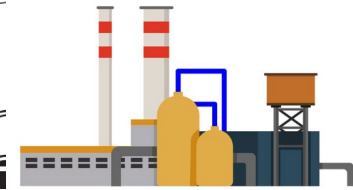
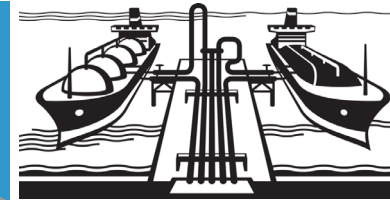
* CONTROL VALVE – GLOBE, ANGLE, BUTTERFLY, BALL TYPE

▷APPLICATION

_ LNGC, FLNG, FSRU, RV, FSU, LNG TERMINAL, CARGO TANK, BUNKERING STATION

_ FGS SYSTEM, DUAL FUEL ENGINE, MEGI ENGINE, LATENT HEAT CAPTURE SYSTEM, COMPRESSOR, PUMP

_ LNG POWER PLANT, LNG TEMINAL, AIR GAS, OXYGEN PLANT



CONTROL VALVE FOR CRYOGENIC STATE



**Angle
& Pneumatic**



**Globe
& Pneumatic**



**Butterfly
& Pneumatic**



**Globe
& Hydraulic**



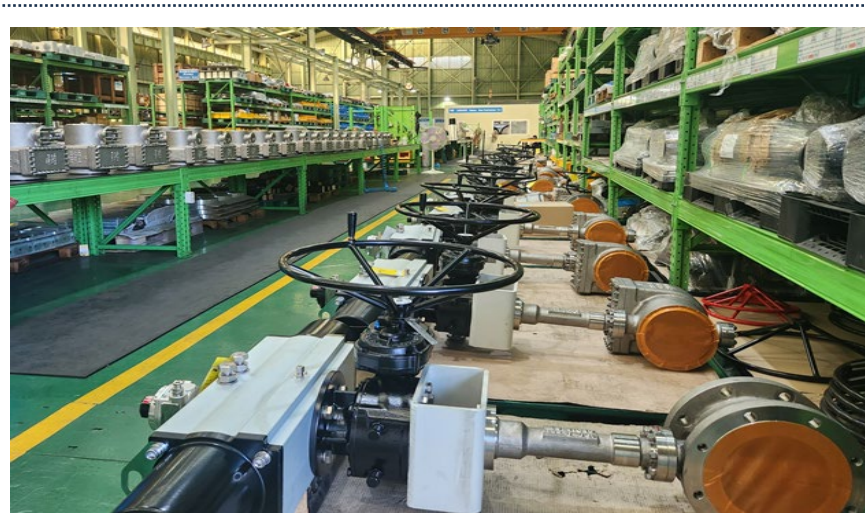
**Ball
& Pneumatic**

Code: ASME/API

■ Size : 1/2" ~ 20"

■ Rating: 150# ~ 2500#

Material: A351 CF8M/ A351 CF3M



▷ITEM

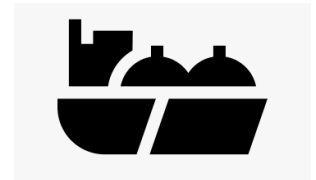
* MANUAL VALVE – GLOBE, GATE, CHECK, ANGLE, BUTTERFLY, BALL, NEEDLE TYPE

▷APPLICATION

_LNGC, FLNG, FSRU, RV, FSU, LNG TERMINAL, CARGO TANK, BUNKERING STATION

_FGS SYSTEM, DUAL FUEL ENGINE, MEGI ENGINE, LATENT HEAT CAPTURE SYSTEM, COMPRESSOR, PUMP

_LNG POWER PLANT, LNG TEMINAL, AIR GAS, OXYGEN PLANT



Butterfly



Ball



Globe



Swing Check



HP Lift Check

CHANGEOVER VALVE for C-Type Tank Isolation



Ball
3Way Changeover



Globe
3Way Changeover



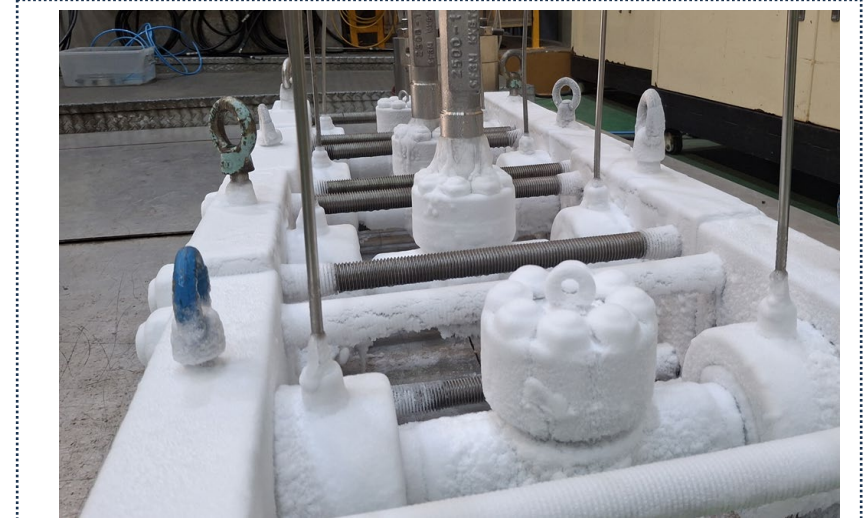
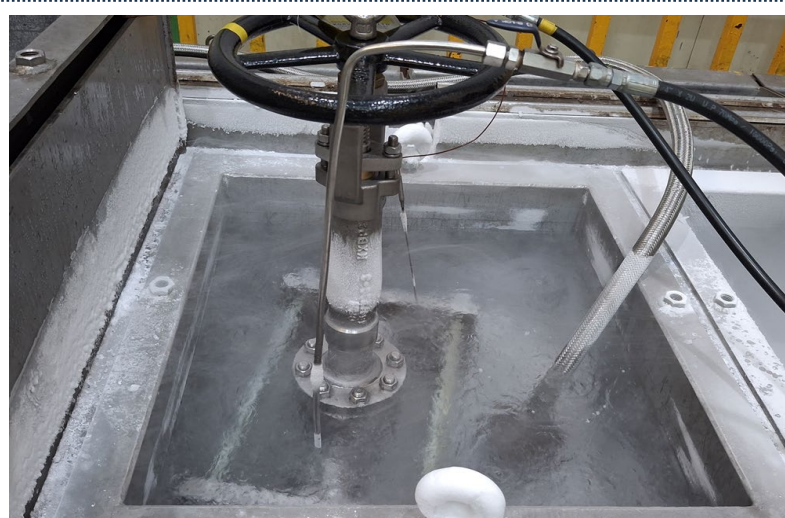
DOUBLE BLOCK & BLEED BALL VALVE for FSRU

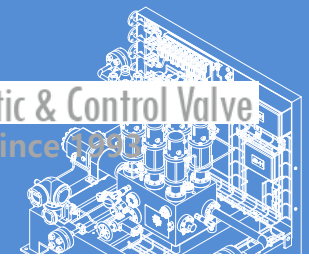
Code: ASME/API

■ Size : 1/2" ~ 20"

■ Rating: 150# ~ 2500#

Material: A351 CF8M/ A351 CF3M





■ GVT

▷ITEM

- Gas valve train(GVT) for ME-GI Engine



MAN Energy Solutions
Future in the making

Certificate of Approval

This document certifies that:

Korval Co., Ltd.
92, Dasanro, Saha-gu, Busan, Korea, 49498, Korea

Has been granted a Certificate of Approval by MAN Energy Solutions for design, manufacture and supply of:

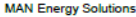
GVT
Gas Valve Train
KGV-2 Series (GVT 1") for ME-GI Mk.2
KGV-3 Series (GVT 1½") for ME-GI Mk.2

For MAN B&W engines (two-stroke) in accordance with the Terms and Conditions stated in Appendix A

Issue date: 09/01/2025
Expiration date: 09/01/2030
Certificate No.: 0660_4

Ole Fogh

Nikolaos Remygiakis

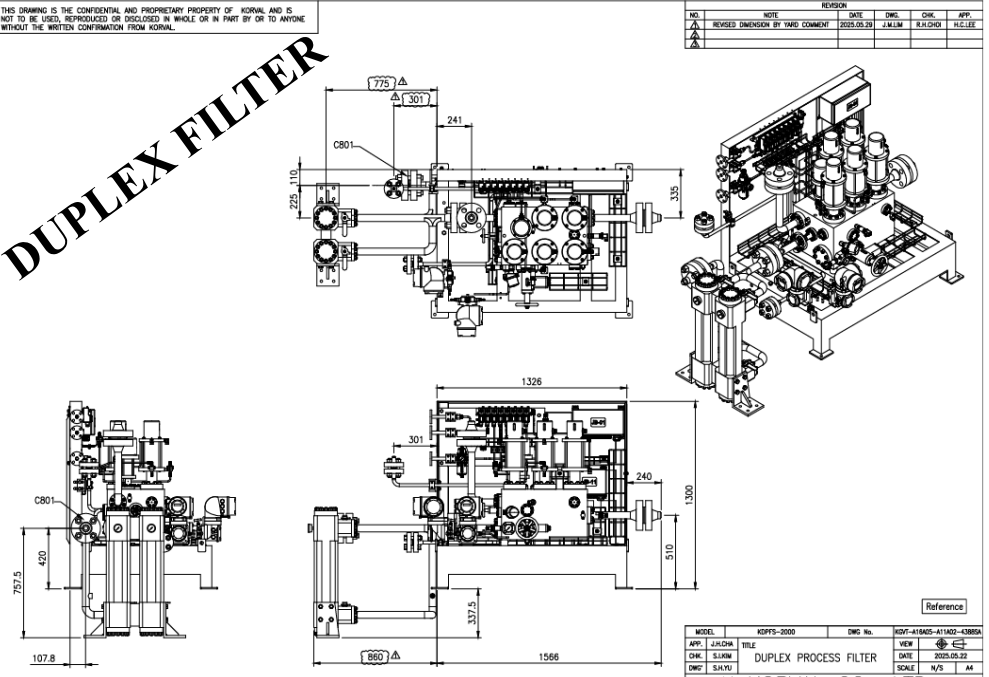






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DUPLX FILTER



REVISION		DATE	CHK	CHK	APP
NO.	NOTE				
1	REVISED DIMENSION BY THIRD COMMENT	2025.05.28	J.H.KIM	K.H.OH	H.C.LEE

MODEL	TITLE	DWG. NO.	REF.
KDPT5-2000	DUPLX PROCESS FILTER		

APR. J.H.KIM

CHK. S.H.KIM

DMG. S.H.YU

VIEW: C-E

DATE: 2025.05.22

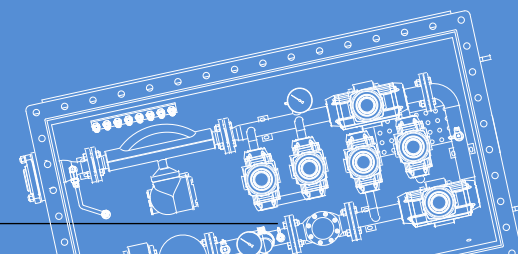
SCALE: N/S A4

Reference

KORVAL CO., LTD.

Specification

- Main Block
 - Design Pressure : 350~420Bar
 - Working Pressure : 300~380Bar
 - Rated Capacity
 - 1" : 4,820kg/h(Methane)
 - 1-1/2 : 10,500kg/h(Methane)
 - Fluid : Methane/Ethane/Nitrogen
- Shut Off Valves
 - Media : Compressed Air
 - Actuation : 5~7Bar
 - Size : 1"~2"
- Electrical Components
 - Degree of Protection : IP65
 - Pressure Transmitter
 - Range : 4~20mA, 0~600Bar
 - 4~20mA, 0~16Bar
 - Temperature Transmitter
 - Range : 4~20mA, -50~100°C



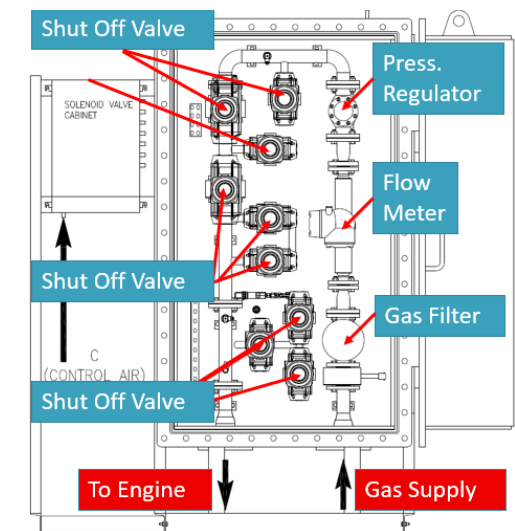
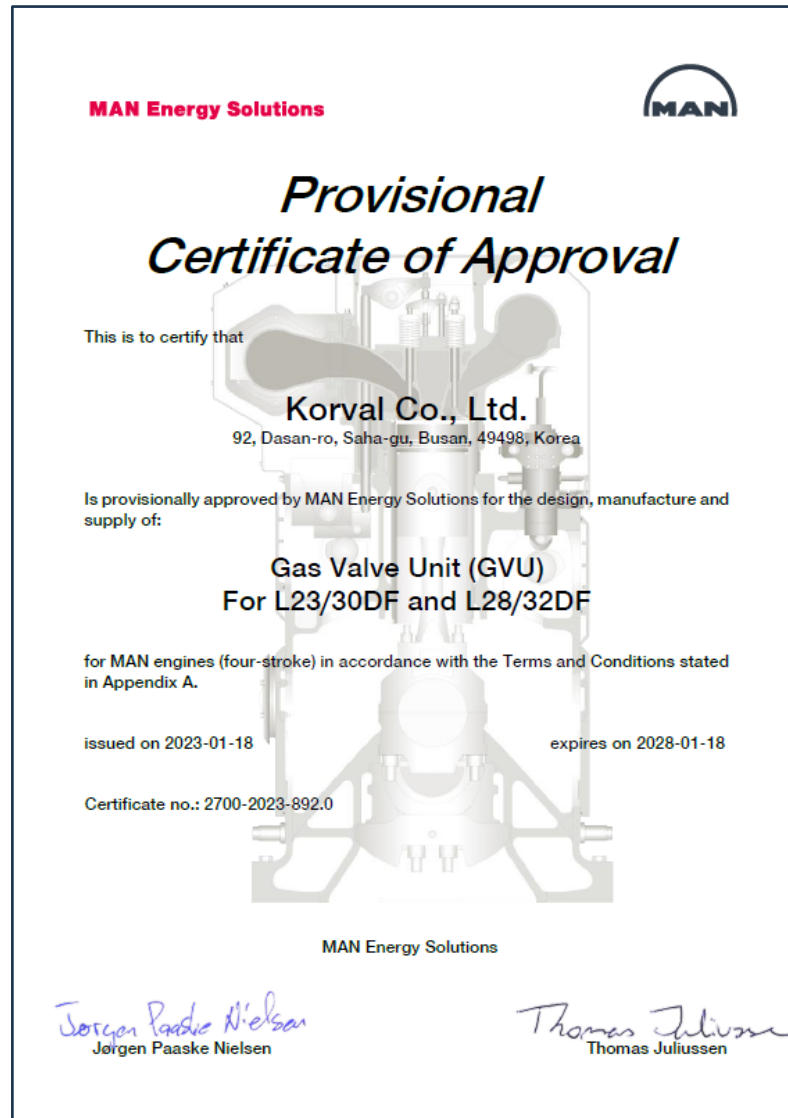
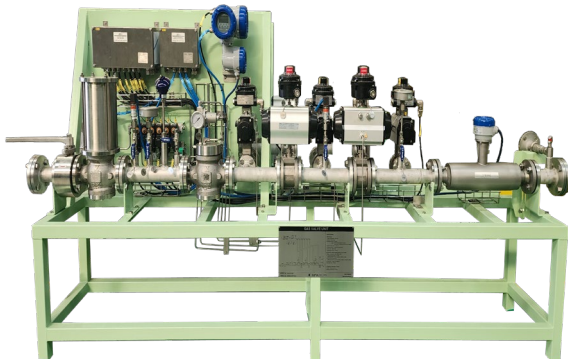
■ GVU

▷ITEM

- Gas valve unit(GVU) for Generator Engine

Specification

- Regulating Valve
 - Type : Pilot Operated / Diaphragm
 - Fluid : NG, N2, Compressed Air
 - Max Working Pressure : 16Bar
 - Setting Pressure : 1~6Bar
- Shut Off Valves
 - Media : Compressed Air
 - Rate : JIS 16K
 - Size : 40A~80A
- Electrical Components
 - Degree of Protection : IP65
 - Pressure Transmitter
 - Range : 4~20mA, 0~25Bar
 - 4~20mA, 0~16Bar
 - Temperature Transmitter
 - Range : 4~20mA, -50~100°C



Function Test with Liquid Hydrogen

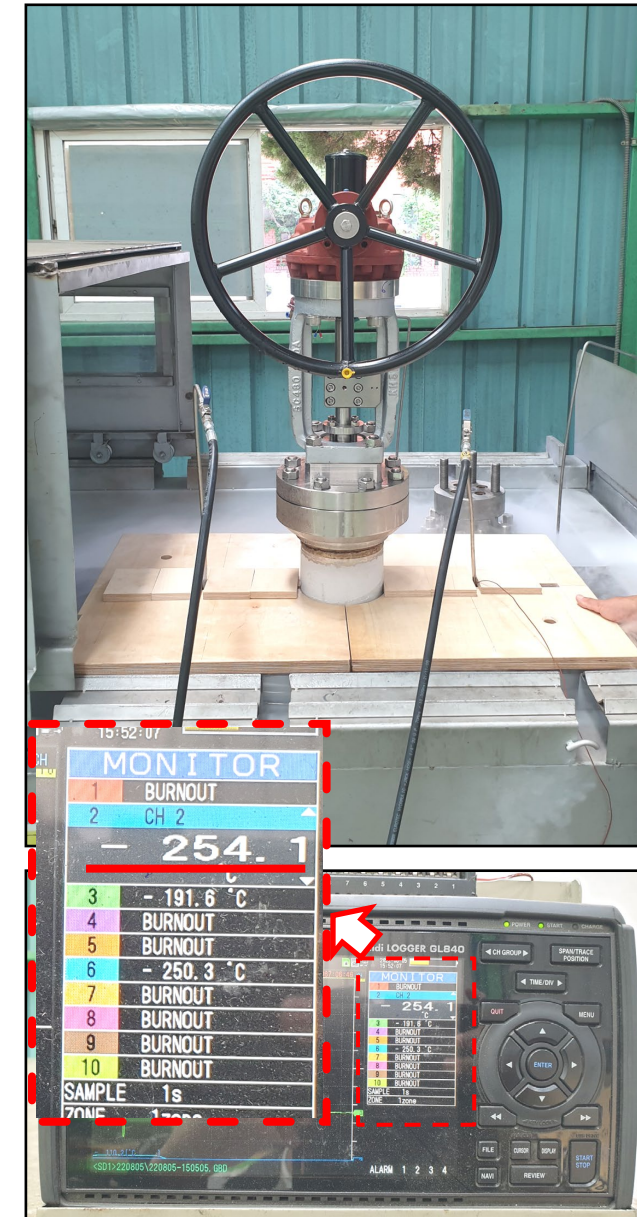


Prototype valve

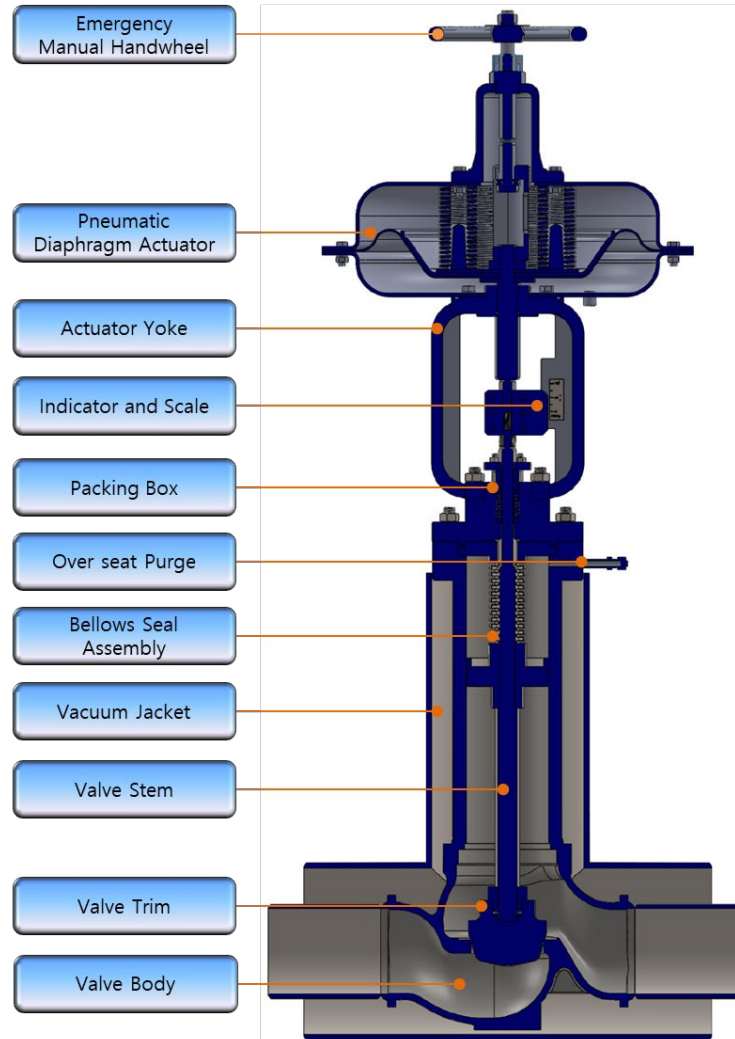
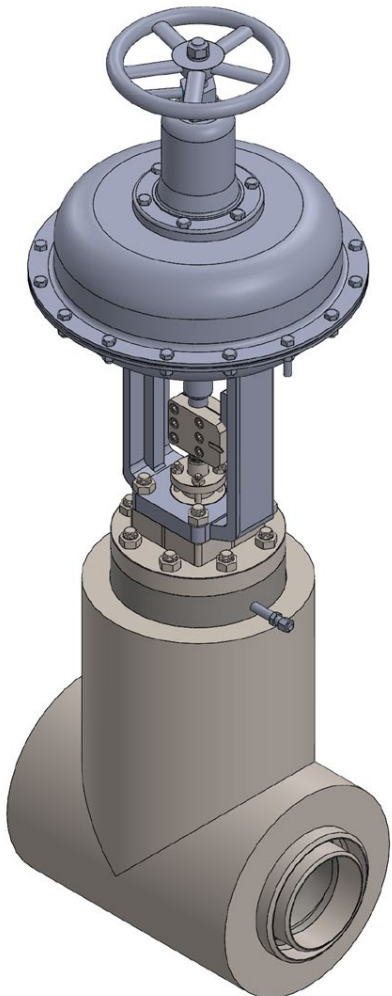


Liquid Hydrogen

Spec.	Max. Temp. (°C)	Design Pressure : 10 bar	Time (Second)	Fluid	Max. Allowable Leakage (cc/min)
	-253	11 bar	30 sec	He	900
Actual	-254.1	3.5 bar	each 30 sec	He	45
		7 bar		He	65
		10.5 bar		He	90
		11 bar		He	100



Vacuum Jacket type valve



Specifications

Type	Valve	Globe, Bellows Seal, Extension Bonnet
	Actuator	Pneumatic Diaphragm with Handwheel
	Trim	Linear, Equal Percentage, Quick Opening
Applicable Fluids		LNG, LHe, LH2
Valve	Rate	ANSI Class 150, 300
	Size	1/2" ~ 16"
Design	Temperature	-268°C ~ 80°C (450°F ~ 176°F)
	Pressure	10 Bar
Hydro. Test		Design Pressure x 1.5
Valve End connection		Butt-Weld, Flanged, Socket weld
Seat Leakage		BS 6334, ANSI/FCI 70-2 Class VI

■ CONTROL VALVE

▷ ITEM

* GLOBE, BALL, BUTTERFLY CONTROL VALVE

▷ APPLICATION

* OFFSHORE : DRILLSHIP, DRILL RIG, SEMI RIG, FPSO, FSO, FLNG, FIXED PLATFORM, ETC

* ONSHORE : **NUCLEAR POWER PLANT**, THERMAL POWER PLANT, DIESEL ENGINE POWER PLANT, REFINERY, STEEL PLANT, EPC.

* MARINE : LNG/LPGC, **FUEL GAS SUPPLY SYSTEM**, CONTAINERSHIP, TANKERS, BULK CARRIERS, ETC

Specification

- Code: ANSI/ASME
- Size : 1/2" ~ 24"
- Rating: 150#~2500#
- Material: A216 WCB/A351 CF8
SS316/SS410



Globe
& Pneumatic



Globe
& Pneumatic



3Way Globe
Pneumatic



3Way Rotary
Motor



Butterfly
& Hydraulic



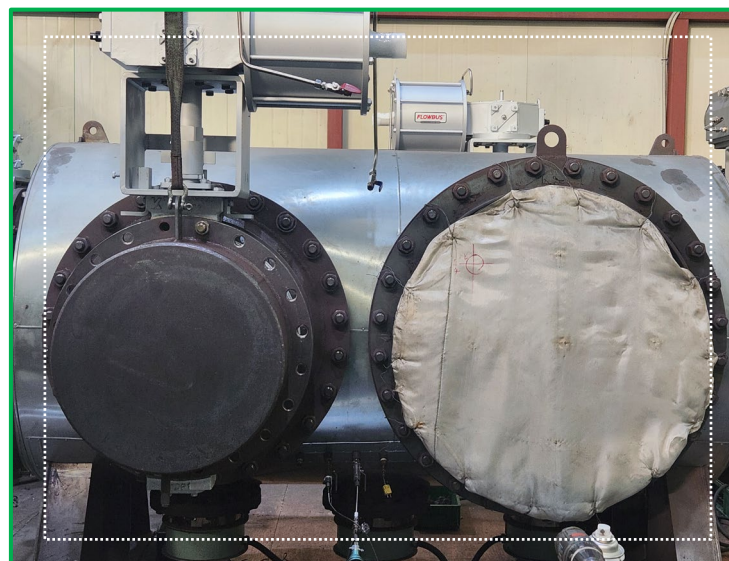




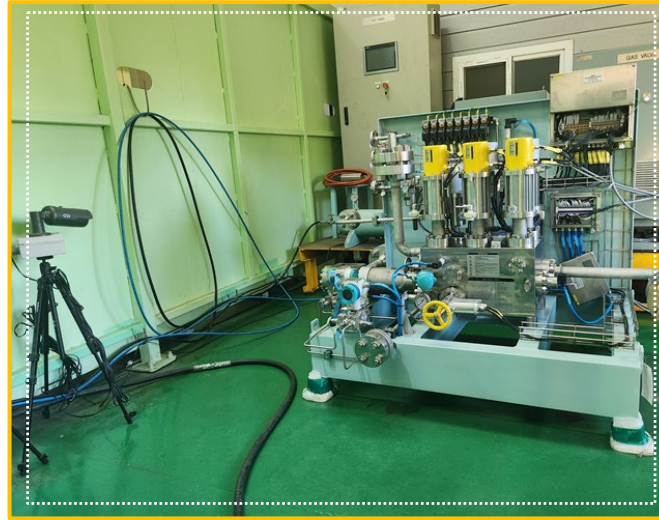
Cryogenic Test Chamber, ½" ~50", We can carry out 1 lot 50sets valve



Hydro Test Facility Up to 1500A



High Temperature Test Facility, Up to 600'c, 5set VV's can be tested simultaneously



GVT (Gas Valve Train) Test Facility, Design pr': 420bar, Fluid : N₂, Size 1~2"



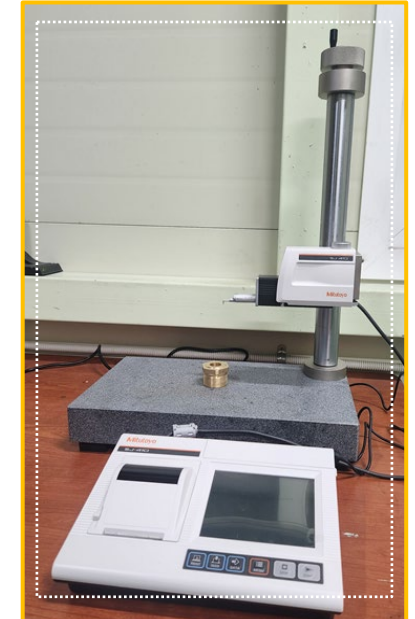
Dial Gauge



Torque Gauge Up to 2100N.m



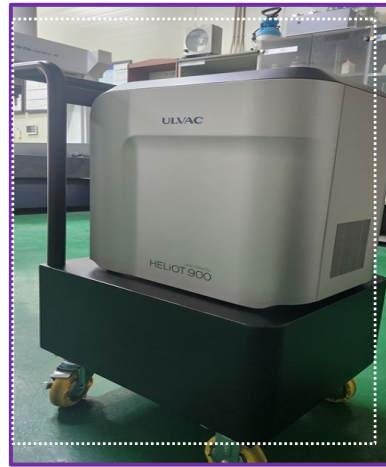
Pressure Gauge 30,000psi



Illumination measurement



Spring Tester



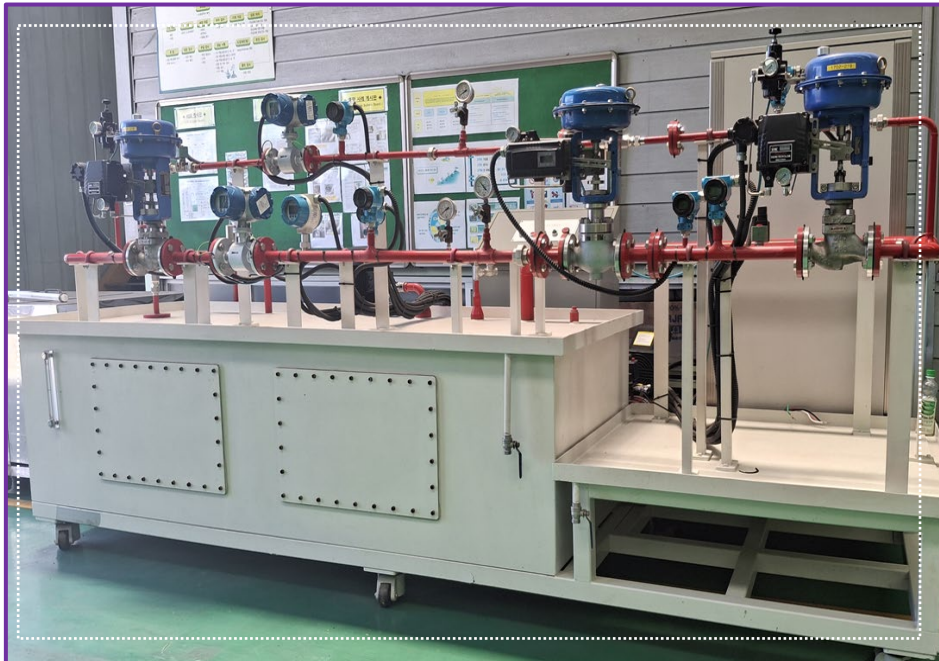
Helium Leak Detector



3D Measurement Tester



Video Measurement Tester



Valve CV Tester



Hydro. Tester Up to 500A

1. Cryogenic Safety Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
DSME SHI HHI KOGAS-Tech Etc.	Maran Gas	LNG Carrier	12" x 16"	150 ~ 300	Pilot (Cargo Tank)	2,254
	Teekay Gas Alpha Gas BW Minerva Excelsior / Etc.	FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	8" x 10" 1/2" x 10"	150 ~ 2500	Conventional	7,520

2. Cryogenic Control Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
DSME HHI KOGAS-Tech Etc.	Maran Gas Alpha Gas Minerva Swan Energy BW Etc.	LNG Carrier FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	1/2" ~ 20"	150 ~ 2500	Pneumatic Cylinder and Diaphragm	3,138

3. Cryogenic Butterfly Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
HHI-EMD Excelsior Energy KOGAS-Tech Atlantic Gulf & Pacific Company Etc.	Excelsior Energy Easton Pacific Shipping Karpowership EXMAR MOL BW / Etc.	LNG Carrier FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	3" ~ 32" 3" ~ 8"	150 ~ 300 600	Manual (Gear box)	988
					Remote (Pneumatic and Hydraulic)	539

4. Cryogenic Ball Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
DSME Excelsior Energy KOGAS-Tech J&P-Avax S.A. Etc.	Teekay Gas Chandris Easton Pacific Shipping BW Etc.	LNG Carrier FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	1/2" ~ 16" 1/2" ~ 4"	150 ~ 900 1500 ~ 2500	Manual (Gear box)	4,554
			1/2" ~ 20" 1/2" ~ 8" 1/2" ~ 4"	150 ~ 300 600 ~ 900 1500 ~ 2500	Remote (Pneumatic and Hydraulic)	191

5. Cryogenic Globe Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
HHI-EMD MITSUBISHI SHIPBUILDING KOGAS-Tech Atlantic Gulf & Pacific Company Etc.	Gaslog Knutsen Chandris NYK Easten Pacific Shipping Etc.	LNG Carrier FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	1/2"~20"	150 ~ 2500	Manual	5,730

6. Cryogenic Check Valve

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
HHI-EMD MITSUBISHI SHIPBUILDING KOGAS-Tech Atlantic Gulf & Pacific Company Etc.	Gaslog EXMAR Knutsen Easten Pacific Shipping Teekay Gas Etc.	LNG Carrier FSRU, FSU LNG Fueled Ship LNG Terminal Etc.	1/2" ~ 10"	150 ~ 2500	Swing	286
					Lift	76
					SDNR	139

7. Gas Valve Train (GVT)

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
HHI-EMD HSD Engine STX Engine	Hapag Lyoyd Gaslog Etc.	LNG Carrier LNG Fueled Ship (Container, Bulk Carrier, Etc.)	1" ~ 2"	2500	2-Stroke ME-GI Engine	89

8. Gas Valve Unit (GVU)

Customer	Ship Owner	Project	Size (inch)	Press. (lbs)	Type	Q'ty (ea)
HHI-EMD HSD Engine STX Engine	Hapag Lyoyd Gaslog Etc.	LNG Carrier LNG Fueled Ship (Container, Bulk Carrier, Etc.)	2" ~ 4"	150	4-Stroke Generator Engine	65



인증 및 설계 기준

Automatic & Control Valve
Since 1993



* We have most of all kind of cryogenic valve class certification such as BV, ABS, DNV-GL, CCS, KR, NK, CCS, RS

<2025>

GVT(Gas Valve Train), GUV, FGSS VV, CHS(CARGO HANDLING SYS.) VV, PILOT SAFETY, SCR/EGR VV, LNG Terminal, DBB VV => AGENT Activate, Shipowner Sales.

<2023>

GVT(Gas Valve Train) Selling with Provisional Cert', GUV, FGSS, CHS(Cargo Handling Sys.)VALVE, SCR/EGR HT B/F => AGENT Activate, Shipowner Sales

<2021>

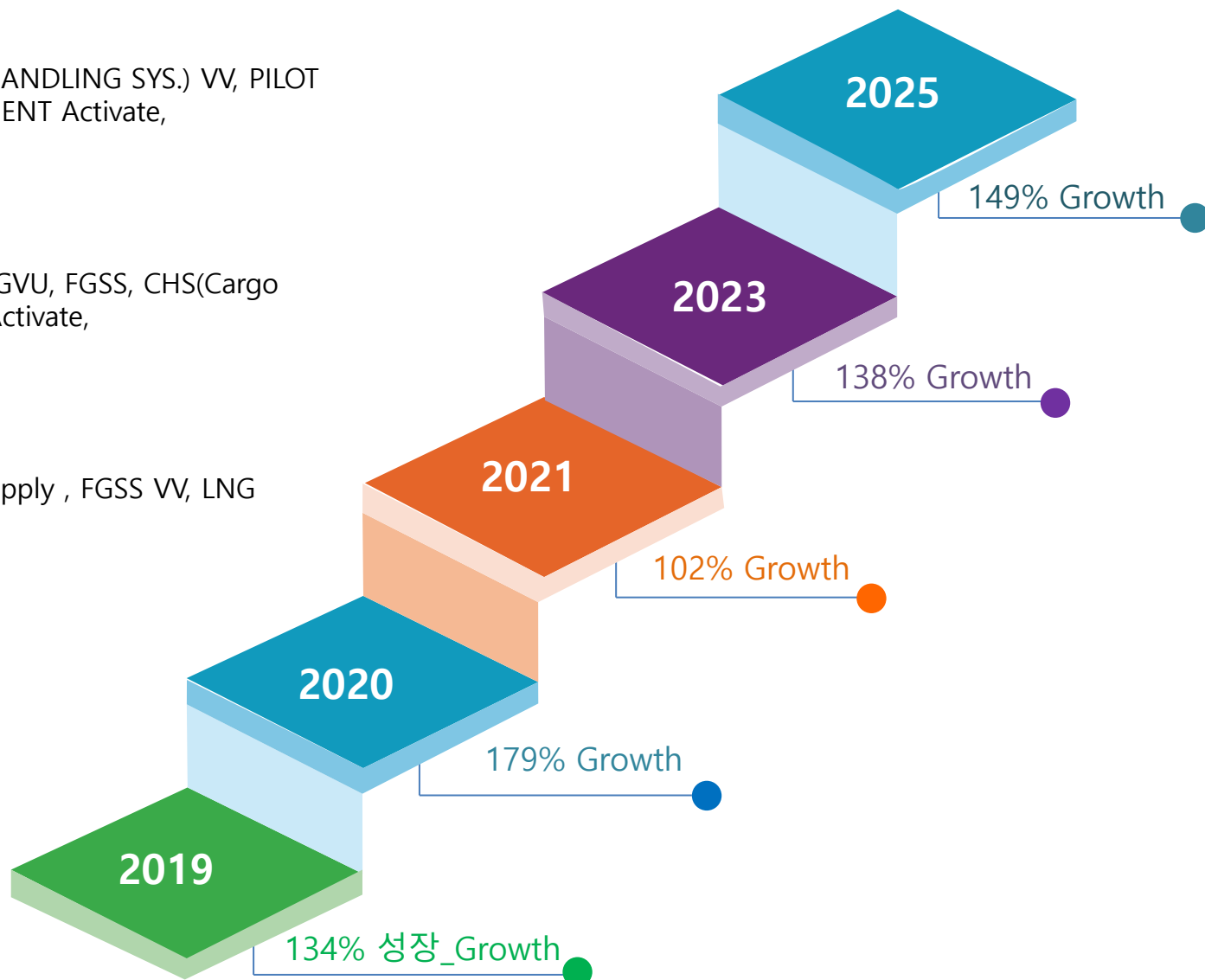
GVT(Gas Valve Train) Develop Complete & Initial supply , FGSS VV, LNG Terminal(Ilijan), SCR/EGR HT B/F, Shipowner Sales

<2020>

All kind of LNG VV supply such as FGSS VV, CHS (Cargo Handling Sys), Pilot Safety, SCR/EGR VV

<2019>

All kind of LNG VV supply such as FGSS VV, CHS(Cargo Handling Sys), Pilot Safety, SCR/EGR VV





KORVAL has specialized in producing valves for the shipbuilding(Hull, Machine, Outfitting, Engine, Equipment and so on), EPC(Chemical, Water works), Nuclear, LNG Terminal industries for 33 years.

The world's largest item-holding company capable of producing all types(such as control, Safety, Ball, Butterfly, GGC, Check and so on)/pressures(Below atm to #4500, 500bar)/sizes(1/2" to 24") of cryogenic valves used in LNG systems.

Securing quality excellence in the cryogenic temperature(-163'c) field based on long-term supply experience and accumulated our own technological prowess for all items.

Provides convenience in purchasing and after-sales service through package supply of small quantities of various products.

Our own direct design and production enable fast and accurate after-sales service, and maintenance costs are also reduced by establishing a global after-sales service network.

감사합니다.

