



Together 3010



COMPANY PROFILE 2025

DYNAMIC & SPECIAL COMPANY



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*Beyond the Simple
Customer's Satisfaction*

DYNAMIC & SPECIAL COMPANY



GREETING MESSAGE

The management philosophy of DASCO is that the enterprises should permanently exist and develop, the purpose of management of the company is “profit maximization”, and the goal of the management of the company is to be a world-class company. DASCO has continuously made investments and endeavors to be the best in the heat exchange area since its establishment in 1995.

The company intends to make every endeavor as the leader in heat exchanger area based on its know-how that has been accumulated as a professional heat exchanger company including Air compressor inter cooler, H2 cooler, Shell & Tube heat exchanger, Pressure Vessels, and Electric heater as well as good-quality products and competitive prices.

CHAIRMAN **Lee, Geun young**

Our mission is to be a company with core technologies that contribute to the development of our customers, businesses, local community and the nation. We promise to develop into a strong company that contributes to the development of local communities and the nation through continuous technology development and self-directed management.



PRESIDENT **Lee, Sang kyu**



Date of establishment : Jul. 2020
Land area : 11,600 m²
Factory Building area : 7,700 m²

DASCO NOKSAN FACTORY

OUTLINE OF NOKSAN FACTORY (HEAD OFFICE)

1. NAME : DASCO Co., Ltd
2. BOARD OF DIRECTOR / CHAIRMAN : Lee, Geun young
3. FOUNDED : OCT, 1995
4. CORRESPONDENT BANKS : INDUSTRIAL BANK OF KOREA(IBK)
5. NUMBER OF EMPLOYEES : 114 PERSONS
(Financial & Managing : 11 / Sales : 5 / Design : 8 / Q.A : 10 / Production : 61 / Procurement : 10 / R&D : 9)
6. CAPITAL : ₩ 363,270,000 (US\$ 330,000) / SALES AMOUNT OF YEAR 2024 : US\$31,000,000
7. ADDRESS : 33, Noksansandan 17-ro 78beon-gil, Gangseo-gu, Busan, Korea
T. 82.51.324.9984 E-mail : hs@heatsolution.co.kr



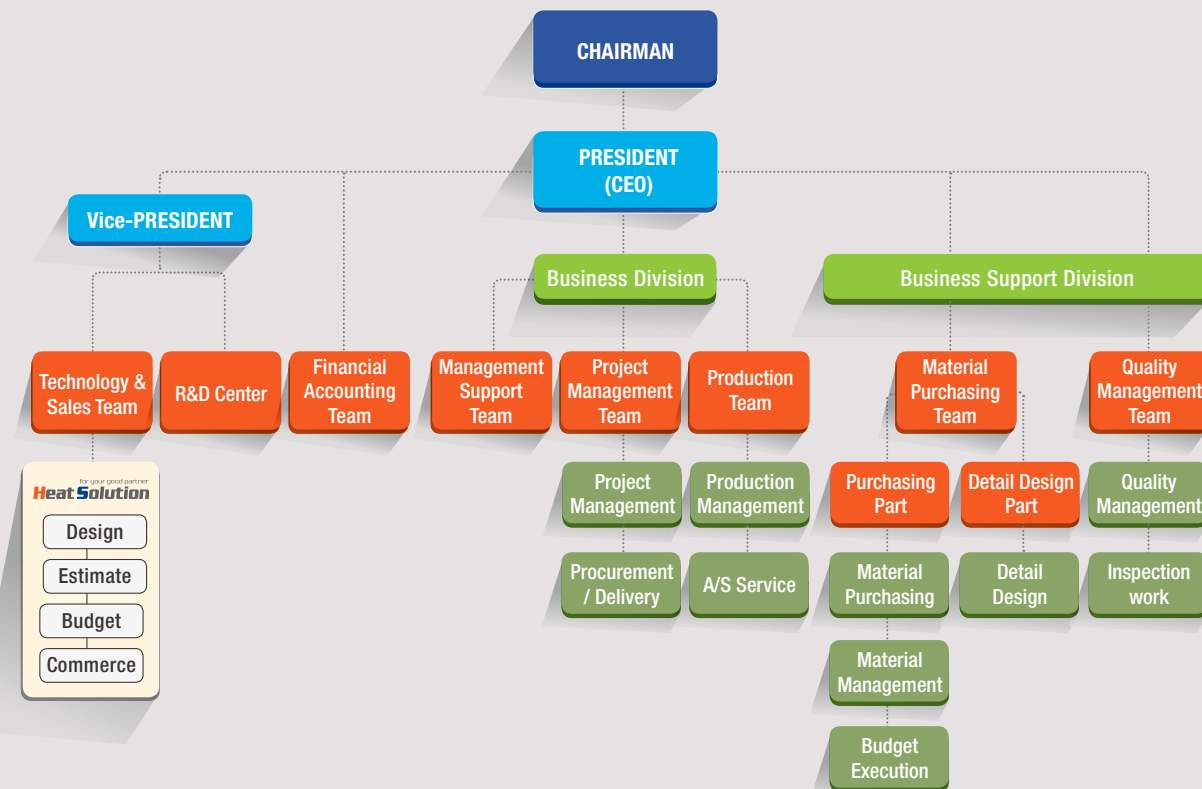
Date of establishment : Nov. 2023
Land area : 8,460 m²
Factory Building area : 4,974 m²

DASCO MIEUM FACTORY

OUTLINE OF MIEUM FACTORY

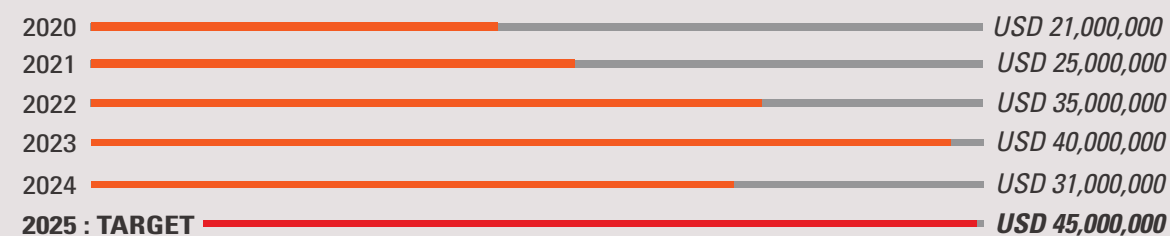
ADDRESS : 33, Mieumsandan 1-ro 15beon-gil, Gangseo-gu, Busan, Korea
T. 82.51.324.9984 E-mail : hs@heatsolution.co.kr

2. ORGANIZATION CHART

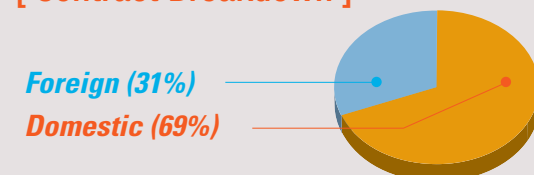


3. TURN-OVER (YEARLY SALES)

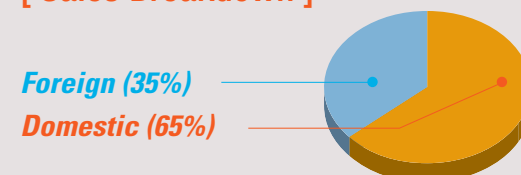
(1,000 WON/USD)



[Contract Breakdown]



[Sales Breakdown]



4. HISTORY OF DASCO

- 1995** 10. Established DASCO in 1995, Busan, Korea
- 2000** 05. Changed the company into a corporation, DASCO Co., Ltd.
- 2003** 11. Certified of ISO 9001:2000(NQA)
- 2005** 11. Obtained the certification of anti-explosive electric heater (KIMM)
- 2006** 08. Obtained CE certification (in electric heater part (SGS))
- 2007** 02. Registered vendor in Hanwha Power Systems (Previously Samsung Techwin)
- 2008** 10. Obtained the classification society certification of ABS, BV, KR
12. Shop approved by DNV-GL ship classification
- 2009** 02. Obtained INNO-BIZ certification
03. Registered vendor in Doosan Heavy Industries
11. Obtained the certification of ASME, S and U Stamp
- 2010** 06. Registered as business partner of GE (General Electric)
07. Registered manufacture of specific equipment in Korea Gas Safety Corporation
- 2015** 04. Invested capital to plant engineering professional company, Heat Solution
05. Registered vendor of Air Liquide (Japan), Hyundai Heavy Industries
10. Registered vendor of IHI, MHPS, Atlas Copco (America, France, Korea)
12. Registered vendor of Kobe Steel
- 2016** 02. Obtained the certification of 5 Major Korea Electric Power Co.
09. Registered vendor of Fuji Electric, POSCO
- 2017** 10. Obtained the certification of TR-CU as approved factory
- 2019** 07. Selected as a prospective medium & small enterprise
12. Awarded export tower for USD 3 million dollars
- 2020** 07. Renewal H.Q. to Noksan National ind. Complex in Busan, Korea
- 2022** 11. Selected as a leading regional innovation company
12. Awarded export tower for USD 5 million dollars
- 2023** 04. Selected as one of the 1000+ Global small giant companies
11. Renewal 2nd factory to Mieum District General Industrial Complex in Busan, Korea
12. Certified of ISO 45001(OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM)
12. Awarded export tower for USD 10 million dollars
- 2024** 01. Selected as one of ten Leading corporation in Busan
05. Awarded Legend 50+ project from Busan Technopark
10. Certified of ISO 14001 (ENVIRONMENT MANAGEMENT SYSTEM)

5. MAIN CUSTOMER

FOR PLANT

FOR ASU

AIR LIQUIDE



AIR PRODUCTS



DIG AIRGAS



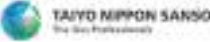
LINDE



PRAXAIR



TAIYO NIPPON SANSO



SK materials airplus



FOR PLANT

FOR ROTATING MACHINERY

COMPRESSOR

ATLAS COPCO [AMERICA],
[GERMANY], [FRANCE], [KOREA]



HANWHA POWER SYSTEMS



HITACHI



HOWDEN



HYUNDAI HEAVY INDUSTRIES
TURBOMACHINERY



IHI ROTATING MACHINERY



SA ENGINEERING



KOBE STEEL



MAN



NEUMAN & ESSER



Mitsui E&S Co., Ltd.



TURBINE & GENERATOR

DOOSAN ENERBILITY



FUJI ELECTRIC



MITSUBISHI HEAVY
INDUSTRY



MITSUBISHI POWER



TOSHIBA



MITSUBISHI ELECTRIC



5. MAIN CUSTOMER

FOR PLANT

FOR POWER PLANT

KOEN



KOMIPO / KOSPO



KEWP



KOWEPO



FOR ACHE

SAMSUNG C&T



HD HYUNDAI OIL BANK



SK ENERGY



HD HYUNDAI CHEMICAL



HANWHA TOTAL



JORD INT'L Pty Ltd



HYUNDAI HEAVY INDUSTRIES
TURBOMACHINERY



IHI ROTATING MACHINERY



HANWAH POWER SYSTEMS



KOBE STEEL



MITSUBISHI POWER



ARCELORMITTAL PECEM S.A



FOR MARINE

FOR SHIPYARD

WOOD SIDE ENERGYS



HANWHA OCEAN



DAEWOO SHIPBUILDING
ENGINEERING COMPANY



HD HYUNDAI HEAVY
INDUSTRIES



SAMSUNG HEAVY
INDUSTRIES



FOR PACKAGE

SUNBO INDUSTRIES



KANGRIM HEAVY INDUSTRIES



HANWHA OCEAN ECOTECH



HI AIR KOREA



FOR ENGINE

HD HYUNDAI HEAVY
INDUSTRIES (HHI-EMD)



HSD ENGINE



STX ENGINE



6. MAIN PRODUCTS

FOR PLANT

COMPRESSOR – INTER /AFTER/OIL COOLER

- 1) INTER, AFTER, RECYCLE COOLER
- PLATE & HIGH FIN TYPE (BY TEMA TYPE)
- 2) AIR COOLED HEAT EXCHANGER(BY API661)
- 3) GAS PIPING & SPOOL
- 4) K.O DRUM
- 5) PRESSURE VESSEL

TURBINE

- 1) SURFACE CONDENSER (CYLINDRICAL TYPE)
WITH EJECTOR UNIT FOR STEAM TURBINE
- 2) GLAND STEAM CONDENSER
- 3) EJECTOR FOR GLAND CONDENSER

GENERATOR

- 1) HYDROGEN COOLER
- 2) AIR COOLER

ETC.

- 1) STEAM AIR HEATER FOR BOILER
- 2) PRESSURE VESSEL & TANK
- 3) H₂ & He HEAT EXCHANGER

FOR LNG & LPG

CARGO HANDLING SYSTEM

- 1) VAPORIZER(LNG, FORCING)
- 2) GAS HEATER(HIGH DUTY, LOW DUTY,
WARM-UP HEATER)
- 3) MIST SEPARATOR / DRAIN POT

REGASIFICATION SYSTEM

- 1) HIGH PRESSURE VAPORIZER
- 2) TRIM HEATER

RELIQUEFACTION PACKAGE

- 1) BOG PREHEATER
- 2) WASTE GAS HEATER
- 3) GAS SEPARATOR & TANK

FUEL GAS SUPPLY SYSTEM

- 1) VAPORIZER(HIGH&LOW PRESSURE)
- 2) FUEL GAS HEATER
- 3) GLYCOL WATER HEATER & TANK

INERT GAS GENERATOR

- 1) GAS COOLER
- 2) STEAM GAS HEATER
- 3) ELECTRIC GAS HEATER

FOR MARINE

- 1) SHELL & TUBE HEAT EXCHANGER
- 2) SOUND ATTENUATOR
- 3) VESSEL & STRUCTURE & AIR SEPARATOR
- 4) SILENCER

FOR INNOVATION

- 1) R&D CENTER
 - Development and Demonstration of Core Technology for Commercial Liquid Hydrogen Plant
 - Development of hair-pin type vaporizer for pump package localization of eco-friendly LNG-fuelled ships
 - Commercialization of heat exchangers for hydrogen stations and onshore plants through the development of air fan type heat exchangers to improve compressor efficiency

INTER/AFTER COOLER FOR COMPRESSOR



A Inter/After Cooler is installed in air compressor, It requires special design with a heat exchanger that cools compressed high temperature air to reduce its volume. It consists of Fin Tube, Water Box, and Casing, etc.

• Material Code

- ASME, ASTM, JIS

• Material Combination

- Tube : Cu-Ni (9:1, 7:3), Cu, SUS 304, 316, Duplex.
- Fin : AL, CU, SUS
- Fin Coat : Sn Coat, Bly gold Coat, Phenolic Coat

• Applicable Code

- ASME(U-STMP with NB Cer't)
- TEMA R.C.B.
- KOREA KGS, KOSHA, KEA, KESCO and Etc.
- JAPAN KHK, 2nd Pressure Vessel code
- CE MARK (PED Cer't)
- World Wide Local law
(DOSH, MOL, TRCU for Russia, CRN for Canada, UKCA (U.K) & etc.)



AIR COOLED HEAT EXCHANGER (API 661)



It is a device that cools the fluid flowing into tube inside to the temperature designed by customers using air from the atmosphere and is used in oil refining plant, petrochemical plant, incinerator, and compressor.

• Applicable Code

- ASME(U-STMP with NB Cer't)
- TEMA R.C.B.
- KOREA KGS, KOSHA, KEA, KESCO and Etc.
- JAPAN KHK, 2nd Pressure Vessel code
- CE MARK (PED Cer't)
- World Wide Local law
(DOSH, MOL, TRCU for Russia, CRN for Canada, UKCA (U.K) & etc.)

• Material Combination

- Tube : Cu-Ni (9:1, 7:3), Cu, SUS 304, 316, Duplex.
- Fin : AL, CU, SUS, C.S



H2 / AIR COOLER FOR GENERATOR FOR PLANT



Hydrogen Cooler is a heat exchanger that cools with tube side cooling water. A large-sized power generator uses hydrogen which specific heat is big as a cooling media.

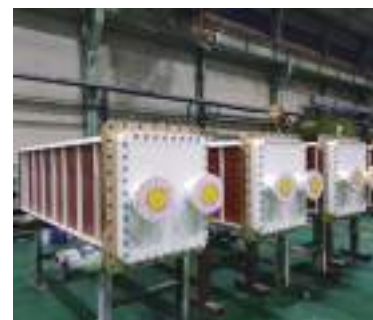
The high temperature hydrogen by cooling power generator flows to fin side and it is used for cooling. It consist of plate fin, tube and water box. To prevent from vibration, it is manufactured using a professional vibration interpretation device.

• Applicable Code

- ASME(U-STMP with NB Cer't)
- TEMA R.C.B.
- KOREA KGS, KOSHA, KEA, KESCO and Etc.
- JAPAN KHK, 2nd Pressure Vessel code
- CE MARK (PED Cer't)
- World Wide Local law
(DOSH, MOL, TRCU for Russia, CRN for Canada, UKCA (U.K) & etc.)

• Material Combination

- Tube : Cu-Ni (9:1, 7:3), Cu, SUS 304, 316, Duplex.
- Fin : AL, CU, SUS
- Fin Coat : Sn Coat, Bly gold Coat, Phenolic Coat



SHELL & TUBE TYPE HEAT EXCHANGER FOR PLANT & MARINE



A Shell & Tube Heat Exchanger is heat exchanger that is the most general form and the most widely used. It is used for processor of power generation station, petroleum and chemical engineering factory and for facilities such as fuel Oil heater, Lubrication oil cooler. We provides heat calculation and structure design services for its manufacturing.

• Applicable Code

- ASME(U-STMP with NB Cer't)
- SHIP CLASS : ABS, BV, DNV, KR, LR, NK, RS
- TEMA R.C.B.
- KOREA KGS, KOSHA, KEA, KESCO and Etc.
- JAPAN KHK, 2nd Pressure Vessel code
- CE MARK (PED Cer't)
- World Wide Local law
(DOSH, MOL, TRCU for Russia, CRN for Canada, UKCA (U.K) & etc.)

O2 COOLER WITH O2 CLEANING ROOM



RECYCLE GAS COOLER AND AFTER COOLER



LUBE OIL COOLER



GLAND STEAM CONDENSER



TRUCK BOIL-OFF HEATER



LNG & LPG FOR MARINE



- **Applicable Code**
 - SHIP CLASS ABS, BV, DNV, KR, LR, NK, RS
 - ASME(U-STAMP)
 - TEMA R.C.B



N2 COMPANDER FOR FSRU



NG HEATER



WARM-UP HEATER



GAS COOLER & GAS HEATER FOR IGG(LNG&LPG)



N2 INVENTORY TANK



NG PRE HEATER



LNG SEPARATOR



LNG VAPORIZOR DEMONSTRATION FACILITY TEST

PRESSURE VESSEL & TANK

- **Applicable Code**
 - ASME(U-STAMP with NB Cer't)
 - TEMA R.C.B.
 - SHIP CLASS ABS, BV, DNV, KR, LR, NK, RS
 - KOREA KGS, KOSHA, KEMCO, KESCO and Etc.
 - JAPAN KHK, 2nd Pressure Vessel code
 - CE MARK (PED Cer't)
 - World Wide Local law
(DOSH, MOL, TRCU for Russia, CRN for Canada, UKCA (U.K) & etc.)



7. PRODUCTION CAPACITY & HANDLING MATERIALS

1) PRODUCTION CAPACITY FOR NOKSAN FACTORY(HEAD OFFICE)

- MAX. WEIGHT : 100 TON
- MAX. SIZE (L x W x H) : 20 x 8 x 7 (m)

2) PRODUCTION CAPACITY FOR MIEUM FACTORY

- MAX. WEIGHT : 100 TON
- MAX. SIZE (L x W x H) : 20 x 8 x 7 (m)

3) MAJOR HANDLING MATERIALS

- CARBON STEEL
- STAINLESS STEEL
- COPPER & COPPER ALLOY (BRASS, BRONZE, CU-NI)
- ALLOY STEEL (Cr-Mo & CARBON-Mo)
- TITANIUM & TITANIUM CLAD
- DUPLEX & SUPER DUPLEX STAINLESS STEEL

8. MAIN FACILITY



NO.	Equipment	Specification	Q'ty
1	OVERHEAD CRANE	1TON (1ea), 2TON(3ea), 3TON(1ea), 5TON(9ea), 10TON(7ea), 20TON(2ea), 30TON(2ea), 5/20TON(1ea)	26
2	TIG WELDING MACHINE	500A	43
3	CO2 WELDING MACHINE	600A	29
4	PLATE FIN PRESS MACHINE	60TON(1EA), 80TON(3EA)	4
5	LATHE MACHINE	D-480	2
6	H2/C, AIR/C, I/AC BUNDLE ASS'Y TABLE	1600 x 4500(1ea), 1600 x 3500(6ea)	7
7	VIBRATION TESTER	Lion / VA-12	1
8	HYDRO. TEST UNIT	35kg/cm ² (1ea), 70kg/cm ² (1ea), 450kg/cm ² (1ea)	9
9	OIL FLUSHING EQUIPMENT	3,000L	1
10	HYDRAULIC TORQUE WRENCH	450 ~ 4510 N/m	3
11	R.T ROOM	13L x 5W x 5H (m)	1
12	COMPRESSOR	75HP	1
13	GAS BOOSTER	420kg/cm ² (1ea), 1000kg/cm ² (1ea)	2
14	LIQUID STORAGE TANK	L-N2(3.33MPa, 2ea), L-Ar(1.03MPa, 1ea)	3
15	TUBE EXPANDING MACHINE	-	8
16	PLATE FIN & TUBE MULTI-EXPANDER	2.5m x 280Hole (2ea), Ø12 x 930L (1ea)	3
17	TUBE SINGLE EXPANDER	Ø10 x 20mm	5
18	DRILLING MACHINE	Ø19 (2ea), Ø23 (1ea), Ø32 (1ea)	4
19	VACUUM PUMP (FOR HE LEAK TEST)	1.5kw	1
20	GAUGING	1500A	2
21	PLASMA CUT	150A (1ea), 120A (2ea)	3
22	TUBE BENDING	Ø15.88 COPPER TUBE BENDING	1
23	SAW WELDING MACHINE	1000A, 600A (In/Outside SAW Welding Machine for AFC)	2
24	RADIAL DRILLING MACHINE	2HP x 960L	1
25	BUNDLE INSERT MACHINE	220/380V 1.5kw	2
26	BUNDLE ASSEMBLY JIG	W1800 x L6000	4
27	CLEANING ROOM for O2 COOLER		1
28	N-AXIS BALL EXPANDER(NC)	W1200 x 1500H x 6000L	1



Compressor



Liquid Storage Tank (L-N2)



Liquid Storage Tank (L-Ar)

8. MAIN FACILITY



Plate Fin & Tube Multi Expander



Fin-Tube Bundle Ass'y Jig



SAW Welding Machine



RT Room



Oil Flushing Equipment



Press Machine



Transportation Equipment

9. QUALITY MANAGEMENT

1) Organization of Quality Management Team



2) For Welder List

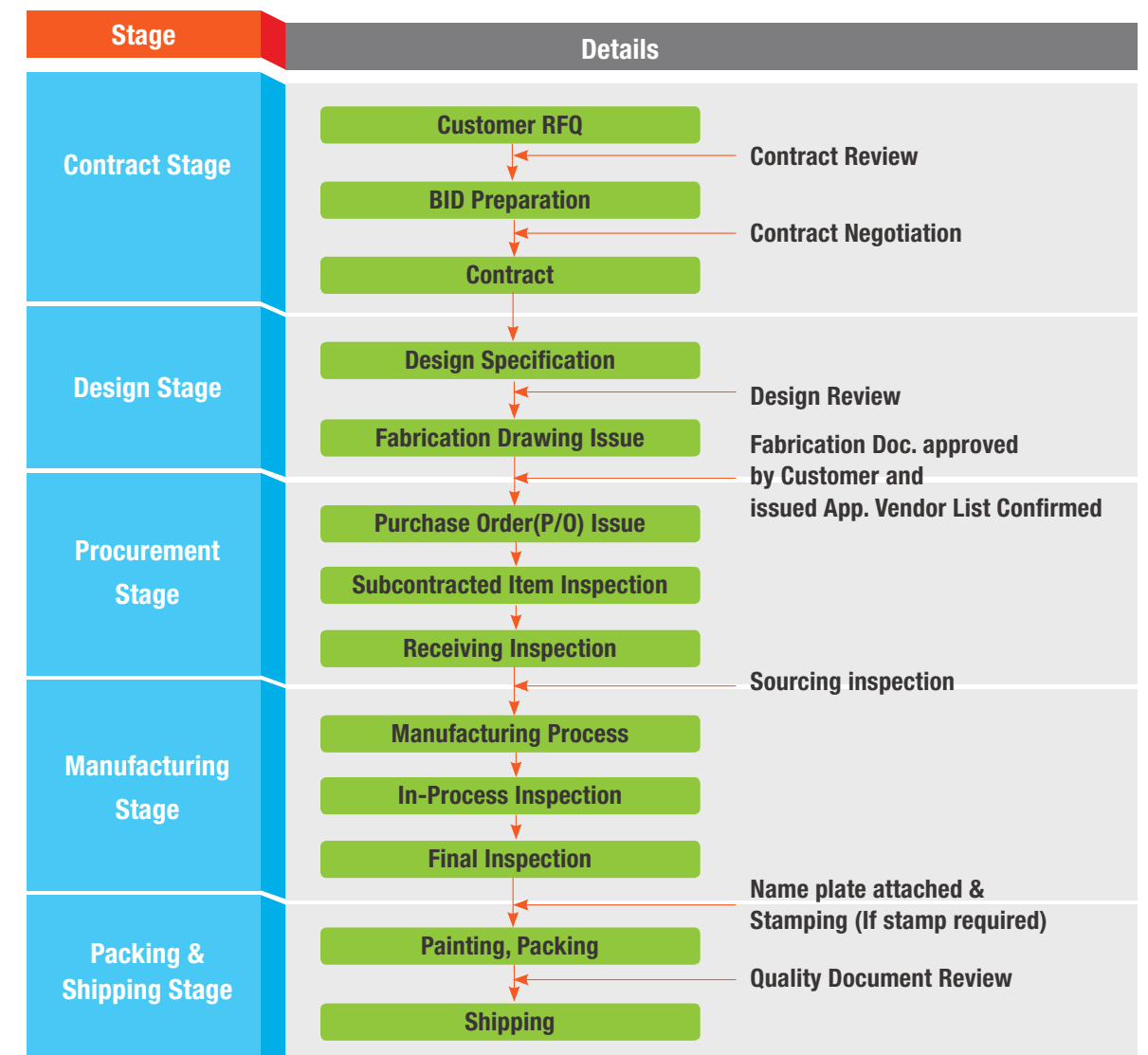
Welder I.D No.	Welder Name	Method		
		GTAW	FCAW	SAW
DW01	S.G. Lee	○	○	X
DW03	JS. Woo	○	○	X
DW06	J.H. Lee	○	○	X
DW22	J.G. Kim	○	○	X
DW27	M.G. Kang	○	○	○
DW28	S.E. Kwon	○	○	X
DW30	J.G. Kang	○	○	X
DW31	Y.S. Jo	○	○	X
DW32	S.G. Lee	○	○	X
DW33	D.Y. Lee	○	○	X
DW34	J.S. Kim	○	○	○
DW37	G.H. Park	○	○	X
DW38	S.M. Mun	○	○	X
DW39	C.S. Lee	○	○	X
DW40	M.H. Park	○	○	X
DW41	Y.G. Kim	○	○	X
DW42	T.H. Kim	○	○	X
DW43	G.B. Gu	○	○	X
DW44	H.J. Song	○	○	X
DW45	J.G. Lee	○	○	○
DW46	Y.H. Kim	○	○	X
DW48	H.Y. Lee	○	○	X

Welder I.D No.	Welder Name	Method		
		GTAW	FCAW	SAW
DW50	H.C. Kim	○	○	X
DW51	K.J. Oh	○	X	X
DW61	H.J. Lee	○	○	○
DW62	J.G. Kang	○	○	X
DW63	U.M. Lee	○	○	X
DW64	H.G. Kim	○	○	X
DW65	D.G. Kim	○	○	X
DW66	K.S. Kim	○	○	X
DW67	D.S. Shin	○	○	X
DW68	H.H. Park	○	○	X
DW70	J.C. Lee	○	X	X
DW71	S.H. Lee	X	○	X
DW72	M.S. Choi	○	X	X
DW73	P.S. Hwang	○	○	X
DW74	H.J. Sim	○	○	X
DW75	C.S. Go	○	○	○
DW76	J.G. Oh	X	X	○
DW77	C.H. Kim	○	○	X
DW78	D.M. Kim	○	○	X
DW79	C.H. Lee	○	○	X
DW80	H.S. Jung	○	○	X
DW81	C.H. Han	○	○	X
Total Welder		42	40	6

3) Certified NDE Personnel List

No	Name	Method	Level	Certificated by
1	M.J.Park	RT, UT, MT, PT, LT	III	ASNT
		RT, UT, PAUT, TOFD, MT, PT, VT	III	KITC
2	S.J.Kim	RT, PAUT, TOFD	II (EN ISO 09712)	TWI
		UT	II (EN ISO 09712)	TUV NORD
		PAUT, TOFD	II	SAEHAN
		RT, UT, MT, PT, VT, LT	III	ASNT
		TOFD	III (EN ISO 09712)	RTC
		RT, UT, PAUT, TOFD, MT, PT, VT	III	KITC
3	G.W.Dan	RT, UT, MT, PT, VT	II	KITC
4	S.H.Yang	MT, PT	II (EN ISO 09712)	KPCN
		RT, UT, PAUT	II (EN ISO 09712)	TUV NORD
		RT, UT, PAUT, TOFD, MT, PT, VT	II	KITC
5	N.N.Kim	RT, UT, MT, PT	II	KITC
6	H.S.Oh	RT, UT, MT, PT, VT	II	KITC

4) Quality Plan of the Manufacturing Process



10. R&D CENTER

DASCO R&D Center is dedicated to continuous self-innovation and R&D.
We will do our best to be reborn as a global heat exchanger company.



Since DASCO Center was recognized as a company-affiliated R&D Center by the Korea Industrial Technology Association in 2008, it has been striving to improve heat exchanger-related manufacturing technology and product quality, as well as develop products in various fields for shipbuilding, offshore and onshore plants and enhancing technological process. In order to survive in the fierce technological competition in the world, our research institute is striving to develop heat exchangers and packages using eco-friendly fuels to meet the eco-friendly technologies and carbon-neutral lifestyles demanded by modern industrial society.

We are confident that our researchers will contribute to creating a pleasant environment through the development of eco-friendly products. DASCO R&D Center will strive to create global brand value and become a global heat exchanger company through continuous self-innovation and R&D.



11. STATUS OF QUALITY CERTIFICATION



Organization	Certificate Item	Expiry Date	Number
KGC	ISO 9001	2027.04.24	022-80082-Q
ASME	U-STAMP	2027.12.10	#39135
ASME	S-STAMP	2027.12.10	#39134
KGC	ISO14001	2027.10.20	024-80082-E
KGC	ISO45001	2027.02.04	023-80082-O

Korean Local Regulation

1. KESCO – Korea Electrical Safety Corporation
2. KGS – Korea Gas Safety Corporation
3. KEA- Korea Energy Agency
4. KOSHA – Korea Occupational Safety & Health Agency
5. KIMM – Korea Institute of Machinery & Materials

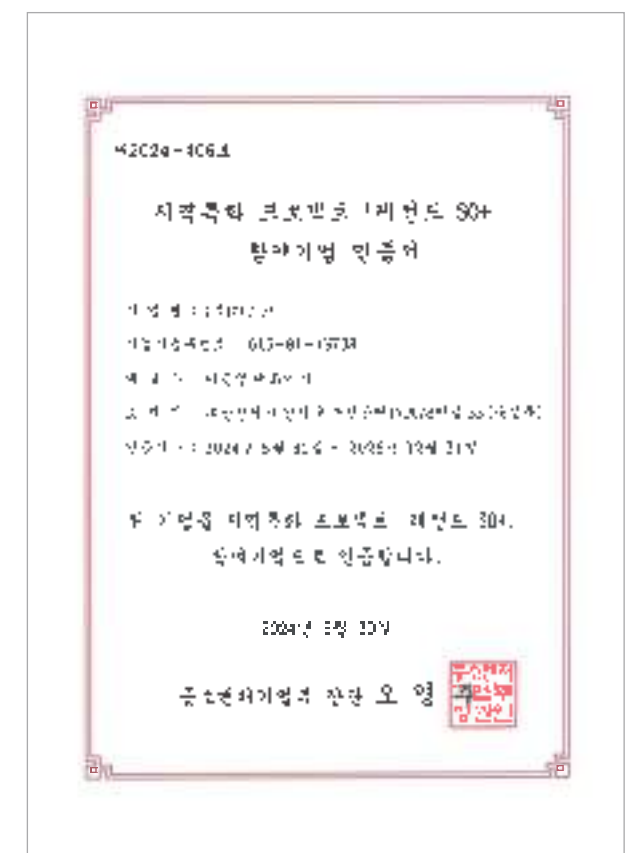
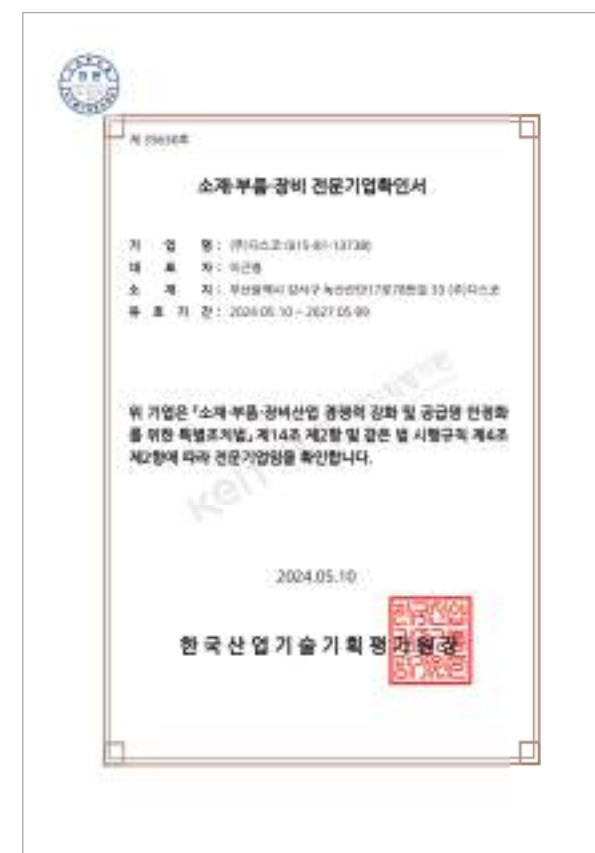
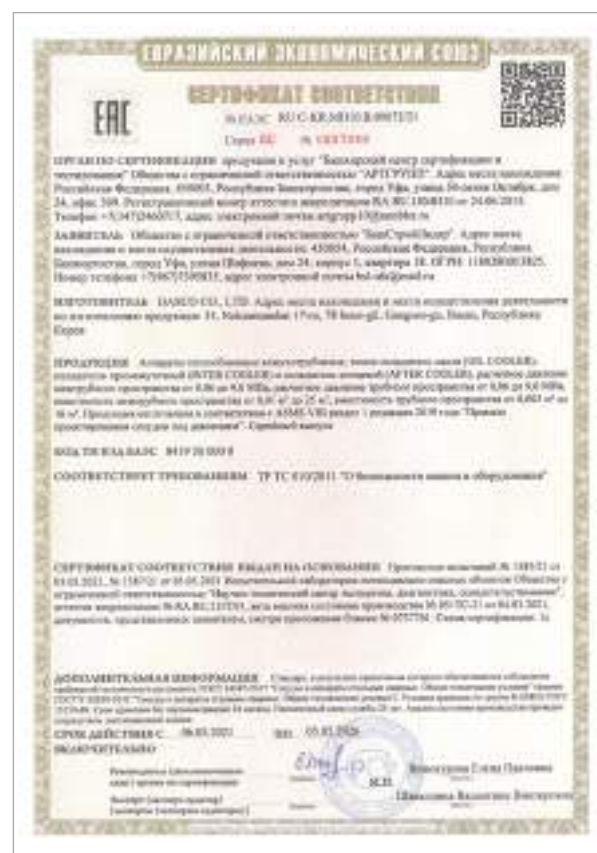
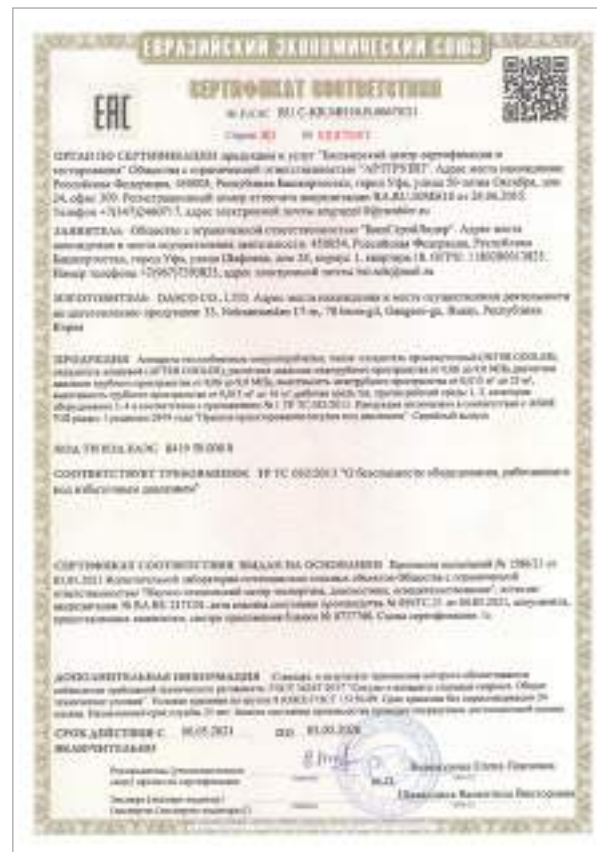
Other International Local Regulation

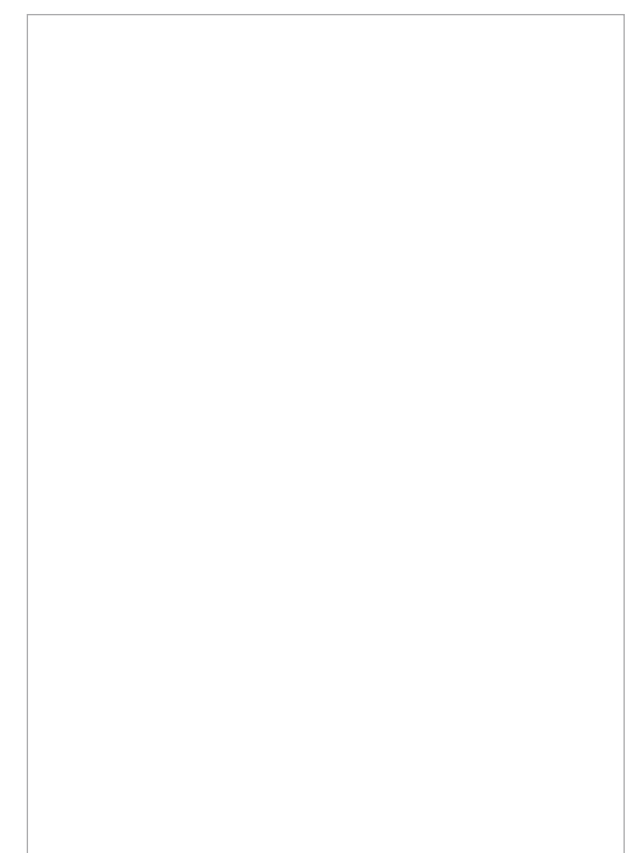
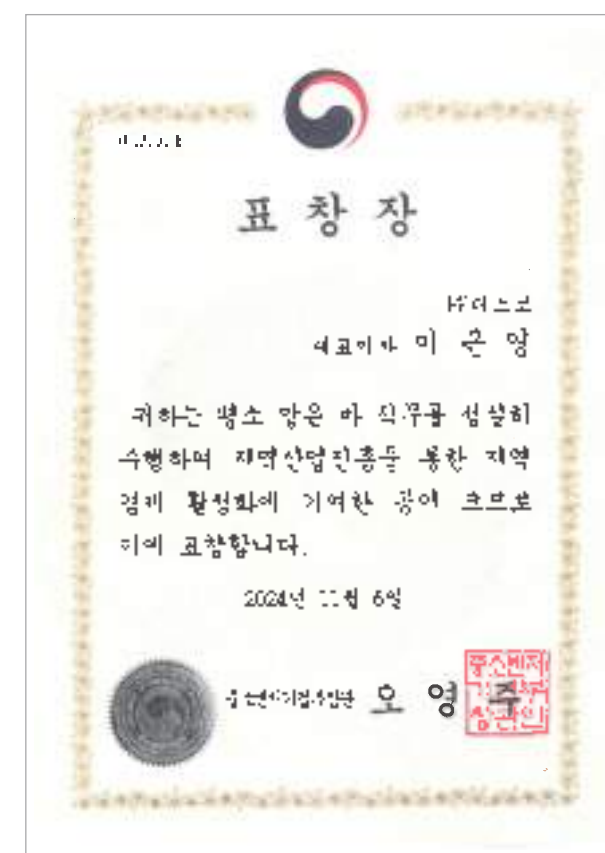
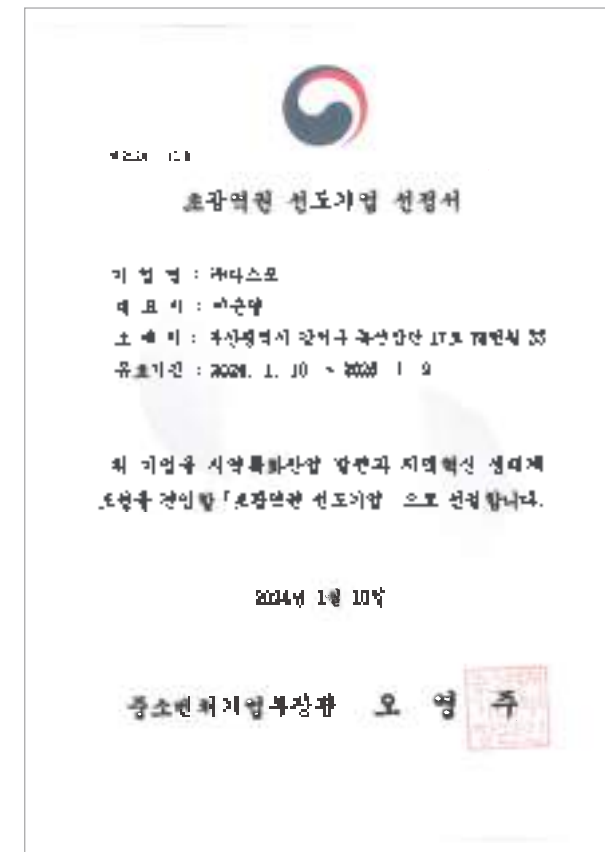
1. Japanese KHK, and 1st & 2nd Pressure Vessel Code
2. CE-Mark (PED) for European site
3. UKCA for UK site
4. TR-CU (GOST-R, etc.) for Russian, Kazakhstani, Belarusian, Kyrgyzstani and Armenian site
5. IBR Cert. for Indian site
6. Others (Singapore-MOL, Malaysian- DOSH, CRN for Canada, Algerian rule)

Class	Certificate Item
A.B.S.	Manufacturer Approval (Boiler and Group I and II Pressure Vessel Manufacturer Approval)
B.V.	Welding Procedure Approval
D.N.V.	Manufacturer Approval (Manufacture of Welded Pressure Vessels Class I & II)
L.R.	Manufacturer Approval (Fusion Welded Pressure Vessels Class I)
K.R.	Manufacturing Process Approval (Manufacture of Welded Class I & II Pressure Vessels (Heat Exchangers))
N.K.	Manufacturer Approval Manufacture of Welded Pressure Vessels Class I & II









12. TEST & MEASURING EQUIPMENTS

1) Welding Machine List

No.	Equipment	Model	Manufacture	Type	Q'ty
1	DC Ammester	EP-500T	EAGLE	GTAW	1
2	DC Ammester	DUTY-500D/502AD	PRO-TECH	GTAW	37
3	DC Ammester	500SC	SUNJIN WELD	FCAW	3
4	DC Ammester	COD-600A	DWEL TECH	FCAW	21
5	DC Ammester	RF2-500	PANASONIC	FCAW	1
6	DC Ammester	PROPAC 600	HYOSUNG	FCAW	1
7	DC Ammester	MICRO-352XD	PRO-TECH	GTAW	2
8	DC Ammester	EALARC DC-1000	LINCOLN ELECTRIC	SAW	1
9	DC Ammester	CAPTAIN-500C	CAPTAIN	FCAW	3
10	DC Ammester	EAKARC-DC600	LINCOLN ELECTRIC	SAW	6
11	DC Ammester	350TP	D.WELCO	GTAW	1
12	DC Ammester	LONGRUN 500LT	WORLDWEL	GTAW	1
13	DC Ammester	TIGSTAR 350T	WELDING START	GTAW	1

2) I.M.T.E Control List

No.	Equipment	Specification	Q'ty
Pressure Recorder	Range : ~10 MPa	MyungsunHyoda	11
Helium Leak Detector	ASM340	PFEIFFER	1
3-Point Micrometers	Range : 6 mm ~ 50 mm	MITUTOYO	19
Tabular Inside Micrometer	337-302, 200 mm ~ 1500 mm	MITUTOYO	1
Ferrite Meter	MF300Fm+ P46	DIVERSE	1
Black Light	UV LED 3P-BS	NAWOO	1
Borescope	NTS300 / TD500	TESLONG	3
Gas Analyzer	MINIMAX-X4	HONEYWELL	1
Coating Thickness Gauge	A456C	ELCOMETER	2
Ultrasonic thickness gauge	C1M100 / AR860	Solid NDT / SMART SENSOR	2
Hardness Testers (Portable)	HLN-11A / PB	TIME / IMAI	2
Temperature Recorders	GL840	GRAPHTEC	1
Vibration Analyzer	VA-12 / ACO-3116	Rion / ACO	2
Sound Level Meter	1350A	TES	1
Air Velocity Meter	TSI-5725	TSI	1
Belt Frequency Meter	CON-TR10400	CONTINENTAL	1
Liquid Flowmeter	FTT-S-S 15A	AUTO FLOW	1



Ultrasonic thickness gauge



3-Point Micrometers



Air Velocity Meter



Belt Frequency Meter



Black Light



Borescope



Coating Thickness Gauge



Ferrite Meter



Gas Analyzer



Hardness Testers (Portable)



Helium Leak Detector



Liquid Flowmeter



Pressure Recorder



Sound Level Meter



Tabular Inside Micrometer



Temperature Recorders



Ultrasonic thickness gauge



Vibration Analyzer

13. DESIGN LICENSE LIST



14. EXPERIENCE LIST

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1. EXPERIENCE LIST (for API 661 AIR COOLED HEAT EXCHANGER)
2. EXPERIENCE LIST (for SAUDI ARAMCO PROJECT)
3. EXPERIENCE LIST (for CARBON CAPTURE PLANT)
4. EXPERIENCE LIST (for LNG & LPG SHIP)
5. EXPERIENCE LIST (for HYDROGEN)
6. EXPERIENCE LIST (for AMMONIA(NH3))

Experience List (for API 661 AIR COOLED HEAT EXCHANGER)

JOB No	END USER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2020-1	SAMSUNG CONSTRUCTION & TRADING	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	UAE FUJAIRA 3 IPP FGC / AIR COOLED HEAT EXCHANGER (RECYCLE/C + OIL/C)	U.A.E	2	4 BAY / 8 BUNDLE	2021
2021-1	POSCO ENGINEERING & CONSTRUCTION	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	POSCO PULAU INDAH CCPP / AIR COOLED HEAT EXCHANGER (RECYCLE/C + OIL/C)	MALAYSIA	2	3 BAY / 6 BUNDLE	2022
2021-2	mitsubishi heavy industries, LTD.	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	THAILAND HINKONG FGC / AIR COOLED HEAT EXCHANGER (RECYCLE/C + OIL/C)	THAILAND	2	3 BAY / 6 BUNDLE	2022
2022-1	TSK / MITSUBISHI POWER LTD	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	CCC SALAMANCA / AIR COOLED HEAT EXCHANGER (RECYCLE/C + OIL/C)	MEXICO	2	3 BAY / 6 BUNDLE	2023
2022-2	NATIONAL GRID GRAIN LNG LTD	IHI ROTATING MACHINERY	NATIONAL GRID LNG HP BOG COMPRESSORS / AIR COOLED HEAT EXCHANGER (INTER/C + AFTER/C)*	U.K	4	3 BAY / 12 BUNDLE	2023
2023-1	TAIWAN CPC CORPORATION & JGC	IHI ROTATING MACHINERY	CPC TAICHUNG BOG COMPRESSOR / AIR COOLED HEAT EXCHANGER (OIL COOLER)	TAIWAN	1	3 BAY / 3 BUNDLE	2023
2023-2	CCGT OSTROLEKA	HANWHA POWER SYSTEMS	OSTROLEKA PROJECT / AIR COOLED HEAT EXCHANGER (RECYCLE COOLER)	POLAND	1	2 BAY / 2 BUNDLE	2024
2023-3	COBRA SENER SERAING JV	HANWHA POWER SYSTEMS	CCGT SERAING EXTENSION PROJECT / AIR COOLED HEAT EXCHANGER (RECYCLE COOLER)*	BELGIUM	1	1 BAY / 2 BUNDLE	2024
2023-4	POSCO	DAEWON ENT CO., LTD	POSCO PROJECT / AIR COOLED HEAT EXCHANGER (GAS C / BUNDLE)	BRAZIL	1	- BAY / 11 BUNDLE	2023
2023-5	SOUTH HOOK LNG TERMINAL COMPANY LTD	IHI ROTATING MACHINERY	SOUTH HOOK LNG TERMINAL / AIR COOLED HEAT EXCHANGER (INTER/C + AFTER/C)	U.K	3	1 BAY / 3 BUNDLE	2024
2023-6	CCGT GRUDIADZ / GRUPA ORLEN	HANWHA POWER SYSTEMS	POLAND METKA GRUDIADZ FGC / AIR COOLED HEAT EXCHANGER (AFTER/C + OIL/C)	POLAND	2	1 BAY / 2 BUNDLE	2024
2024-1	mitsubishi heavy industries, LTD.	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	DAESAN LNG COMBINED CYCLE POWER PLANT / AIR COOLED HEAT EXCHANGER (RECYCLE/C + OIL/C)*	KOREA	2	2 BAY / 4 BUNDLE	2025
2024-2	HD HYUNDAI CHEMICAL	HD HYUNDAI CHEMICAL	DAESAN HPC / AIR COOLED HEAT EXCHANGER (ONLY BUNDLE)	KOREA	1	- BAY / 2 BUNDLE	2024
2024-3	KOGAS	IHI ROTATING MACHINERY	DANGJIN LNG TERMINAL / AIR COOLED HEAT EXCHANGER (PRE/C + INTER/C + AFTER/C + WATER/C)	KOREA	4	2 BAY / 8 BUNDLE	2025
2024-4	GOSEONG GREEN POWER	MITSUBISHI HEAVY INDUSTRIES, LTD.	GOSEONG NATURAL GAS PLANT #1 POWER BLOCK / AIR COOLED HEAT EXCHANGER (4S COOLER)	KOREA	1	2 BAY / 2 BUNDLE	2025
2024-5	SAMSUNG CONSTRUCTION & TRADING	HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,	AMIRAL COGEN IPP / AIR COOLED HEAT EXCHANGER (INTER/C + RECYCLE/C + OIL/C)	SAUDI ARABIA	3	3 BAY / 9 BUNDLE	2025
2024-6	CHIYODA ENERGIES PTY LTD	JORD INTERNATIONAL PTY LTD	DIRECT MCH LARGE SCALE DEMONSTRATION PLANT / AIR COOLED HEAT EXCHANGER	AUSTRALIA	1	1 BAY / 2 BUNDLE	2025



Experience List (for Saudi Aramco Project)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2017-1	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	ETHANE DEEP RECOVERY FACILITY / INTER, AFTER COOLER	SAUDI ARABIA	3	9 UNIT	2018
2017-2	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	ETHANE DEEP RECOVERY FACILITY / OIL COOLER	SAUDI ARABIA	1	3 UNIT	2018
2019-1	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	HAWIAH GAS PLANT EXPANSION / INTER, AFTER COOLER	SAUDI ARABIA	3	12 UNIT	2019
2019-2	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	HAWIAH GAS PLANT EXPANSION / OIL COOLER	SAUDI ARABIA	1	4 UNIT	2019
2019-3	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	SHEDGUM / INTER, AFTER COOLER	SAUDI ARABIA	3	3 UNIT	2019
2019-4	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	SHEDGUM / OIL COOLER	SAUDI ARABIA	1	1 UNIT	2019
2020-1	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	MARJAN INCREMENT PROGRAM PKG12 (AC) / INTER, AFTER COOLER	SAUDI ARABIA	3	12 UNIT	2020
2020-2	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	MARJAN INCREMENT PROGRAM PKG12 (AC) / OIL COOLER	SAUDI ARABIA	1	4 UNIT	2020
2020-3	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	MARJAN DEVELOPMENT PROGRAM PKG 10 / INTER COOLER	SAUDI ARABIA	2	12 UNIT	2021
2022-1	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	MARJAN INCREMENT PROGRAM PKG12 (MAC for ASU) / INTER, AFTER COOLER	SAUDI ARABIA	3	12 UNIT	2022
2022-2	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	MARJAN INCREMENT PROGRAM PKG12 / COMPANDER AFTER COOLER	SAUDI ARABIA	1	2 UNIT	2023
2022-3	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	JAFURAH (IAC) / INTER, AFTER COOLER	SAUDI ARABIA	3	12 UNIT	2023
2022-4	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	JAFURAH (IAC) / OIL COOLER	SAUDI ARABIA	1	4 UNIT	2023
2023-1	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	GAS INCREMENT PROGRAM / OIL COOLER	SAUDI ARABIA	1	6 UNIT	2024
2024-1	SAUDI ELECTRICITY COMPANY	HANWHA POWER SYSTEMS	RABIGH COMBINED CYCLE POWER PLANG / RECYCLE,OIL COOLER	SAUDI ARABIA	2	8 UNIT	2024
2024-2	AMIRAL (Saudi Aramco and Total Petrochemical Complex)	HANWHA POWER SYSTEMS	AMIRAL (PKG 3) ETHYLENE BOOSTER / INTER COOLER	SAUDI ARABIA	1	1 UNIT	2025
2024-3	AMIRAL (Saudi Aramco and Total Petrochemical Complex)	"HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,"	AMIRAL (PKG 4) / INTER, AFTER, OIL COOLER	SAUDI ARABIA	4	16 UNIT	2025

Experience List (for Saudi Aramco Project)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2024-4	AMIRAL (Saudi Aramco and Total Petrochemical Complex)	"HYUNDAI HEAVY INDUSTRIES TURBOMACHINERY CO. LTD.,"	"SAMSUNG C&T / AMIRAL COGEN IPP / AIR COOLED HEAT EXCHANGER (INTER/C + RECYCLE/C + OIL/C)"	SAUDI ARABIA	3	3 UNIT	2025
2024-5	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	JAFURAH GAS PLANT EXPANSION 2 MAC / INTER, AFTER COOLER	SAUDI ARABIA	3	15 UNIT	2025
2024-6	SAUDI ARABIAN OIL COMPANY	HANWHA POWER SYSTEMS	RIYAS NGL FRACTIONATION FACILITIES / INTER, AFTER, OIL COOLER	SAUDI ARABIA	4	4 UNIT	2025

Experience List (for CARBON CAPTURE PLANT)

JOB No	END USER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2022-1	DEOKYANG COOPERATION LTD.	HANWHA POWER SYSTEMS	DEOKYANG CO2 COMP / INTER, AFTER COOLER	KOREA	5	5 UNIT	2023
2023-1	DEOKYANG COOPERATION LTD.	HANWHA POWER SYSTEMS	DEOKYANG LC02 450TPD / INTER/AFTER COOLER	KOREA	2	6 UNIT	2023
2023-2	TRIMERIC CORP.	ATLAS COPCO - GERMANY	MARQUIS / INTER, AFTER COOLER	USA	4	12 UNIT	2023
2023-3	TRIMERIC CORP.	ATLAS COPCO - GERMANY	VAULT / INTER, AFTER COOLER	USA	4	4 UNIT	2023
2023-4	TECNIMONT	HANWHA POWER SYSTEMS	CE5816 TECNIMONT BOROUGE 4 / INTER COOLER	UAE	2	8 UNIT	2023
2023-5	-	IHI ROTATING MACHINERY	3051-258 / INTER, AFTER COO0ERL	JAPAN	4	8 UNIT	2024

Experience List (for LNG & LPG SHIP)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2017-1	DAEWOO SHIPBUILDING & MARINE ENGINEERING	HANWHA POWER SYSTEMS	DSME MOL EXPANDER(H.2462) / AFTER COOLER	BV	1	1 UNIT	200 ℃	2017
2017-2	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	E.ON-MOL 180,000m3 LNG CARRIER(H.NO.2462) / DISCHARGE COOLER & DAMPER	BV&IGC	11	12 UNIT	180 ℃	2017
2017-3	HYUNDAI HEAVY INDUSTRIES	KOBE STEEL	HHI PARDUS MSO COMPRESSOR (H.NO.2945) / DISCHARGE COOLER & DAMPER	BV&IGC	9	9 UNIT	180 ℃	2018
2017-4	DAEWOO SHIPBUILDING & MARINE ENGINEERING	HANWHA POWER SYSTEMS	DSME MOL EXPANDER(H.2462) / OIL COOLER	BV	1	1 UNIT	100 ℃	2017
2017-5	CORAL FLNG / MOZAMBIQUE / SAMSUNG HEAVY INDUSTRIES	HANWHA POWER SYSTEMS	CORAL SOUTH DEVELOPMENT / INTER&AFTER&OIL COOLER	LR&IGC	4	12 UNIT	195 ℃	2018
2017-6	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	KOGAS(H.NO.2233/2234) / PRE- HEATER	KR	1	4 UNIT	-165 ℃	2018
2017-7	CORAL FLNG / MOZAMBIQUE / SAMSUNG HEAVY INDUSTRIES	HANWHA POWER SYSTEMS	CORAL SOUTH DEVELOPMENT / LNG CARGO TANK WARM-UP HEATER"	LR&IGC	1	4 UNIT	-170 ℃	2019
2018-1	DAEWOO SHIPBUILDING & MARINE ENGINEERING	ATLAS COPCO	"MARAN 173,400 CBM FSRUI(H.NO.2477/2487) / AFTER COOLER	DNV-GL	3	6 UNIT	200	2019
2019-1	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2297/2298) / OIL COOLER	LR	2	4 UNIT	110 ℃	2019
2019-2	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	E.ON-MOL 180,000m3 LNG CARRIER(H.NO.2498/2499) / DISCHARGE COOLER & DAMPER"	BV&IGC	11	24 UNIT	180	2019
2019-3	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2313/2314) / OIL COOLER	LR	2	2 UNIT	110 ℃	2019
2019-4	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP / OIL COOLER	ABS	1	1 UNIT	140 ℃	2020
2019-5	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2310) / OIL COOLER	DNV-GL	1	2 UNIT	110 ℃	2020
2019-6	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	LNG SHIP (H.NO.2495/2504) / DISCHARGE COOLER & DAMPER"	ABS&IGC	11	24 UNIT	180 ℃	2020
2019-7	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	LNG SHIP (H.NO.2505) / DISCHARGE COOLER & DAMPER"	BV&IGC	11	12 UNIT	180 ℃	2020
2019-8	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	LNG SHIP (H.NO.2502/2503) / DISCHARGE COOLER & DAMPER"	DNV-GL&IGC	11	24 UNIT	180 ℃	2020
2019-9	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	LNG SHIP (H.NO.2507) / DISCHARGE COOLER & DAMPER"	LR&IGC	11	12 UNIT	180 ℃	2020



Experience List (for LNG & LPG SHIP)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2019-10	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2357&2358 / GAS COOLER	LR	1	2 UNIT	50 ℃	2020
2020-1	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3185~3188 / GAS COOLER	LR&DNV-GL&KR	1	4 UNIT	50 ℃	2020
2020-2	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8091~8094 / STEAM GAS HEATER	LR&DNV-GL&KR	1	4 UNIT	197 ℃	2020
2020-3	DAEWOO SHIPBUILDING & MARINE ENGINEERING	HANWHA POWER SYSTEMS	MOL 361,600 m3 LNG BARGE, N2 COMPANDER (H.NO.2512/2513) / INTER&AFTER&OIL COOLER	BV&RS&IGC	4	24 UNIT	150 ℃	2021
2020-4	DAEWOO SHIPBUILDING & MARINE ENGINEERING	HANWHA POWER SYSTEMS	MOL 361,600 m3 LNG BARGE, BOG COMP. (H.NO.2512/2513) / INTER&AFTER&OIL COOLER	BV&RS&IGC	4	24 UNIT	150 ℃	2021
2020-5	DAEWOO SHIPBUILDING & MARINE ENGINEERING	HANWHA POWER SYSTEMS	MOL 361,600 m3 LNG BARGE, FG COMP. (H.NO.2512/2513) / AFTER&OIL COOLER	BV&RS&IGC	2	8 UNIT	150 ℃	2021
2020-6	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	MOL 361,600 m3 LNG BARGE, (H.NO.2512/2513) / BOG PRE HEATER"	BV&RS&IGC	1	6 UNIT	-196 ℃	2021
2020-7	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	MOL 361,600 m3 LNG BARGE, (H.NO.2512/2513) / WASTE GAS HEATER"	BV&RS&IGC	1	6 UNIT	-196 ℃	2021
2020-8	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	DSME NRS PILOT PLANT / NG HEATER	KR	1	1 UNIT	-196 ℃	2021
2020-9	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	DSME NRS PILOT PLANT / N2 INVENTORY TANK	KR	1	1 UNIT	70 ℃	2021
2020-10	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	DSME NRS PILOT PLANT / LIQUID/GAS SEPARATOR	KR	1	1 UNIT	-196 ℃	2021
2020-11	DAEWOO SHIPBUILDING & MARINE ENGINEERING	SAMWOO HEAVY IND.	DSME NRS PILOT PLANT / LIQUID/GAS SEPARATOR	KR	1	1 UNIT	-196 ℃	2021
2020-12	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / HMD(LPG) (H.NO. 8305-8308) / GAS COOLER	LR	1	4 UNIT	50 ℃	2021
2020-13	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2336/2337) / OIL COOLER	ABS	1	4 UNIT	110 ℃	2020
2020-14	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2319) / OIL COOLER	BV	1	2 UNIT	110 ℃	2021
2020-15	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2315/2316) / OIL COOLER	BV	2	4 UNIT	110 ℃	2020
2020-16	SAMSUNG HEAVY INDUSTRIES	ATLAS COPCO	LNG SHIP(SN2364/2365) / OIL COOLER	ABS	2	4 UNIT	110 ℃	2021

Experience List (for LNG & LPG SHIP)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2021-1	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3186 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2021
2021-2	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8094 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2021
2021-3	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8307 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-4	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3187 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2021
2021-5	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8308 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-6	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3188 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2021
2021-7	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8095 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2021
2021-8	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8096 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2021
2021-9	SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / SN.2425 / GAS COOLER	BV	1	1 UNIT	50 ℃	2022
2021-10	SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / SN.2425 / STEAM HEATER	BV	2	1 UNIT	50 ℃	2022
2021-11	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3243 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2021
2021-12	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8328 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-13	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2360 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-14	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2361 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-15	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8113 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-16	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8114 / GAS COOLER	LR	1	1 UNIT	50 ℃	2021
2021-17	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3244 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2021



JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2021-18	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3276 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2021
2021-19	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8105 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-20	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3199 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-21	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8346 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-22	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8115 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-23	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3190 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-24	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8347 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-25	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8117 / GAS COOLER	LR / KR	1	1 UNIT	50 ℃	2022
2021-26	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8118 / GAS COOLER	LR / KR	1	1 UNIT	50 ℃	2022
2021-27	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3191 / GAS COOLER, STEAM HEATER	LR / KR	2	1 UNIT	50 ℃	2022
2021-28	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8356 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-29	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8329 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-30	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3277 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-31	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3198 / GAS COOLER, STEAM HEATER	LR / KR	2	1 UNIT	50 ℃	2022
2021-32	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8357 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-33	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8366 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-34	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8330 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2021-35	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8359 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-36	-	KANGRIM HEAVY INDUSTRIES	EGCS (SHIP NO. CSBC 1182) / PLATE TYPE COOLER	BV	1	1 UNIT	50 ℃	2022
2021-37	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8139 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2022
2021-38	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8148 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2022
2021-39	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3303 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-40	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8138 / GAS COOLER	LR / KR	1	1 UNIT	50 ℃	2022
2021-41	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3278 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-42	HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3304 / GAS COOLER	ABS	1	1 UNIT	50 ℃	2022
2021-43	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8149 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2022
2021-44	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8331 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-45	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2362 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2021-46	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2365 / GAS COOLER	ABS / KR	1	1 UNIT	50 ℃	2022
2021-47	SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.2580 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-48	HYUNDAI SAMHO HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.8101 / GAS COOLER, STEAM HEATER	LR	2	1 UNIT	50 ℃	2022
2021-49	SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / SN.2581 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-50	SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / SN.2582 / GAS COOLER, STEAM HEATER	DNV-GL	2	1 UNIT	50 ℃	2022
2021-51	HYUNDAI HEAVY INDUSTRIES	SAMWOO HEAVY INDUSTRY	H2520/27 A-PRS / SEPARATOR	NK	2	1 UNIT	-196 ℃	2022



Experience List (for LNG & LPG SHIP)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2021-52	HYUNDAI HEAVY INDUSTRIES	KOBE STEEL	"MOL H2505,2520 / DAMPER, SEPARATOR, CHARCOL FILTER"	NK	12	24 UNIT	180 ℃	2022
2022-1	DAEWOO SHIPBUILDING & MARINE ENGINEERING	TRANS GAS SOLUTION	"DSME N2 SUPPLY UNIT / GLYCOL WATER HEATER & TANK (ELECTRIC TYPE)"	N/A	1	1 UNIT	500KW	2022
2022-2	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2521 & 2522 / GAS COOLER	KR	1	2 UNIT	50 ℃	2023
2022-3	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.3388 / GAS COOLER	LR	1	1 UNIT	50 ℃	2022
2022-4	SAMSUNG HEAVY INDUSTRIES	KOBE STEEL	"SN2580-2583 / OIL RECOVERY TANK, PRE HEATER, OIL SEPARATOR"	DNV	4	24 UNIT	180 ℃	2022
2022-5	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	H2527 / DAMPER, SEPARATOR, CHARCOL FILTER	NK	11	12 UNIT	180 ℃	2023
2022-6	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2523-2526 / GAS COOLER	BV	1	4 UNIT	50 ℃	2023
2022-7	HD HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3306&3307 / GAS COOLER	ABS & KR	1	2 UNIT	50 ℃	2023
2022-8	HD HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	"IGG / H.3221&3222 / GAS COOLER, STEAM HEATER"	DNV & KR	2	4 UNIT	50 ℃	2023
2022-9	SAMSUNG HEAVY INDUSTRIES	KOBE STEEL	H2527 / OIL SEP, TANK, GAS COOLER, HEATER	NK	6	12 UNIT	180 ℃	2022
2022-10	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2532-2535 / GAS COOLER, STEAM HEATER	ABS	2	8 UNIT	50 ℃	2023
2022-11	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2528&2529&2537~2540 / GAS COOLER, STEAM HEATER	ABS & LR & DNV	1	6 UNIT	50 ℃	2023
2022-12	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	"H2523-2526 / OIL RECOVERY TANK, OIL SEPARATOR, GAS COOLER, PRE HEATER"	BV	4	72 UNIT	50 ℃	2023
2022-13	HYUNDAI MIPO DOCKYARD	KANGRIM HEAVY INDUSTRIES	IGG / H.8100 / GAS COOLER	LR	1	1 UNIT	50 ℃	2023
2022-14	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KANGRIM HEAVY INDUSTRIES	IGG / H.2523-2526 / STEAM HEATER	BV	1	4 UNIT	50 ℃	2023
2022-15	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	"H2536 / OIL RECOVERY TANK, PRE HEATER, STARTUP HEATER, GAS COOLER"	NK	6	12 UNIT	180 ℃	2023
2022-16	DAEWOO SHIPBUILDING & MARINE ENGINEERING	KOBE STEEL	H2536 / DAMPER, SEPARATOR, CHARCOL FILTER	NK	11	12 UNIT	180 ℃	2023

Experience List (for LNG & LPG SHIP)

JOB No.	CUSTOMER	CONTRACTOR	PROJECT Name / ITEM Name	CLASS	ITEM	Q'TY	DESIGN TEMP.	DELIVERY
2022-17	HD HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3224&3225 / STEAM HEATER	DNV & KR	1	2 UNIT	50 ℃	2023
2022-18	HD HYUNDAI HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / H.3223&3224 / GAS COOLER	DNV & KR	1	2 UNIT	50 ℃	2023
2023-1	HD HYUNDAI HEAVY INDUSTRIES HANWHA OCEAN SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / GAS COOLER, STEAM HEATER	"DNV & KR & LR & BV & ABS"	2	34 UNIT	50 ℃	2023~2025
2023-2	KR CLASS SOCIETY	E & CO	LNH3 HEAT EXCHANGER / HP LNH3 HEATER/COOLER CASE 2	BV	1	3 UNIT	70 ℃	2023
2023-3	QATAR GAS	KOBE STEEL	22-00323 QATAR GAS LNG (H2559-65) / DISCHARGE COOLER	BV & KR	3	21 UNIT	70 ℃	2023
2023-4	QATAR GAS	KOBE STEEL	DSME QATAR GAS 174K LNGC / H2566~71 / DISCHARGE COOLER	LR	3	18 UNIT	70 ℃	2023
2023-5	HANWHA OCEAN	KOBE STEEL	21-00574, 577 H2523-26 DSME MOL / CHARCOAL FILTER	NK & BV	2	8 UNIT	70 ℃	2023
2023-6	QATAR GAS	KOBE STEEL	"DSME QATAR GAS 174K LNGC / H2546~49, 59-71 / DAMPER, DISCHARGE COOLER, OIL DETECTOR"	NK & BV	11	17 UNIT	70 ℃	2023-2025
2023-7	ITSUI O.S.K. LINES, LTD.	KOBE STEEL	DSME MOL 174K LNGC / H2520,27,36 / VESSELS	NK	3	11 UNIT	70 ℃	2023-2025
2023-8	QATAR GAS	KOBE STEEL	"DSME QATAR GAS 174K LNGC / H2546~49, 59-71 / DAMPER, DISCHARGE COOLER, OIL DETECTOR"	BV & KR	17	11 UNIT	70 ℃	2025
2023-9	ITSUI O.S.K. LINES, LTD.	KOBE STEEL	DSME MOL 174K LNGC / H2520,27,36 / VESSELS	NK	3	11 UNIT	70 ℃	2025
2023-10	QATAR GAS	KOBE STEEL	"DSME QATAR GAS 174K LNGC / H2559-65 / DAMPER, DISCHARGE COOLER, OIL DETECTOR"	BV & KR	9	63 UNIT	70 ℃	2024
2024-1	HD HYUNDAI HEAVY INDUSTRIES HANWHA OCEAN SAMSUNG HEAVY INDUSTRIES	KANGRIM HEAVY INDUSTRIES	IGG / GAS COOLER, STEAM HEATER	"DNV & KR & LR & BV & ABS"	38	38 UNIT	50 ℃	2024-2026
2024-2	MOL	HANWHA OCEAN ECOTECH	H.2584 / MOL A-PRS SEPARATOR	ABS/BV	1	1 UNIT	-143 ℃	2025
2024-3	QATAR GAS	KOBE STEEL	"DSME QATAR GAS 174K LNGC / H2572-73 / DAMPER, DISCHARGE COOLER, OIL DETECTOR"	ABS & LR	11	24 UNIT	70 ℃	2024-2025
2024-4	MOL	KOBE STEEL	"DSME MOL 174K LNGC / H2576,80,83, 84 / DAMPER, DISCHARGE COOLER, OIL DETECTOR"	NK	11	48 UNIT	70 ℃	2025-2026
2024-5	MOL	KOBE STEEL	DSME MOL 174K LNGC / H2576,80,83, 84 / OIL RECOVERY TANK, OIL SEPARATOR, AFTER GAS COOLER-HEATER, PRE-HEATER, STARTUP HEATER, L.O. COOLER	NK	1	48 UNIT	70 ℃	2025-2026
2024-6	SHI Pembina CEDAR FLNG	HANWHA POWER SYSTEMS	SHI CEDAR FLNG / MAINTENANCE COMPRESSOR & HEATER & LUBE OIL COOLER	DNV	2	1 UNIT	-170 ℃	2025

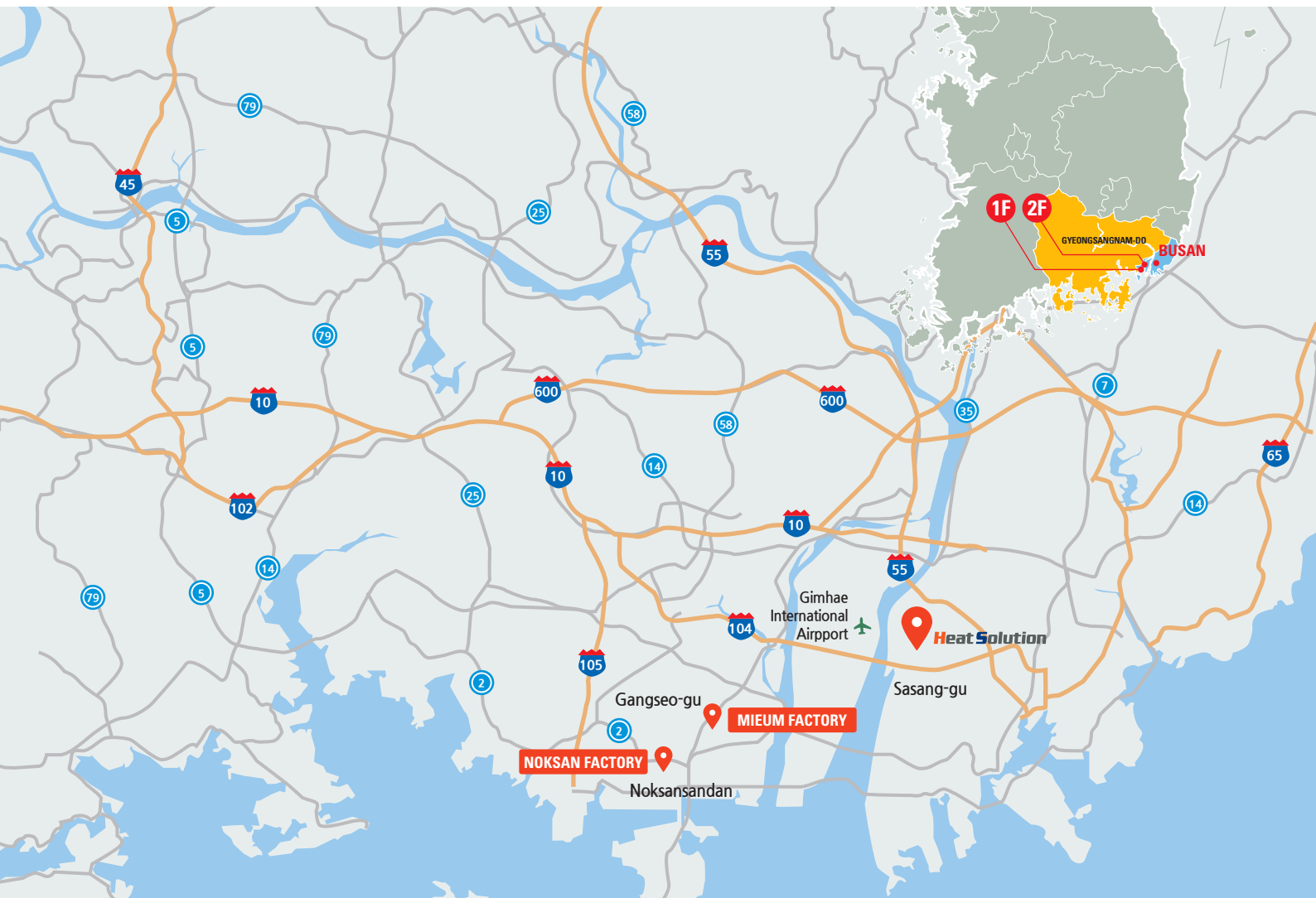
Experience List (for HYDROGEN)

JOB No.	END USER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2021-1	HANWHA POWER SYSTEM	HANWHA POWER SYSTEM	KOHYGEN / H2 INTER COOLER & AFTER COOLER	KOREA	2	60 UNIT	2021
2021-2	DOOSAN HEAVY INDUSTRIES	AIR LIQUIDE-FRANCH	CHANGWON H2 / AFTER COOLER	KOREA	1	2 UNIT	2022
2021-3	SK ENGINEERING & CONSTRUCTION	AIR LIQUIDE-FRANCH	SK LH2 / H2 BUFFER BEARINGS	KOREA	1	6 UNIT	2022
2021-4	SK E&S	AIR LIQUIDE-FRANCH	GREEN ENERGY PROGRAM 1 / TRUCK BOIL OFF HEATER	KOREA	1	1 UNIT	2022
2022-1	SK ENGINEERING & CONSTRUCTION	AIR LIQUIDE-FRANCH	SK LH2 / H2 GAS COOLER	KOREA	4	12 UNIT	2023
2024-1	TOSHIBA	DAISHO SANGYO	HOLLAND USA	USA	1	2 UNIT	2024
2024-2	mitsubishi electric corporation	MITSUBISHI ELECTRIC KOREA	MEXICO VALLADOLID	MEXICO	1	2 UNIT	2024

Experience List (for AMMONIA(NH3))

JOB No.	END USER	CONTRACTOR	PROJECT Name / ITEM Name	LOCATION	ITEM	Q'TY	DELIVERY
2023-1	KOREAN REGISTER OF SHIPPING (KR)	E&CO CO.,LTD	R&D PROJECT / HP LNH3 HEATER	KOREA	2	2 UNIT	2023
2023-2	HANWHA OCEAN	HANWHA OCEAN ECOTECH	AMMONIA FUEL SUPPLY SYSTEM / AMMONIA SEPARATOR	KOREA	1	1 UNIT	2023
2023-3	SUNBO INDUSTRIAL	SUNBO INDUSTRIAL	R&D TEST FACILITY / AMMONIA CONDENSER & HEATER	KOREA	3	4 UNIT	2023
2023-4	E&CO CO.,LTD	E&CO CO.,LTD	KOMERI KUNSAN PJT / LNH3 HEATER & COOLER	KOREA	2	2 UNIT	2023
2024-1	KR (KOREAN REGISTER)	E&CO CO.,LTD	KUNSHAN AMMONIA SUPPLYING / LNH3 Vaporizer	KOREA	2	2 UNIT	2024





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