

Company Profile



1-1. Company History

- 1999 *Established as "Ulsan Plant"*
- 2006 *Renamed as "ULP Co., Ltd."*
- 2007 *Qualified ISO9001 Certificate*
- 2007 *Qualified ASME "U" & "S" Certificate*
- 2010 *Qualified ASME "U2" certificate*
- 2010 *Approved Vendor of Saudi Electricity Com.*
- 2011 *Qualified ISO 14001 and OHSAS 18001 Certificate*
- 2013 *Qualified ISO 3834-2 (EN certification)*
- 2013 *Qualified LR Class Register*
- 2013 *Construction new 1st Factory*
- 2016 *Renewal ISO 9001 Certificate*
- 2016 *Renewal ASME "U ", "S ", "U2", "PP" Certificate*
- 2016 *Addition 2nd Factory operation*
- 2017 *Renewal ISO14001, OHSAS 18001 Certificate*
- 2017 *Qualified China ML Certificate for Boiler Drum*
- 2019 *Addition 3rd Factory operation*

1. Company Information

- Established Sep. 1999
- Employees 190 people
- Factory Area 40,000 m²
- Shop Area 16,000 m²



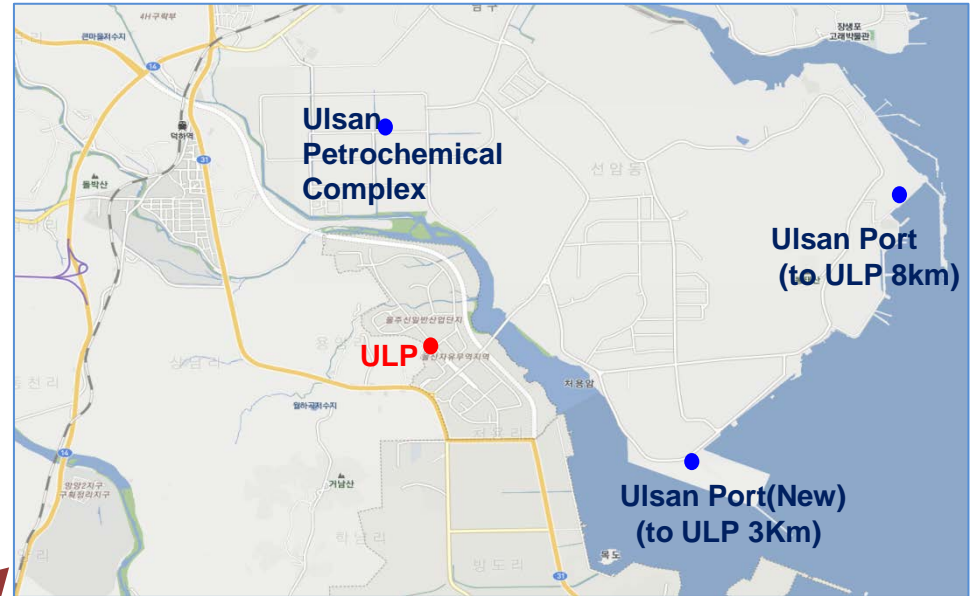
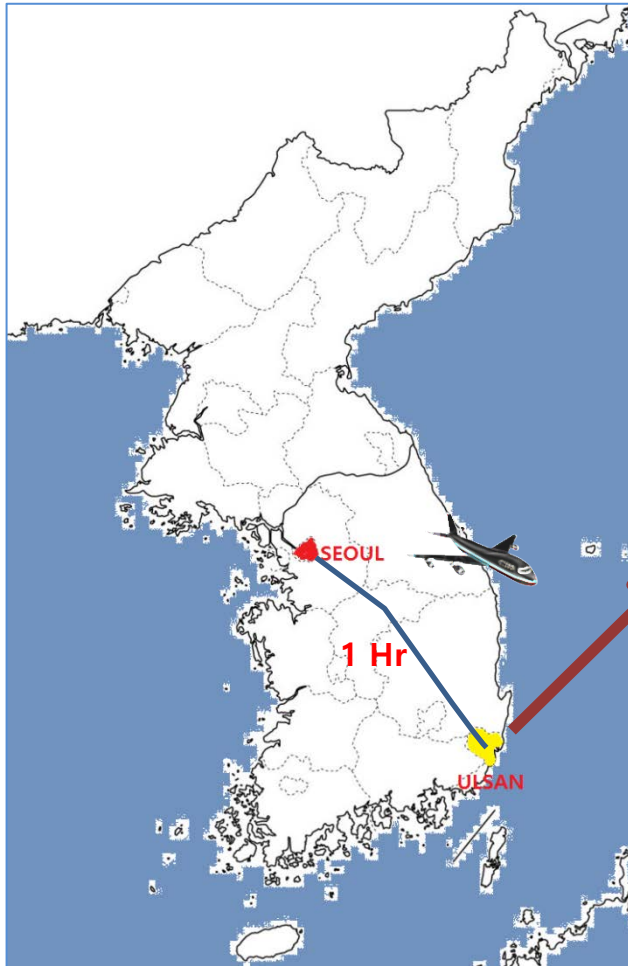
◆ Shop Detail

- 1st : 15,000 M²
- 2nd : 14,000 M²
- 3rd : 11,000 M²
- Total : 40,000 M²

◆ Main Product

- Heat Exchanger
- Pressure Vessels
- Steam Drum
- Surface Condenser
- HRSG Module
- Skid Module

1-1. Location

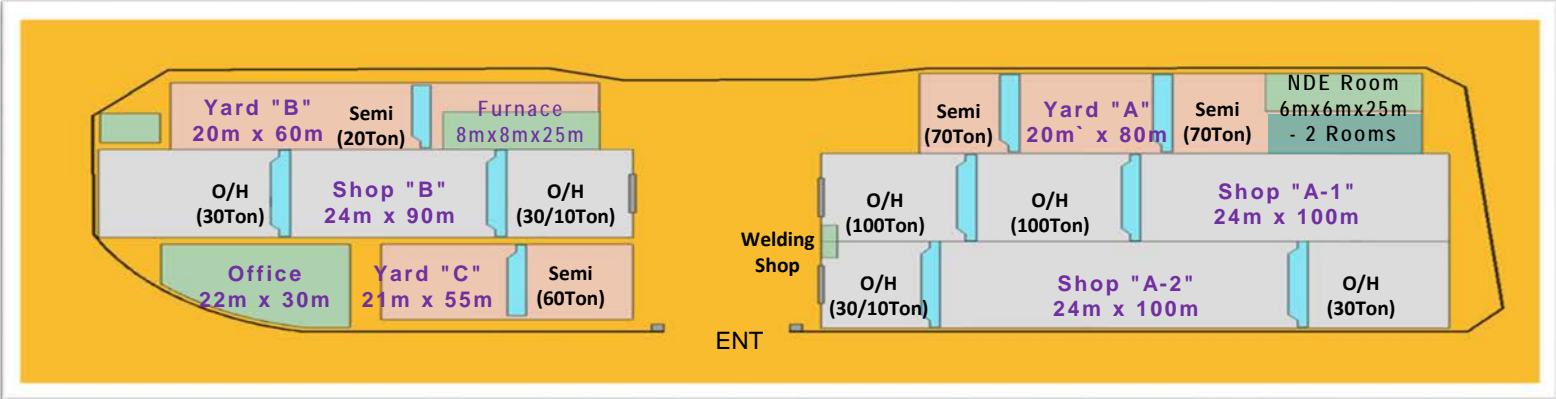


Factory & Head Office

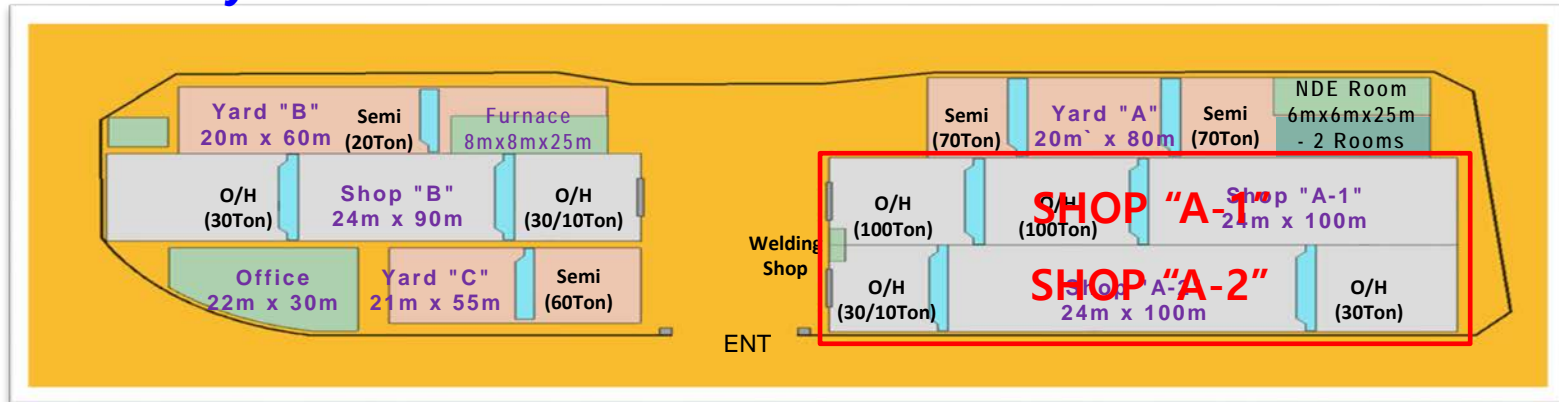
#129-19, Cheoyongsaneop-Ro, Onsan-Eup Ulju-Gun, Ulsan, Korea

Home : www.ulp99.com
TEL : +82 52 922-9550
E-mail : yhlee@ulp99.com

1-2. 1st Factory

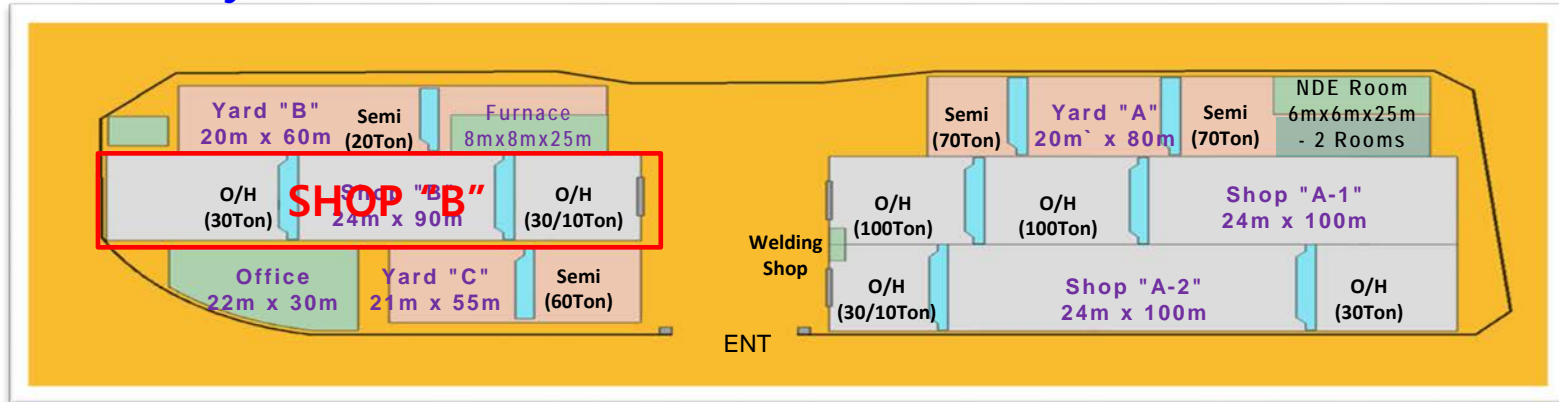


1-3. 1st Factory



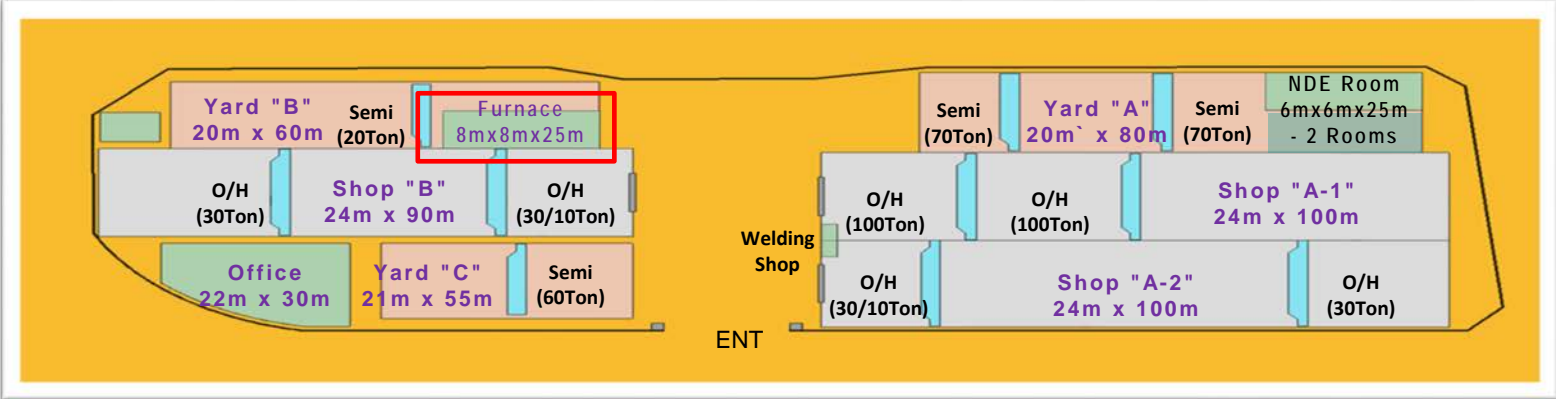
Shop	Size	Area	Crane
Shop "A-1"	24.0m(W) x 100m(L) x 20m(H)	2,400M2	100 ton x 2 sets 20 ton x 1 set
Shop "A-2"	24.0m(W) x 100m(L) x 15m(H)	2,300 M2	30 ton x 2 sets 20 ton x 1 set

1-3. 1st Factory



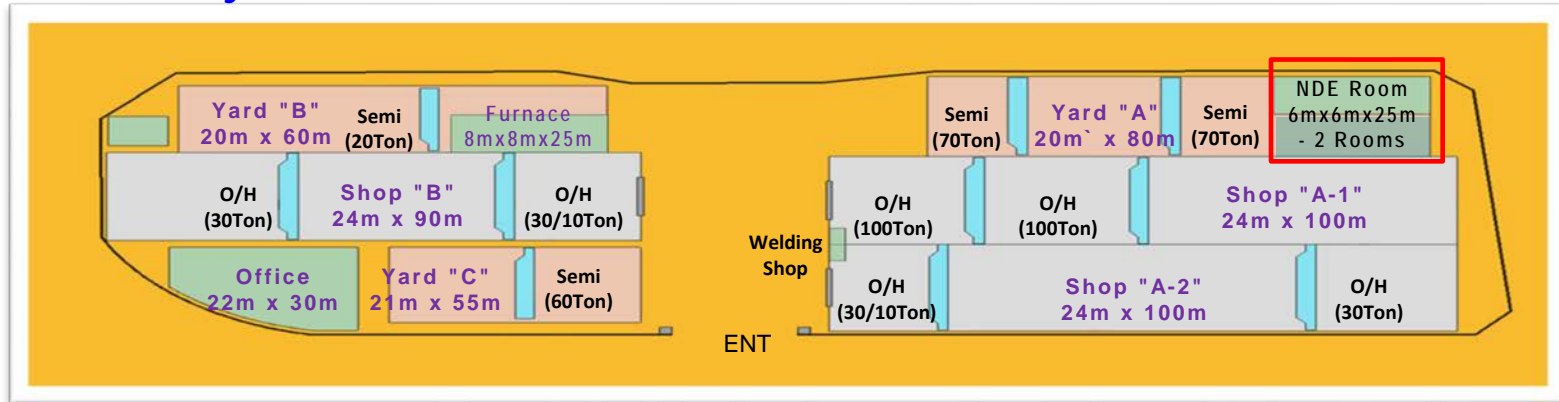
Shop	Size	Area	Crane
Shop "B"	24.0m(W) x 90m(L) x 15m(H)	2,160 M2	30 ton x 2 sets

1-3. 1st Factory



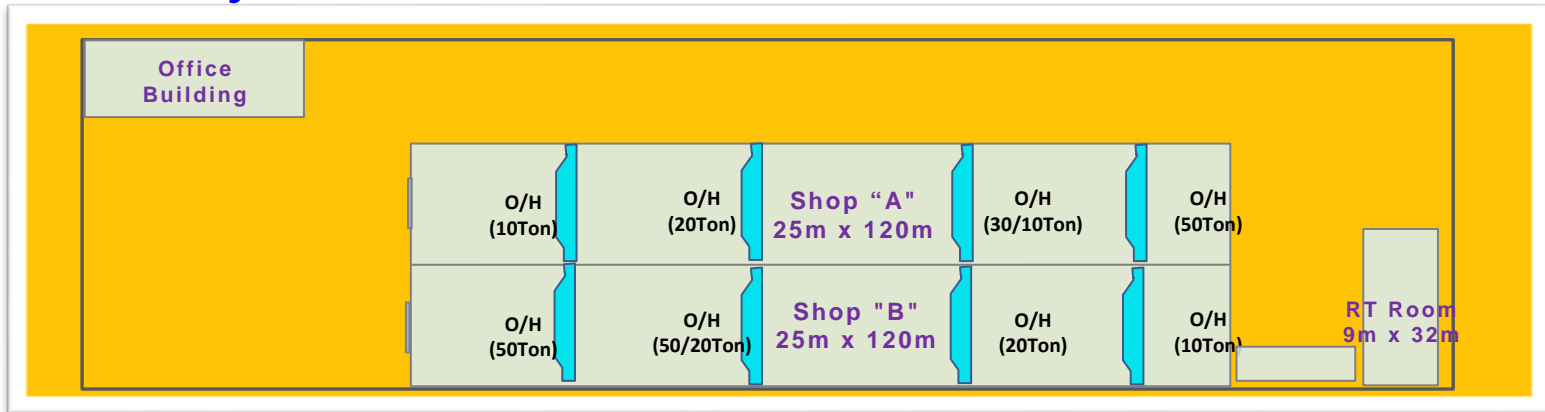
	Size	Area	Remark
PWHT	8.0m(W) x 8.0m(H) x 25.0m(L)	-	

1-3. 1st Factory

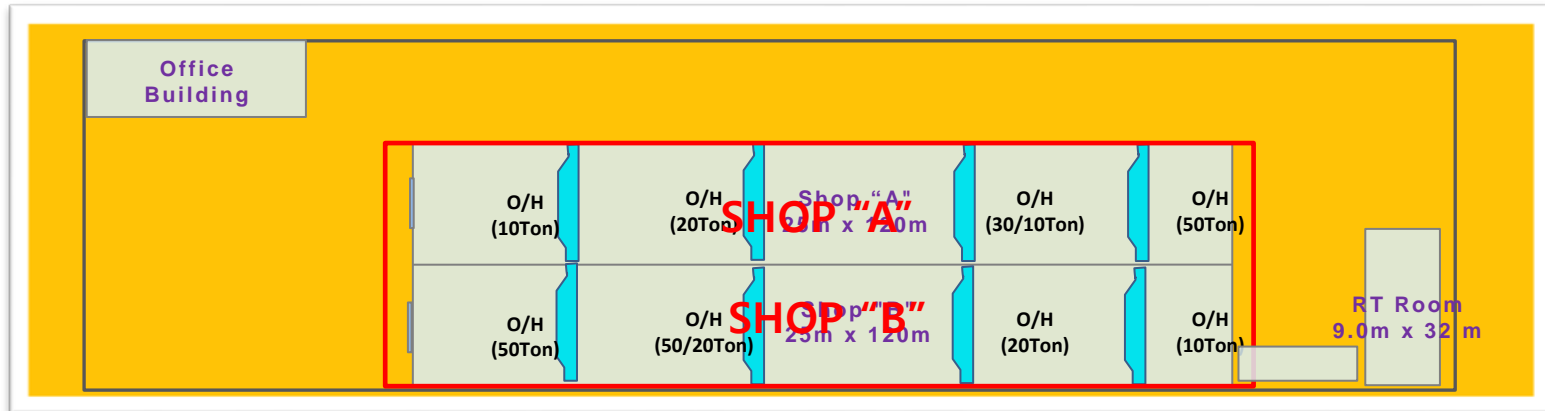


	Size	Area	Crane
RT Room	6.0m(W) x 6.0m(H) x 25.0m(L)	-	70 ton x 2 sets
	6.0m(W) x 6.0m(H) x 25.0m(L)		

1-4. 2nd Factory



1-4. 2nd Factory



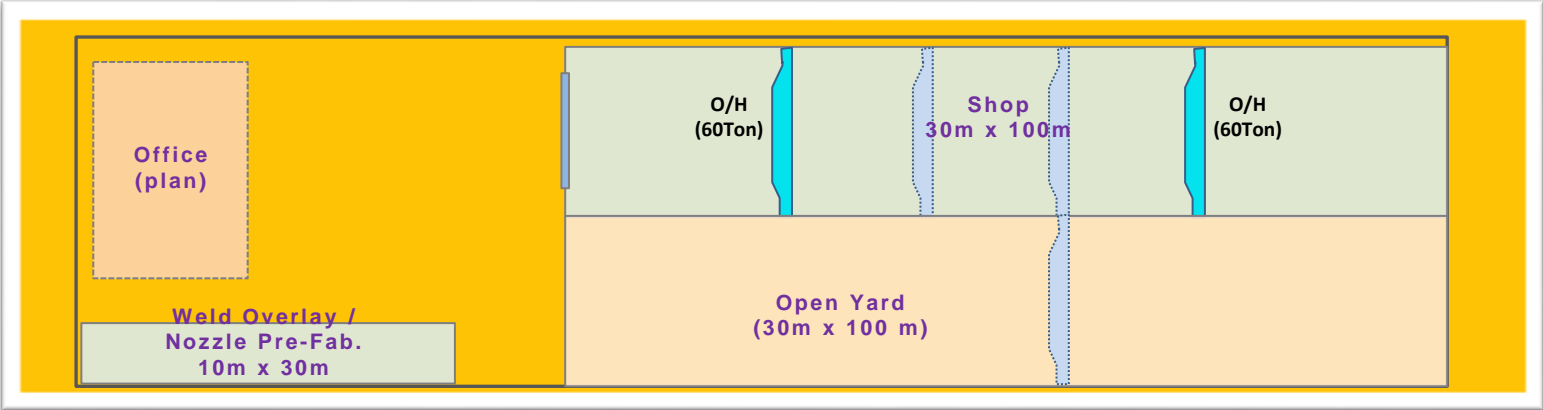
Shop	Size	Area	Crane
Shop "A"	25.0m(W) x 120m(L) x 12m(H)	3,000M2	50 ton x 1 sets 10~30 ton x 3 set
Shop "B"	25.0m(W) x 120m(L) x 12m(H)	3,000M2	50 ton x 2 sets 10/20 ton x 2 set

1-4. 2nd Factory

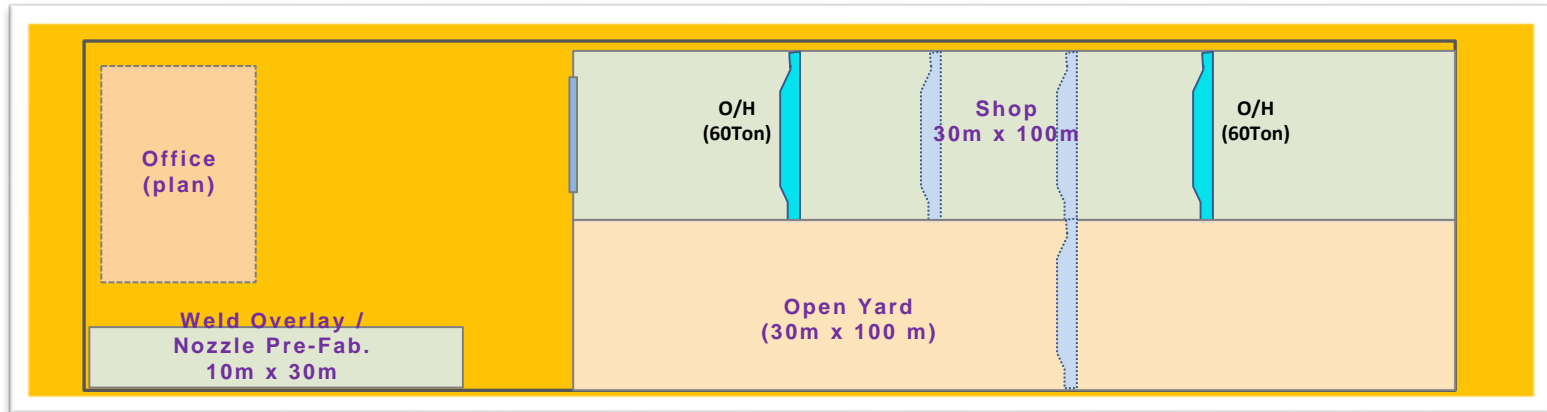


Shop	Size	Area	Remark
RT Room	6 m(W) x 9 m(H) x 32 m(L)	288 M ²	-

1-5. 3rd Factory

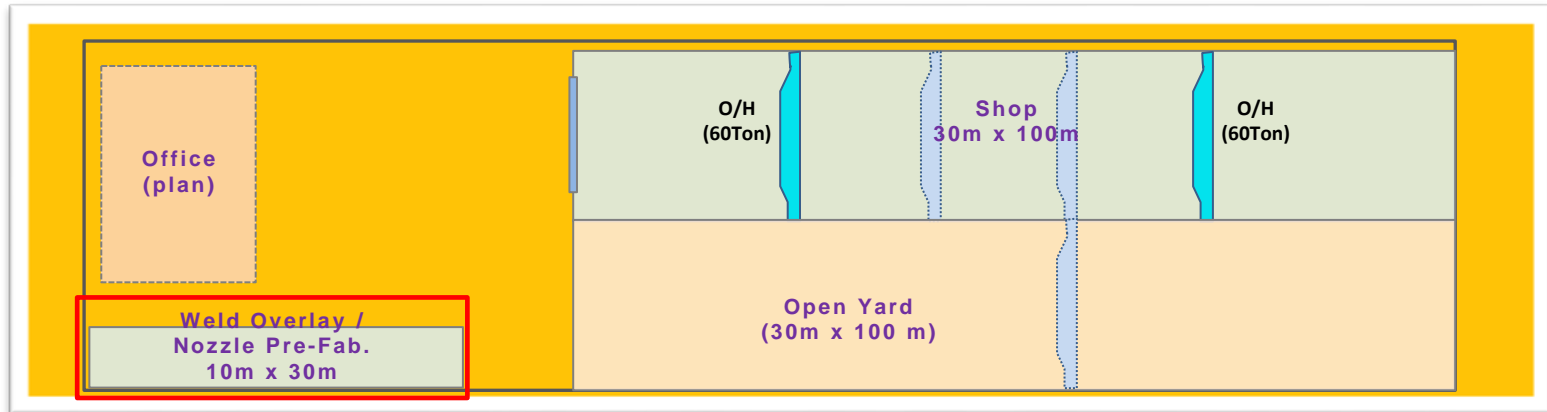


1-5. 3rd Factory





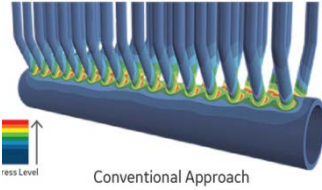





Shop	Size	Area	Crane
Shop	30.0m(W) x 100m(L) x 20m(H)	3,000 M2	60 ton x 4 sets

1-5. 3rd Factory

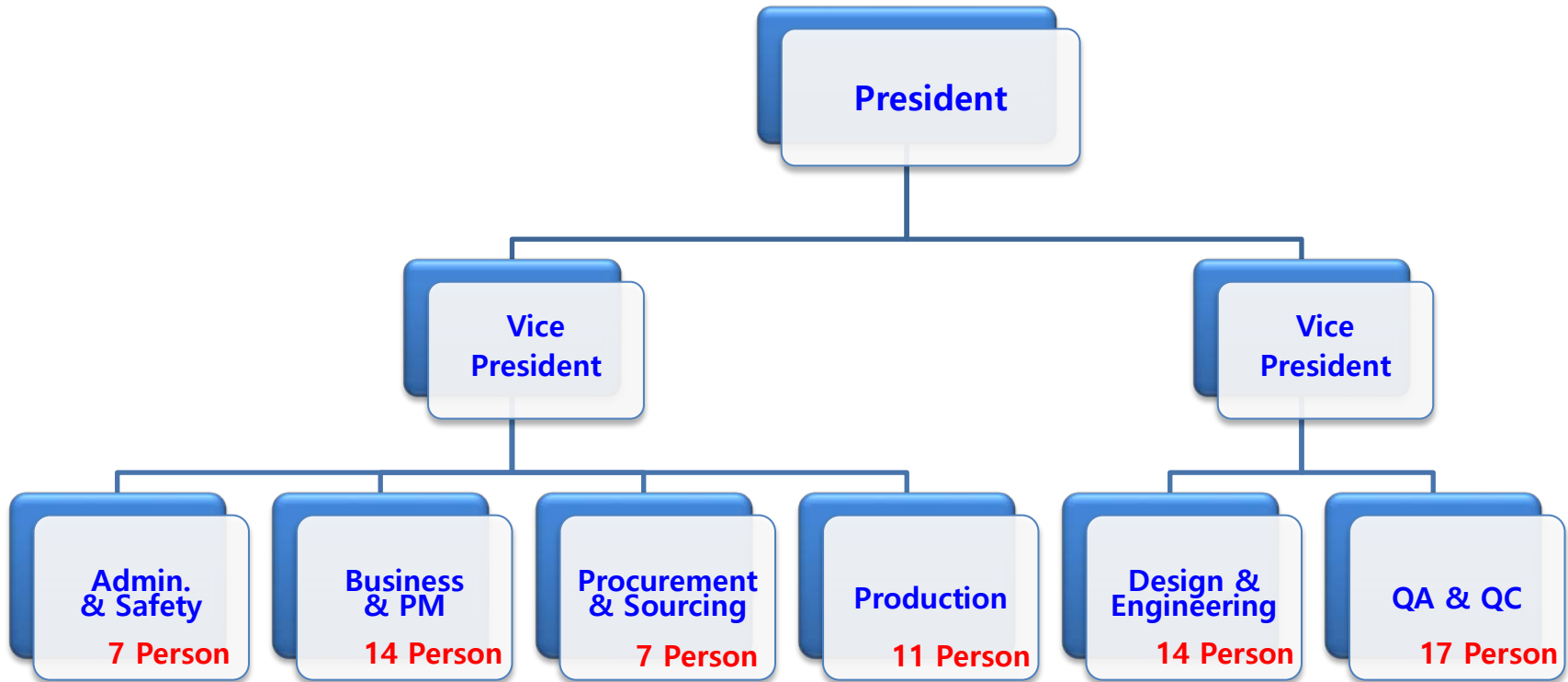


Shop	Size	Area	Crane
Weld Overlay Nozzle Fabrication	10.0m(W) x 30m(L)	300 M2	

2. Business Area

Oil & Gas Refinery Plant	Power Plant		Skid Module
	Equipment	HRSG	
Heat Exchanger Pressure Vessel Reactor Tower & Column	Steam Drum Feed Water Heater Surface Condenser Deaerator	Harp & Module For HRSG	Skid Module (PSA Skid) (Membrane Skid)
			
			

3. Organization



- Engineer : 63 Person
- Admin. : 7 person
- Worker : 120 person

4. Product & Capacity

1) Product

Equipment for Oil & Gas, Refinery

- Shell & Tube Heat Exchanger
- Pressure Vessels, Drum
- Reactor

Equipment for Power Plant

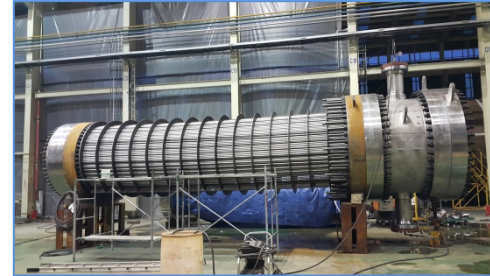
- HP, IP, LP Steam Drum
- Feed water Heater
- Surface Condenser
- Deaerator

Module for Power Plant

- Harp & Module

Skid Module

- Valve Skid
- Membrane Skid

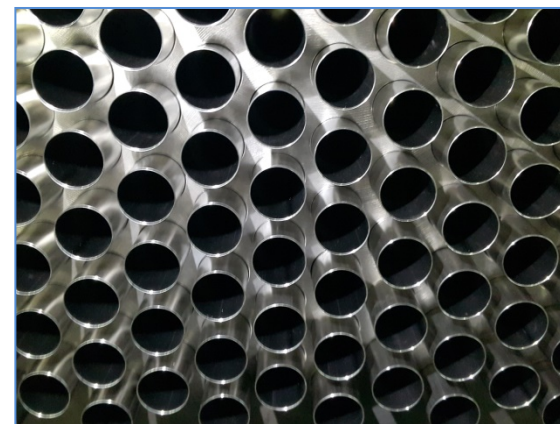


4. Product & Capacity

2) Capacity

Material

Carbon Steel, HIC Material, Clad Steel,
Stainless, (Duplex, 904L Stainless Steel)
Cr-Mo Steel,
Cu-Ni Steel, Cu Alloy,
Ni Alloy Steel (Hastelloy)
Titanium



4. Product & Capacity

2) Capacity

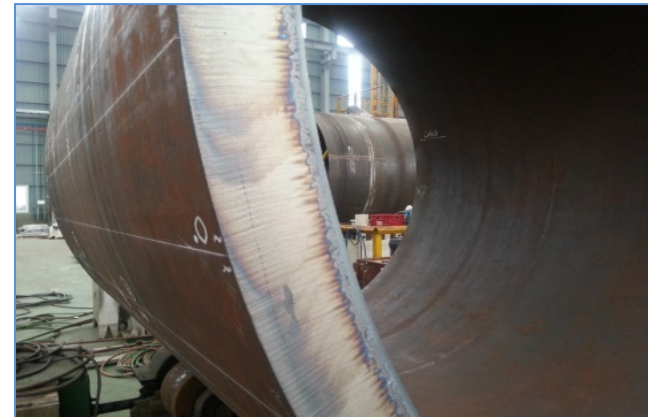
Size & Weight

Max. Diameter : 8,000 mm

Max. Thickness : 180 mm

Annual Capacity

Equipment : 18,000 Ton/Year



5. Facility

1) Design Facility

Software	Mechanical Calculation	Compress	For Strength Calculation
		PV Elite	For Strength Calculation (Sub)
	Thermal Calculation	HTRI	For Heat Exchanger Thermal Calculation (Sub)
	Analysis	ANSYS Work bench	For FEA, Fatigue Analysis (Sub)
	2D Design Program	Auto Cad	Drawing
	Cutting & Piercing Program	CNC	Program for cutting & piercing hole exactly.



5. Facility

2) Fabrication Facility

Facilities	Description	Size	QTY (set)
CRANE	Over head crane	100ton , 17m	2
	Over head crane	60ton , 12m	2
	Over head crane	30ton , 12m	4
	Gantry crane	60ton , 20m	1
	Semi gantry crane	70/10ton , 12m	1
	Semi gantry crane	70ton , 12m	1
	Semi gantry crane	20ton , 12m	1
	Over head crane	30ton , 12m	1
	Over head crane	20ton , 12m	2
FOLKLIFT	Electric forklift	2.5ton	2
	Diesel forklift	7ton	1
WELDING	ARC welding machine	450A	6
	Auto-welding machine	DC-1000A	2
	CO ₂ welding machine	AUTO 600M	48
	TIG welding machine	ALPHAI 500A	18
	Inverter TIG welding machine	200A	1
	Inverter ARC welding machine	250A	1
ROLLER	Turning roller	200ton	10
	Turning roller	100ton	16
	Turning roller	50ton	25
	Turning roller	30ton	26



5. Facility

2) Fabrication Facility

Facilities	Description	Size	Q'TY (set)
DRILLING M/C	Drilling machine	JD-1650	1
CUTTING M/C	Plasma cutting machine	TW-120A	1
ETC	Boiler	2035RTG	1
	Boiler	BON-500G	1
	Boiler	BON-250G	1
	Compressor	100HP	2
	Compressor	10HP	1
	Bench machine	GY-360	1
	Flux collector	JY-3056	2
	Gauging	DHC-1500A	2
	High frequency generator	HFC15	1
	High pressure washer	440V	1
	High pressure washer	220V	1
	Pipe circle cutting	YK-600D	1
	Tube expander	-	1
	Turn table	S-300	1
	Turn table	SH-150	1
Welding rod dryer	YCH-100	2	
Flux dryer	YCH-500	1	



5. Facility

3) Inspection Facility

Facilities	Description	Size	Q'TY
TEST & INSPECTION	Tension / Compression testing machines	0 ~ 490.3 KN	1
	Impact tester	490.33 J	1
	Hardness tester	HIC 10 / Vickers	2
	Clamp on Hitester	DC: 400mV ~ 1000V	1
		AC: 4V ~ 600V	
	Gas Analyzer		1
	3 Point Micrometer	16-20 mm	1
	Bevel Protector		2
	Coating Thickness Tester	0~3000	1
	Dead Weight Tester	0.5 – 100Kgf / cm ²	1
	HYD TEST	220V 3phase current	1
	External Micrometer	25-50mm / 0.01mm	1
	Roughness Tester	0 ~ 2000μm	1
	Ultrasonic Thickness Gauge		4
	Pressure Gauge	15 Bar~700bar	50
	Pressure Recorders	0 ~ 300Kgf / cm ²	10
	Digital Thermometer	-40.0 ~ 600.0	1
	Torque Wrench	0 ~ 100Kgf x cm	1
	Cylinder Gauge	10~18.5mm / 0.01mm	1
	Digital Thermo-hygrometer		1
PMI		1	
Vernier Calipers	150mm / 0.05mm	1	



6. Certificate

ASME S, U, U2, PP

The American Society of Mechanical Engineers	 <p>S</p>	 <p>U</p>	 <p>U2</p>	 <p>PP</p>	<h3 style="text-align: center;">CERTIFICATE OF AUTHORIZATION</h3> <p>The named company is authorized by the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.</p>	
	The named company (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.	The named company (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.	The named company (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.	The named company (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.		
	COMPANY:	COMPANY:	COMPANY:	COMPANY:		<p>ULP Co., Ltd. 129-19, Cheoyongsaneop-ro, Onsan-eup Ulju-gun, Ulsan 44988 Republic of Korea</p>
	SCOPE: <p style="text-align: center;">Manufacture of</p>	SCOPE: <p style="text-align: center;">Manufacture of by the above I</p>	SCOPE: <p style="text-align: center;">Manufacture of</p>	SCOPE: <p style="text-align: center;">Fabrication and assembly of pressure piping at the above location and field sites controlled by the above location</p>		
AUTHORIZED: EXPIRES: CERTIFICATE NUMBER:	AUTHORIZED: EXPIRES: CERTIFICATE NUMBER:	AUTHORIZED: EXPIRES: CERTIFICATE NUMBER:	AUTHORIZED: EXPIRES: CERTIFICATE NUMBER:	AUTHORIZED: November 6, 2019 EXPIRES: November 6, 2022 CERTIFICATE NUMBER: 46868		
				<p style="text-align: right;">  Board Chair, Conformity Assessment </p> <p style="text-align: right;">  Managing Director, Conformity Assessment </p>		

6. Certificate

ISO9001, ISO14001, OHSAS18001, ISO3834-2 (EN), Lloyd's Register, China ML

<p>Risk Solutions</p> <p>HSB Registration 595 E. Swedesfo Wayne, Pennsylv</p> <p>Certificate of R</p> <p>This is to cert ULP Co., 129-19, Cheoyongsaneop-ro Ulsan, K</p> <p>Has established and applied a Quality Design/Development and Ma Vessels</p> <p>Proof has been furnished that the re ISO 9001:200 are fulfilled.</p> <p>Certificate Number: Q 1361</p> <p>Initial Audit Date: September 24, 2008 Effective Date: October 12, 2016 Expiration Date: September 15, 2018 Revision Date: January 1, 2017</p> <p><i>Jane Smith-Walsh</i> Signed on behalf of HSB Registration Services</p> <p>  </p> <p>Hartford Steam Boiler</p>	<p>Risk Solutions</p> <p>HSB Registrat 595 E. Swede Wayne, Pennsylv</p> <p>Certificate of</p> <p>This is to ce ULP Co 129-19, Cheoyongsaneop-r Ulsan, K</p> <p>Has established and applied an Enviro Design and Manufacture</p> <p>Proof has been furnished that the ISO 14001: are fulfill</p> <p>Certificate Number: E 1361</p> <p>Original Certification Date: November 24, 2011 Transfer Audit Date: November 8, 2012 Effective Date: November 24, 2014 Expiration Date: November 23, 2017 Revision Date: January 1, 2017</p> <p><i>Jane Smith-Walsh</i> Signed on behalf of HSB Registration Services</p> <p>  </p> <p>Hartford Steam Boiler</p>	<p>Risk Solutions</p> <p>HSB Registrat 595 E. Swede Wayne, Pennsylv</p> <p>Certificat</p> <p>This is to ce ULP Co 129-19, Cheoyongs</p> <p>Has established and ap Ma Design and Mar</p> <p>Proof has been furnishe OHS</p> <p>Certificate Number: O 1361</p> <p>Original Certification Date: November 24, Transfer Audit Date: November 8, 2012 Effective Date: November 24, 2014 Expiration Date: November 23, 2017 Revision Date: January 1, 2017</p> <p><i>Jane Smith-Walsh</i> Signed on behalf of HSB Registration Services</p> <p></p> <p>Hartford Steam Boiler</p>	<p>Certificatio related</p> <p>#129-19, Cheoyongs Bureau Veritas certifies that the at Certificate n°: BV-KOR-16- Part 2: Comprehensive Qual This certificate is valid fro This certificate expires on: Subject to satisfactory yearly aud Filed of application: Comprehe Range of certification:</p> <table border="1"> <tr> <td>Workshop NAME</td> <td></td> </tr> <tr> <td>ULP</td> <td>#129-19, Cheoyongsaneop-ro, Ulsan, Korea</td> </tr> </table> <p>Responsible Welding Coordinat Main Shop : IWE :: Cheolmin KIM Deputy of Responsible Welding Main Shop: Eunsoo KIM</p> <p>Auditor: Hwail PARK Signe</p> <p>Bureau Veritas Korea Co., Ltd. #1102, Keungi Tower, Yeoksam-dong, G To check this certificate, please call: +</p> <p>129-19</p>	Workshop NAME		ULP	#129-19, Cheoyongsaneop-ro, Ulsan, Korea	<p>has been approved Lloyd's Register for</p> <p>This approval is sub Classification of Sp this approval applies</p> <p>Lloyd's Register is th Certificate.</p> <p>This Certificate is in below.</p> <p>Valid Until : 0 Date of Issue : 0</p> <p></p>	<p>中华人民共和国 特种设备制造许可证 Manufacture License of Special Equipment People's Republic of China (锅炉) (Boiler)</p> <p>No.: TS2100F37-2021</p> <p>公司/ Company: ULP CO., LTD.</p> <p>地址 / Address: 129-19, Cheoyongsaneop-Ro, Onsan-Eup, Ulju-Gun, Ulsan, Republic of Korea</p> <p>经审查, 获准从事下列锅炉的制造: Has been audited and approved to manufacture the Boilers within the scope as:</p> <p>A 级锅炉部件 (限锅筒) / Parts of Boilers A (Boiler Drums Only)</p> <p>审批机关: Approval/Issue Organ: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China</p> <p>发证机关: Issue Organ: </p> <p>有效期至: 2021年11月30日 发证日期: 2017年12月01日 Date of Expiration: Nov.30,2021 Date of Issue: Dec.1,2017</p> <p>国家质量监督检验检疫总局制</p>
Workshop NAME									
ULP	#129-19, Cheoyongsaneop-ro, Ulsan, Korea								

7. Client List



8. Experience

Heat Exchanger



RUCP Project

Type : Shell & Tube type Heat exchanger

Client : S-OIL/Daelim

Delivery Date : 2017. 03

Size : Shell – 90t x 2080ID x 11,695L

Tube – OD25.4 x t2.77 x 6150L / 2,376ea

Weight : 179.2 Ton

Total Quantity : 17 items 32sets

Total Weight : 2,565 Ton

Material : Shell - SA516-70

Tube - SA179 /SA213-304L/High Flux

8. Experience

Heat Exchanger



RUCP Project – each item

Type : BXM

Client : S-OIL/Daelim

Delivery Date : 2017. 03

Item No. : E-101610ABCD

Size : Shell – OD2,521 x t23 x 11,982L

Channel – OD2,531 x t28 x 1,400L

Tube – OD19.05 x t2.11 x 12,000L / 8,800 ea

Weight : 154.6 Ton / 1unit

Quantity: 1 item 4sets

Material : Shell - SA516-70N

Channel – SA516-70N

Tube – High Flux

8. Experience

Heat Exchanger

RUCP Project – each item

Type : AKT

Client : S-OIL/Daelim

Delivery Date : 2017. 03

Item No. : E101309ABCD

Size : Shell – OD2936 x t93 x 11,693L

Channel – OD2176 x t48 x 2800L

Tube – OD25.4 x t2.5 x 7300L / 2376 ea

Weight : 168.2 Ton / 1unit

Quantity: 1 item 4sets

Material : Shell - SA516-70N

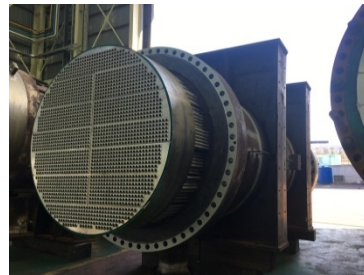
Channel – SA240-304L

Tube – SA240-304L



8. Experience

Heat Exchanger



RUCP Project - each item

Type : AES

Client : S-OIL/Daelim

Delivery Date : 2017. 03

Item No. : E101206ABC

Size : Shell – OD1876 x t38 x 9591L

Channel – OD1870 x t35 x 2360L

Tube – OD25.4 x t2.11 x 6400L / 1972 ea

Weight : 89.6 Ton / 1unit

Quantity: 3 items 3sets

Material : Shell - SA516-70N

Channel – SA240-304L

Tube – SA213-TP304L

8. Experience

Surface Condenser



Bangpakong Project

Site / Client : Thailand / TEi

Delivery Date : 2018. 11. 20

Size (Major) : 10,005 W x 12,690 H x 14,245L

Tube : 25.4 OD x 0.7/0.55 t x 8,900 – 28,248 pcs

Weight : 322.0 Ton / 1unit

Quantity : 2 unit

Material (Shell / TS / Tube)
: SA516-70 / A516-70+Ti / Ti

8. Experience

Surface Condenser

Nanatsushima Project

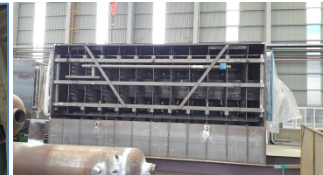
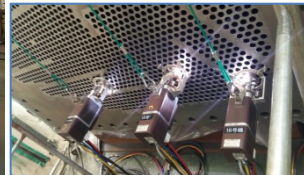
Site / Client : Japan / Hitachi Power

Delivery Date : 2017. 11. 30

Size (Major) : 4,550 W x 5,050 x 9,480L
Tube : 19.05 OD x 0.4 t x 7,504 – 4,160 pcs
Weight : 50.3 Ton / 1unit

Quantity : 1 unit

Material (Shell / TS / Tube)
: SS 400 / Ti Clad / Ti



8. Experience

Pressure Vessel

RUCP Project

Type : Pressure Vessels

Client : S-OIL/Daelim

Delivery Date : 2017

Size : 64t x ID 5900 x 18,800L

: 247 Ton

Total Quantity : 5 Items 7 sets

Total Weight : 795 Ton

Material : SA516-70+S5



8. Experience

Pressure Vessel



RUCP Project

Type : Pressure Vessels

Client : S-OIL/Daewoo

Delivery Date : 2017

Size : 46t x ID 5,800 x 21,317L

: 171 Ton

Total Quantity : 24 Items 27 sets

Total Weight : 753 Ton

Material : SA516-70+HIC/SA516-70

8. Experience

Pressure Vessel

RUCP Project

Type : Pressure Vessels

Client : S-OIL/Daewoo

Delivery Date : 2017

Size : 24t x ID 5,500 x 21,420L

: 137.8 Ton

External : Contro-Trace Heating System

Total Quantity : 24 Items 27 sets

Total Weight : 753 Ton

Material : SA516-70N



8. Experience

Heavy Wall Drum



Trans Canada Project

Site / Client : Canada / Vogt Power

Delivery Date : 2015.05. 30

Size (Major) : 165t x ID 2,133 x 13,411L

Weight : 147.5 Ton / 1unit (HP)

Quantity : 2 unit

Material : SA299-B

8. Experience

Heavy Wall Drum

Duke Citrus Project

Site / Client : USA / Vogot Power

Delivery Date : 2015.06.15

Size (Major) : 148t x ID 1,981 x 14,021L

Weight : HP 132.5 Ton / 1unit

Quantity : 4 unit (4HP, 4IP, 4LP)

Material : SA299-B



8. Experience

Heavy Wall Drum



Yeosu #1 Project

Site / Client : Korea / Doosan Heavy Industries & Construction Co., Ltd.

Delivery Date : 2014.07.30

Size (Major) : 135t x ID 1,676 x 34,000L

Weight : 246 Ton / 1unit

Quantity : 1 unit

Material : SA302-C

8. Experience

Heavy Wall Drum

Samsun Project

Site / Client : Turkey / Doosan Heavy Industries & Construction Co., Ltd.

Delivery Date : 2009.06.30

Size (Major) : 148t x ID 2184 x 17800L

Weight : HP 167 Ton / 1unit
IP 18 Ton / 1unit
LP 26 Ton / 1unit

Quantity : 2 units (2HP, 2IP, 2LP)

Material : SA302-C / SA516-70



8. Experience

Heavy Wall Drum



Bouchain Project

Site / Client : France / CMI

Delivery Date : 2013.10.19

Size (Major) : 132t x ID 2021 x 11260L

Weight : HP 172.3 Ton / 1unit
IP 26.2 Ton / 1unit
LP 27.7 Ton / 1unit

Quantity : 1 unit (1HP, 1IP, 1LP, 1BDT, 1FST)

Material : SA302-B

8. Experience

Heavy Wall Drum



St. Joseph

Site / Client : USA / Nooter Erikson

Delivery Date : 2016. 10.03.

Size (Major) : 102t x ID 1,524 x 13,259L

Weight : 68.8 Ton / 1unit

Quantity : 2 units (2HP 2IP 2LP)

Material : SA302-B

8. Experience

Reactor

HC Project

Site / Client : Korea / Piled Engineering

Delivery Date : 2018. 04

Size (Major) : 87t x ID 2,100 x 4,700L

Weight : 20.3 Ton / 1 sets

Total : 5 Item 6 sets

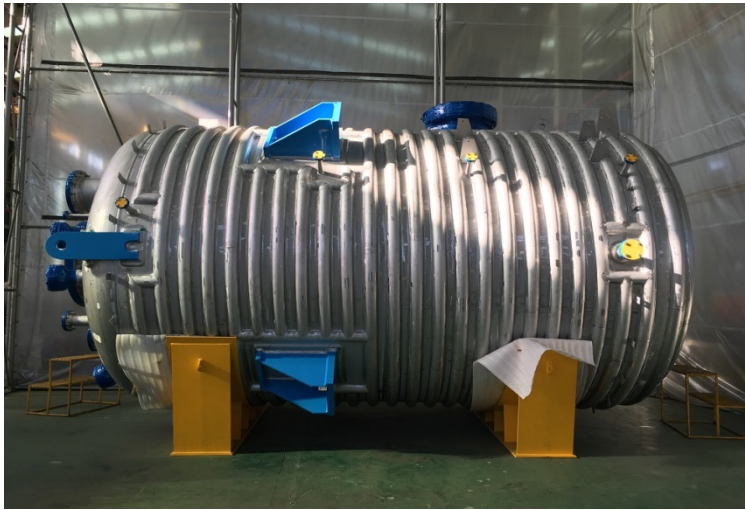
Tortal Weight : 187 Ton

Material : SA387-22



8. Experience

Reactor



HC Project

Site / Client : Korea / Hyundai EP

Delivery Date : 2017. 10

Size (Major) : 18t x ID 3,220 x 4,750L
Pipe Jacket Type
Agitator

Weight : 25.1 Ton / 1 sets

Material : SA240-304

8. Experience

Column



Amine Column

Site / Client : Korea/ S-oil

Delivery Date : 2019. 02

Size (Major) : 28+3t x ID 2,134 x 14,480L

Weight : 25.1 Ton

Total : 3 sets

Material : SA516-70N + 304L Clad

8. Experience

Skid Module



Membrane Skid

Service : Membrane Skid

Site / Client : Kuwait / KNPC / MTR
(Al Zour Project)

Delivery Date : 2017. 12. 30

Size (Major) : 7.800H x 7,500 W x 21,000 L

Weight : 175 Ton x 3 unit

Quantity: 3 Unit

Material : A106-B

8. Experience

Skid Module

Membrane Skid

Service : Membrane Skid

Site / Client : Vietnam / UOP / Chiyoda
(NSRP Project)

Delivery Date : 2015. 07. 30

Size (Major) : 8,000H x 7,800 W x 32,000 L

Weight : 120 Ton

Quantity: 1 lot (2 Block)

Material : A106-B



8. Experience

Skid Module



PSA SKID

Service : Valve Skid

Site / Client : Qatar / UOP

Delivery Date : 2014. 07. 30

Size (Major) : 3200H x 3150W x 18600L

Weight : 42Ton

Quantity: 1lot

Material : A106-B

8. Experience

HRSG Module

Lake Charles Project

Site / Client : USA / Nooter Eriksen

Delivery Date : 2018. 5. 10

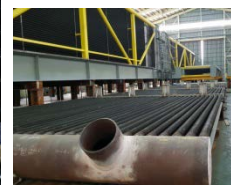
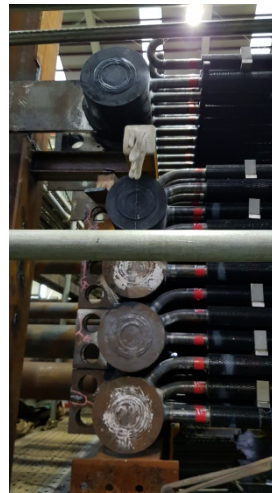
Module Qty : 10 Module x 2 unit

Size (Major) : 3,800 W x 6,300 H x 26,900 L

Tube Qty : 8,790 pcs x 2 unit

Weight : 271.8 ton / each Module (Max.)
: 2,256 ton x 2 unit

Tube Material : T91 / T22 / CS



8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm ²)	Temp. (°C)	Th'k	I.D	Length	
Trans Canada	VOGT	Trans Canada	CANADA	HP Steam Drum	2	147.5	295.0	SA299-B	195.4	362	165	2,133	13,411	2015
Datan Expansion #8&9	GE Power	Taiwan Power Company	Taiwan	HP Steam Drum	4	174.0	696.0	SA299-B	202.3	368	162	1,980	16,320	2020
Long Ridge Energy	GE Power	EMIRATES SEMBCORP	USA	HP Steam Drum	1	143.3	143.3	A299-B	204.6	367	160	1,981	13,005	2020
Hill Top HRSG	GE Power	DEP	USA	HP Steam Drum	1	139.5	139.5	SA299-B	213.0	369	159	1,830	13,716	2020
Shady Hills	GE Power	-	USA	LP Steam Drum	1	22.3	22.3	A516-70	8.0	176	158	2,745	13,000	2020
INDECK NILES	GE Power	Indeck Niles Energy Center	USA	HP Steam Drum	2	131.7	263.4	SA299-B	194.6	364	156	1,980	12,395	2020
South Field	GE Power	COMPELO Energy	USA	HP Steam Drum	2	146.3	292.6	SA516-70	213.0	370	153	1,830	14,783	2019
Guernsey	GE Power	Guernsey Power Station	USA	HP Steam Drum	3	133.8	401.4	A299-B	210.0	369	152	1,830	13,715	2020
Layyah	CMI Belgium	SEWA	UAE	HP Steam Drum	2	138.6	277.2	SA302-B	196.0	363	150	2,210	11,980	2019
Ishikariwan	GE Power	HOKKAIDO ELECTRIC POWER	JAPAN	HP Steam Drum	1	130.6	130.6	SA302-C	194.7	363	150	1,900	13,438	2017
Chiahui	GE Power	CHIAHUI POWER CORP.	Taiwan	HP Steam Drum	1	155.8	155.8	SA299-B	203.0	366	149	1,830	16,800	2019
GSRC Sriracha	Nooter/Eriksen	COMPELO Energy	Thailand	HP Steam Drum	4	168.5	674.0	SA302-B	194.0	366	149	1,956	17,627	2020
Blue Water	GE Power	GE Power	USA	HP Steam Drum	2	143.7	287.4	SA299-B	207.0	368	149	1,829	15,011	2019
Orot Rabin	GE Power	Israel Electric	Israel	HP Steam Drum	1	175.9	175.9	SA299-B	194.7	362	148	1,980	18,000	2020
Duke Citrus	VOGT	Duke Energy	USA	HP Steam Drum	4	132.5	530.0	SA299-B	193.0	362	148	1,981	14,021	2015
Samsun	DHIC	Samsun EC	TURKEY	HP Steam Drum	2	167.0	334.0	SA302-C	180.0	345	148	2,184	17,800	2009
Jackson Generation	John Cokerill	Jackson Generation	USA	HP Steam Drum	2	130.8	261.6	SA299-B	192.0	362	145	1,950	14,000	2020
Middle Town	VOGT	Middle Town	USA	HP Steam Drum	1	130.3	130.3	SA302-B	213.4	370	145	1,981	14,630	2016
Kings Mountain	VOGT	Kings Mountain	USA	HP Steam Drum	1	130.3	130.3	SA302-B	213.4	370	145	1,981	14,630	2016
Topolobampo II	CMI	IBERDROLA	MEXICO	HP Steam Drum	2	109.7	219.4	SA299-B	183.1	359	142	2,020	11,300	2017
Genesis Keys	VOGT	Keys Energy	USA	HP Steam Drum	2	106.0	212.0	SA302-B	207.0	368	142	1,981	11,887	2016
Fairview	CMI LLC	GE International, Inc	USA	HP Steam Drum	2	114.6	229.2	SA299-B	202.0	366	140	1,840	11,800	2018
Parnaiba	GE Power	ENEVA	Brazil	HP Steam Drum	4	91.3	365.2	SA299-B	194.5	364	138	1,830	10,146	2020
HGK Project	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	89.9	89.9	SA516-70	179.0	356	138	1,524	12,600	2019
Kalsel	Sumitomo	Hyundai Engineering	INDONESIA	HP Steam Drum	2	83.1	166.2	SA516-70	17.9	357	138	1,524	13,800	2016
Yeosu	DOOSAN E&C	Korea South-East Power	KOREA	HP Steam Drum	1	246.0	246.0	SA302-C	244.0	368	135	1,676	34,000	2014

8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
Sabiya	GE Power	Sabiya CCGT Power Plant	KUWAIT	HP Steam Drum	2	104.9	209.7	SA302-B	180.2	358	134	1,981	13,500	2018
Wloclawek	DOOSAN E&C	PKN Orlen	POLAND	HP Steam Drum	1	108.0	108.0	P460NH	207.0	368	133	1,730	3,861	2014
Big Bend	VOGT Power	TECO	USA	HP Steam Drum	2	128.5	257.0	SA302-B	-	-	132	1,981	15,344	2020
EDF	CMI	EDF	FRANCE	HP Steam Drum	1	172.3	172.3	SA302-B	203.9	366	132	3,200	11,414	2013
Tung Hsiao	DOOSAN E&C	MHPS	TAIWAN	HP Steam Drum	6	114.5	686.9	SA299-B	183.5	358	129	1,850	15,438	2015
Bang Pakong	VOGT	Electricity Generating Authority	THAILAND	HP Steam Drum	2	166.2	332.4	SA302-B	202.1	366	127	1,829	21,946	2018
Hamitabat	CMI	Hamitabat	TURKEY	HP Steam Drum	2	110.0	220.0	SA302-B	192.0	361	125	1,890	13,530	2016
Navoi II	Nooter/Eriksen	Navoi CCGT Plant	UZBEKISTAN	HP Steam Drum	1	137.5	137.5	SA302-B	154.0	349	124	2,362	13,500	2018
DOII	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	55.2	55.2	SA516-70	169.3	351	124	1,372	9,837	2015
Erzin	DHIC	Erzin Power Plant	TURKEY	HP Steam Drum	2	146.0	292.0	SA299-B	156.9	344	124	2,240	15,600	2012
Phenol MEG	EPAC ME FZE	Phenol Company	UAE	HP Steam Drum	1	306.5	306.5	SA516-70	63.4	290	123	4,900	14,700	2018
Chinook	CMI LLC	Burns & McDonnell	CANADA	HP Steam Drum	1	79.6	79.6	SA299-B	192.0	361	123	1,625	11,500	2017
Tallawarra	GE Power	TRU Energy	AUSTRALIA	HP Steam Drum	1	84.3	84.3	SA299-B	162.0	348	120	1,829	12,192	2017
Montgomery County	Nooter/Eriksen (USA)	Nooter/Eriksen (USA)	USA	LP Steam Drum	2	37.7	75.4	SA516-70	8.0	177	118	1,829	12,800	2019
TJK2 Project	GE Gas Power Systems	GE Gas Power Systems	Malaysia	HP Steam Drum	1	92.3	92.3	SA229-B	176.0	354	118	1,829	12,800	2019
Tanjung Kidurong	GE Power	SEB Power	MALAYSIA	HP Steam Drum	1	88.2	88.2	SA299-B	173.0	354	118	1,829	12,800	2018
Alamitos	VOGT	Alamitos Energy	USA	HP Steam Drum	2	74.3	148.6	SA302-B	198.3	364	116	1,676	11,582	2018
Huntington Beach	VOGT	Huntington Beach Desalination	USA	HP Steam Drum	2	74.3	148.6	SA302-B	198.3	364	116	1,676	11,582	2018
Shin Pyeongtaek	GE Power	Korea Western Power	KOREA	HP Steam Drum	2	98.3	196.5	SA302-C	180.0	358	115	1,780	13,500	2018
Mankato II	Nooter/Eriksen	Calpine	USA	HP Steam Drum	1	81.4	81.4	SA302-B	182.0	360	115	1,829	10,668	2017
Qassim	CMI	Qassim	SAUDI ARABIA	HP Steam Drum	12	45.8	549.0	SA299-B	119.0	320	114	2,730	3,340	2015
Hanam	DOOSAN E&C	SKE&S	KOREA	HP Steam Drum	1	92.6	92.6	SA299-B	147.0	342	114	3,061	12,868	2014
Intergen	DOOSAN E&C	Intergen	PHILIPPINE	HP Steam Drum	1	65.0	65.0	SA299-B	178.0	361	114	2,073	5,636	2014
Add on C.C Unit	DHIC	Israel Electric	ISRAEL	HP Steam Drum	3	104.8	314.4	SA299-B	159.1	346	113	1,980	13,500	2011
SBE	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	52.8	52.8	SA516-70	166.0	350	112	1,372	10,900	2020
KDB	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	52.8	52.8	SA516-70	166.0	350	112	1,372	10,900	2020

8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
KBE	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	52.8	52.8	SA516-70	166.0	350	112	1,372	10,900	2020
Long Son	BORSIG	Long Son Petrochemical	Vietnam	Steam Drum	5	89.4	447.0	A302-B	128.0	360	111	2,278	10,400	2020
Fadhili	GE Power	Fadhili Power Plant	SAUDI ARABIA	HP Steam Drum	5	89.4	447.0	SA299-B	167.0	352	111	1,770	13,000	2018
NKNK	BORSIG	Linde	Russia	Steam Drum	6	71.0	426.0	SA516-70	143.0	345	110	1,780	11,000	2019
CDY Project	Sumitomo/Jiwon	Japan Central Power Plant	JAPAN	HP Steam Drum	1	55.9	55.9	SA516-70	165.0	349	110	1,372	11,040	2018
MBPG	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	55.9	55.9	SA516-70	161.0	349	110	1,372	11,040	2018
Bheramara	CMI	Bheramara	BANGLADESH	HP Steam Drum	1	97.0	97.0	SA299-B	147.0	330	110	2,300	9,948	2015
Oseung	DHIC	SKE&S	KOREA	HP Steam Drum	3	78.9	236.7	SA299-B	152.4	346	110	2,060	9,800	2011
Long Son	BORSIG	Long Son Petrochemical	Vietnam	Steam Drum	1	78.1	78.1	A302-B	135.0	365	109	2,082	10,200	2020
Mattawoman	Nooter/Eriksen	Mattawoman Power	USA	HP Steam Drum	2	85.2	170.4	SA302-B	119.7	368	109	1,575	14,112	2017
Muara Karang	Nooter/Eriksen	Persero	INDONESIA	HP Steam Drum	1	93.7	93.7	SA302-B	178.0	360	108	1,753	14,630	2018
SOHAR	Nooter/Eriksen	SEPCOIII	ALGERIA	HP Steam Drum	4	70.1	280.4	SA302-B	185.0	363	108	1,600	12,500	2017
IBRI	Nooter/Eriksen	SEPCOIII	ALGERIA	HP Steam Drum	4	70.1	280.4	SA302-B	185.0	363	108	1,600	12,500	2017
RIAU GFPP	GE Power	MRPR	Indonesia	HP Steam Drum	2	41.2	82.4	SA299-B	191.6	355	107	1,675	6,600	2020
Edwardsport	DHIC	IGCC Station	USA	HP Steam Drum	2	95.0	190.0	SA299-B	155.1	340	107	2,200	13,800	2009
Qatalum	DHIC	S2 Ruwais	QATAR	HP Steam Drum	4	118.0	472.0	SA299-B	155.9	345	107	2,400	15,000	2008
Beer Tuvia	GE POWER SYSTEM KOREA	IPM	Israel	HP Steam Drum	1	77.4	77.4	SA299-B	163.0	348	105	1,700	15,352	2019
Arian	BORSIG	Di Polymer Arian Company	Germany	HP Steam Drum	1	121.8	121.8	SA302-B	132.0	345	105	2,742	10,737	2017
Westmoreland	Nooter/Eriksen	Westmoreland Generating Station	THAILAND	HP Steam Drum	2	85.3	170.5	SA302-B	119.7	368	105	1,499	15,850	2017
Westmoreland	Nooter/Eriksen	Westmoreland Generating Station	THAILAND	HP Water Drum	2	78.0	156.0	SA302-B	119.7	368	105	1,499	15,850	2017
Talimarjan	DOOSAN E&C	TTUESU	UZBEKISTAN	HP Steam Drum	2	96.2	192.4	SA299-B	145.0	340	105	3,119	13,378	2014
Yangju	DHIC	DaeRyun Power	KOREA	HP Steam Drum	2	78.0	156.0	SA299-B	151.9	342	105	1,962	11,850	2012
Toul	DHIC	POWEO Toul	FRANCE	HP Steam Drum	1	75.7	75.7	SA299-B	158.1	346	105	1,966	11,000	2011
Fairview	CMI LLC	GE International, Inc	USA	IP Steam Drum	2	22.1	44.2	SA516-70	64.0	280	104	1,500	11,200	2018
Tuasspring	VOGT	GMR Energy	SINGAPORE	HP Steam Drum	1	140.0	140.0	SA299-B	158.1	346	104	1,828	14,935	2012
Unosugen	DHIC	Torrent Power	INDIA	HP Steam Drum	1	97.0	97.0	SA299-B	147.9	340	104	1,980	14,000	2010
Qurayyah	DHIC	Saudi Electricity	SAUDI ARABIA	HP Steam Drum	10	76.0	760.0	SA299-B	156.6	345	104	1,830	11,700	2010

8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
Ashvill	VOGT	Duke Energy	USA	HP Steam Drum	2	71.1	142.2	SA299-B	150.1	342	103	1,981	10,058	2017
Montgomery County	Nooter/Eriksen (USA)	Nooter/Eriksen (USA)	USA	HP Water Drum	2	88.2	166.4	SA302-B	194.0	365	102	1,524	14,842	2019
Montgomery County	Nooter/Eriksen (USA)	Nooter/Eriksen (USA)	USA	HP Steam Drum	2	88.1	176.2	SA302-B	194.0	366	102	1,524	14,842	2019
Lake Charles	Nooter/Eriksen	CB&I	USA	HP Steam Drum	2	82.6	165.2	SA302-B	194.0	366	102	1,524	15,240	2018
Lake Charles	Nooter/Eriksen	CB&I	USA	HP Water Drum	2	79.7	159.4	SA302-B	194.0	366	102	1,524	15,240	2018
St. Charles	Nooter/Eriksen	CB&I	USA	HP Steam Drum	2	83.5	167.0	SA302-B	194.0	366	102	1,524	15,240	2017
St. Charles	Nooter/Eriksen	CB&I	USA	HP Water Drum	2	75.0	150.0	SA302-B	194.0	366	102	1,524	15,240	2017
St. Joseph	Nooter/Eriksen	Kiewit	USA	HP Steam Drum	2	68.8	137.5	SA302-B	289.0	366	102	1,524	13,259	2016
Duba	DOOSAN E&C	Saudi Electricity	SAUDI ARABIA	HP Steam Drum	2	90.3	180.6	SA299-B	149.2	341	102	1,910	12,200	2015
OMV Brazi	DHIC	Petrom	ROMANIA	HP Steam Drum	2	92.0	184.0	SA299-B	154.6	345	102	1,930	16,000	2009
Rades-C	CMI	STEG	Tunisia	HP Steam Drum	1	81.0	81.0	SA299-B	156.0	346	100	1,780	14,022	2018
SHP	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	57.3	57.3	SA516-70	140.7	337	100	1,372	12,240	2015
Grati	GE Power	Indonesia Power launches	INDONESIA	HP Steam Drum	2	66.4	132.8	SA299-B	149.0	341	99	1,580	12,354	2017
Okeechobee	Nooter/Eriksen	Florida Power and Light	USA	HP Steam Drum	3	84.4	253.2	SA302-B	188.4	363	99	1,524	16,460	2017
Okeechobee	Nooter/Eriksen	Florida Power and Light	USA	HP Steam Drum	3	83.1	249.3	SA302-B	188.4	363	99	1,524	16,460	2017
Nhon Trach	DHIC	Petro Vietnam	VIETNAM	HP Steam Drum	2	76.0	152.0	SA299-B	156.0	345	99	1,830	10,870	2010
Soharll	DHIC	Al Batinah Power	OMAN	HP Steam Drum	2	81.3	162.6	SA299-B	158.1	346	98	1,829	13,000	2011
Barkall	DHIC	Al Batinah Power	OMAN	HP Steam Drum	2	81.3	162.6	SA299-B	158.1	346	98	1,829	13,000	2011
Hess Oil	VOGT	HESS OIL & CHEM. CORP	USA	HP Steam Drum	2	60.1	120.2	SA299-B	159.6	346	96	1,677	11,000	2013
Besmaya 2	CMI Belgium	Besmaya 2	SIEMENS	HP Steam Drum	4	49.7	198.8	SA299-B	96.0	308	95	3,110	6,000	2018
TGP	Sumitomo/Jiwon	Tsuruga Green Power	JAPAN	HP Steam Drum	1	37.5	37.5	SA516-70	13.5	335	94	1,372	8,000	2016
MBP	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	48.2	48.2	SA516-70	134.6	333	93	1,372	10,864	2015
Jijel	GE Power	SPE	ALGERIA	HP Steam Drum	4	75.3	301.0	SA299-B	149.0	343	92	1,730	13,344	2017
Biskra	GE Power	BISKRA Power Plant	KOREA	HP Steam Drum	4	75.2	301.0	SA299-B	191.0	363	92	1,730	13,344	2016
UNA	Sumitomo/Jiwon	SUMITOMO	JAPAN	HP Steam Drum	1	23.4	23.4	SA516-70	133.6	333	92	1,372	4,878	2015
Riverside Expansion	Nooter/Eriksen	Wisconsin Power and Light	USA	HP Steam Drum	2	59.0	118.0	SA302-B	196.0	368	90	1,321	14,783	2017
NIZHNEKAMSK	CMI Belgium	SIMENS ENKA	Russia	HP Steam Drum	2	50.7	110.4	SA516-70	120.0	324	89	2,140	7,524	2019

8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
RFCC	DAELIM	S-OIL	KOREA	Drum	1	247.2	247.2	SA516-60N	23.4	80	64	5,900	18,800	2017
RFCC	DAELIM	S-OIL	KOREA	Drum	1	170.7	170.7	SA516-60N	16.5	136	46	5,800	17,200	2017
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	161.6	161.6	SA516-60N HIC	3.5	85	37	5,000	21,600	2017
RFCC	DAELIM	S-OIL	KOREA	Drum	1	139.6	139.6	SA516-60N	21.9	109	49	4,800	15,950	2017
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	137.8	137.8	SA516-70	3.5	204	24	5,500	21,420	2017
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	120.4	120.4	SA516-70	46.9	80	65	3,500	14,500	2017
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	1	102.7	102.7	A516-60N+HIC	4.6	142	26	5,900	17,000	2019
ULSADO	DAELIM	Petron Refining & Marketing	MALAYSIA	Column	1	89.9	89.9	SA516-60N+SS316L /	5.6 / FV	280	12/17	2,100	28,700	2019
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	1	87.5	87.5	A516-60N+HIC	3.5	361	21	5,000	20,700	2019
RFCC	DAELIM	S-OIL	KOREA	Drum	1	86.6	86.6	SA516-60N	36.0	80	51	3,600	13,000	2017
RFCC	DAELIM	S-OIL	KOREA	Drum	1	84.9	84.9	SA516-70	3.6	340	30	4,800	16,100	2017
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	76.3	76.3	SA516-60N HIC	3.5	80	26	4,100	17,100	2017
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	69.7	69.7	SA516-70	10.6	80	26	4,200	17,000	2017
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	2	65.5	131.0	A516-60+316L	4.2	100	18	4,250	20,885	2019
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	65.3	65.3	SA516-60N HIC	3.5	80	25	3,600	17,100	2017
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	63.4	126.8	SA516-60	89/FV	85	107	2,345	3,500	2015
Baronia GDU	KPF	PETRONAS CARIGALI SDN	MALAYSIA	Glycol Contactor	1	58.7	58.7	SA516-70N+SS316L	137/FV	65	92	2,000	8,200	2015
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	1	54.5	54.5	A516-70	11.4	335	26	3,800	13,000	2019
ULSADO	DAELIM	Petron Refining & Marketing	MALAYSIA	Vessel	1	51.0	51.0	SA516-60N+SS316L /	39.0	270	58	2,600	15,800	2019
RFCC	DAELIM	S-OIL	KOREA	Drum	1	48.8	48.8	SA516-70	3.6	110	25	3,800	13,600	2017
Andeavor Dickinson	UOP LLC	Technip FMC / Jacobs	USA	Vessel	1	47.9	47.9	SA516-70N	27.0	121	29	4,115	17,831	2020
PDH	UOP	SK E&C / SK GAS	KOREA	Tail Gas Drum	1	47.3	47.3	SA516-70	9.5	65	17	3,000	19,900	2015
New Kero Merox	S-Oil	S-OIL	KOREA	Drum	1	46.6	46.6	SA516-70	15/HV	70	28	3,658	6,800	2010
RFCC	DAELIM	S-OIL	KOREA	Drum	1	38.9	38.9	SA516-60	1.5	109	29	3,300	9,400	2017
S Project	SK E&C	SK Energy	KOREA	Vessel	1	38.5	38.5	A516-70N	9.8/HV	260/150	23	3,600	12,450	2019
HTC ORP	UOP Malaysia	Hwanhwa Total	KOREA	Reactor	2	37.6	75.2	SA516-70N	36.0	145	34	2,100	14,900	2018
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	1	35.4	35.4	A516-60N+HIC	4.9	74	20	3,800	10,000	2019

8. Experience (Pressure Vessels & Steam Drum)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	2	35.2	70.4	A516-60+316L	7.0	288	17	3,353	16,531	2019
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	2	34.2	68.4	A516-60+316L	4.2	105	17	3,200	13,820	2019
HTC ORP	UOP Malaysia	Hwanhwa Total	KOREA	Reactor	1	33.3	33.3	SA516-70N	36.0	145	41	2,700	6,600	2018
PDH	UOP	SK E&C / SK GAS	KOREA	Adsorber	6	32.7	196.0	SA516-60	32.0	121	40	3,000	4,800	2015
ULSADO	DAELIM	Petron Refining & Marketing	MALAYSIA	Vessel	1	32.3	32.3	SA516-70	22.4	335	27	2,700	8,700	2019
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	32.0	32.0	SA516-60N HIC	3.5	145	22	3,000	9,000	2017
S Project	SK E&C	SK Energy	KOREA	Vessel	1	31.4	31.4	A516-70N+HIC	9.8/HV	260/150	21	3,000	12,000	2019
S Project	SK E&C	SK Energy	KOREA	Vessel	1	31.1	31.1	A516-70N	9.8/HV	260/150	19	3,200	10,920	2019
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	28.8	57.6	SA516-60	89/FV	85	93	2,000	3,500	2015
Jamnagar	Posco plantec	Reliance	INDIA	Vessel	5	26.3	131.5	SA240-304L	3.5/FV	121/150	16	2,700	8,237	2014
RFCC	DAELIM	S-OIL	KOREA	Tank	3	25.4	76.2	SA240-316L	0.1	100	6	2,900	8,370	2017
HIPS Revamping	Hyundai EP	Hyundai EP	KOREA	Reactor	1	25.1	25.1	SA240-304	3.9	250	18	3,220	4,750	2017
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	1	25.0	25.0	A516-70	10.2	232	20	3,500	6,900	2019
#3 CDU Amine Tower	S-OIL	S-OIL	KOREA	TOWER	1	25.0	25.0	SA516-70+304L	27.4	73	28	2,134	14,483	2018
S Project	SK E&C	SK Energy	KOREA	Vessel	1	24.7	24.7	A516-70N+304L	20.7/HV	260/150	33	2,900	4,000	2019
LPG Sulfrex Unit	S-OIL	S-OIL	KOREA	Prewash Drum	1	24.7	24.7	SA516-70	23.5/FV	60/150	30	2,600	7,000	2013
BMP	TTS JV	Bahrain Petroleum Company	BAHRAIN	Vessel	2	23.4	46.8	A516-60+316L	34.4	263	31	2,134	8,756	2019
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	22.3	22.3	SA516-60N HIC	3.5	80	17	2,700	8,100	2017
HC-2	Pields Engineering	Deokyang	KOREA	Reactor	1	22.1	22.1	SA387-11	29.0	360	31	2,850	5,000	2018
S Project	SK E&C	SK Energy	KOREA	Vessel	1	21.6	21.6	A516-70N+410S	9.8/HV	316/150	19	2,500	8,600	2019
S Project	SK E&C	SK Energy	KOREA	Vessel	1	21.6	21.6	A516-70N+410S	9.8/HV	316/150	19	2,500	8,600	2019
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	21.5	43.0	SA516-60	89/FV	85	76	1,600	2,400	2015
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	1	20.9	20.9	SA516-70 HIC	15/FV	80/150	30	3,200	7,870	2014
HC-2	Pields Engineering	Deokyang	KOREA	Reactor	1	20.3	20.3	SA387-22	34.5	550	87	2,100	1,600	2018
RFCC	DAEWOO	S-OIL	KOREA	Drum	1	20.2	20.2	SA516-70	5.3	115	14	2,900	8,900	2017
SK gas low price C3	SK Energy	SK Energy	KOREA	Vessel	1	19.4	19.4	A516-70N	16.0	150	20	2,800	8,900	2019
SK gas low price C3	SK Energy	SK Energy	KOREA	Vessel	1	19.4	19.4	A516-70N	16.0	150	20	2,800	8,000	2019

8. Experience (Cr-Mo Material)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
El Campesino	NEM	Central El Campesino S.A	CHILE	HP Separator	1	18.6	18.6	SA336 Gr F11	210	418	65	570	17,370	2017
Prai	DOOSAN E&C	TNB NORTHERN ENERGY Bhd.	MALAYSIA	HP Separator	2	18.0	36.0	SA336 Gr F22	211.15	445	60	610	18,600	2014
Samsun	DHIC	Samsun EC	TURKEY	HP Separator	1	18.0	18.0	SA336 Gr F22	211.15	445	60	610	18,600	2013
Samcheok Green	DHIC	Korea Southern Power	KOREA	Flash Tank	2	6.2	12.4	SA387-11 CL.2	8.8/FV	350	15	2,400	3,350	2013
Samcheok Green	DHIC	Korea Southern Power	KOREA	Flash Tank	2	2.0	4.0	SA387-11 CL.2	8.8/FV	350	15	1,200	2,100	2013
Shoiba	CMI	Saudi Electricity	SAUDI ARABIA	Flash Tank	10	0.6	6.0	SA387-11 CL.2	9.8	302	19	318	2,534	2012
Qurayyah	CMI	Saudi Electricity	SAUDI ARABIA	Blowdown Tank	3	3.6	10.8	SA387-11 CL.2	4.2	400	13	1,500	3,000	2011
Mong Duong	DHIC	AES-VCM	VIETNAM	Flash Tank	2	2.1	4.2	SA387-11 CL.2	9/FV	315	12	1,300	1,650	2013
Mong Duong	DHIC	AES-VCM	VIETNAM	Flash Tank	2	4.2	8.4	SA387-11 CL.2	9/FV	315	15	1,700	2,700	2013
Mong Duong	DHIC	AES-VCM	VIETNAM	Flash Tank	2	4.5	9.0	SA387-11 CL.2	8.8/FV	315	15	2,000	3,500	2012
EDF	CMI	EDF	FRANCE	Blowdown Tank	1	6.7	6.7	SA387-22 CL1	4.1	100	12	2,476	3,700	2013
HC-2	Pields Engineering	Deogyang	KOREA	Reactor	1	20.3	20.3	SA387-22	34.5	550	87	2,100	1,600	On going
HC-2	Pields Engineering	Deogyang	KOREA	Reactor	1	22.1	22.1	SA387-11	29	360	31	2,850	5,000	On going
HC-2	Pields Engineering	Deogyang	KOREA	Reactor	1	11.3	11.3	SA387-11	42	420	27	1,550	6,000	On going
HC-2	Pields Engineering	Deogyang	KOREA	Reactor	1	11.3	11.3	SA387-11	42	420	27	1,550	6,000	On going
HC-2	Pields Engineering	Deogyang	KOREA	Reactor	2	11.0	22.0	SA387-11	42	420	28	1,650	4,900	On going
Prai HRSG	DHEC	TNB NORTHERN ENERGY Bhd.	MALAYSIA	Separator	2	17.7	35.4	SA335-P22	20.3	445	60	610	18,600	2014
RFCC	DAEWOO	S-Oil	KOREA	Heater	1	0.3	0.3	SA335-P11	20	360	11	146	1,474	2017

8. Experience (S&T type Heat Exchanger)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year	
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length		
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	4	181.7	726.8	SA516-70N / SA213-304L	53.1	426	94	2,750	11,695	2017	
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	4	158.0	632.0	SA516-70N / SA179(High Flux)	18/23.5	150/150	23	2,475	16,578	2017	
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	3	102.2	306.6	SA516-70N / SA213-304L	44.6	340	38	1,800	9,592	2017	
MVR	Samsung	S-Oil	KOREA	Heat Exchanger	2	102.0	204.0	SA516-70 / SA179	5/FV	163	19	3,360	11,036	2013	
Ethylene Plant	KPIC	KPIC	KOREA	Heat Exchanger	1	101.2	101.2	SA516-60 / SA334-6(High Flux)	47/8	-	21	14	2,950	12,000	2019
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	2	95.5	191.0	SA516-70N/SA179	48.5	426	68	2,150	8,393	2017	
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	3	82.4	247.2	SA516-70N/SA213-304L	44.6	340	36	1,650	9,090	2017	
mPE PLANT	DAELIM	DAELIM	KOREA	Heat Exchanger	1	71.2	71.2	SA516-70 / SA213-304	25.1	160	24	1,850	13,500	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	70.6	141.2	A516-70 / A179	7.0	150	18	2,330	9,230	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	70.0	70.0	A516-70 / A179	8.4	150	17	2,500	9,460	2020	
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	69.8	139.6	SA516-70 / SA179	23.0	70	22	1,854	11,449	2020	
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	69.6	69.6	SA516-70N / SA179	14.7	65	20	2,550	11,532	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	68.2	68.2	A516-70 / A179	7.0	150	18	2,300	8,404	2020	
Ethylene Plant	KPIC	KPIC	KOREA	Heat Exchanger	2	64.4	128.8	SA516-60 / SA334-6(High Flux)	19.4/24	-45/-33	14	2,400	12,000	2019	
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	60.9	60.9	SA516-70N / SA179	19.0	65	22	1,840	14,316	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	60.0	120.0	A240-316L / A213-316L	8.7	240	16	2,710	6,187	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	57.5	57.5	A516-70 / A179	20.0	150	19	1,970	9,560	2020	
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	4	55.8	223.2	SA516-70N/SA179	37.3	219	28	1,750	9,221	2017	
Ethylene Plant	KPIC	KPIC	KOREA	Heat Exchanger	1	55.5	55.5	SA516-60 / SA179(Lowfin)	20.9/20.9	120/65	21	1,850	9,000	2019	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	55.2	55.2	A516-70 / A179	20.0	160	20	2,050	7,920	2020	
Ulsan PP	SKEC	Ulsan PP Co., Ltd.	KOREA	Heat Exchanger	1	50.0	50.0	SA516-70N / A334-6	25.0	120	17	1,700	6,050	2020	
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	2	49.6	99.2	SA516-70N/SA179	48.5	426	44	1,350	8,310	2017	
MVR	Samsung	S-Oil	KOREA	Heat Exchanger	2	49.0	98.0	SA516-70/SA179	14.8/FV	288	15	1,965	9,219	2013	
Ulsan PP	SKEC	Ulsan PP Co., Ltd.	KOREA	Heat Exchanger	1	48.7	48.7	SA516-70N / A334-6	10.0	120	15	1,720	9,987	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	48.6	48.6	A516-70 / A179	15.4	150	16	1,930	7,920	2020	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	48.3	48.3	A516-70 / A179	8.7	240	13	2,350	6,047	2020	
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	47.2	47.2	SA516-70N / SA179	14.7	65	17	2,170	10,704	2020	

8. Experience (S&T type Heat Exchanger)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	47.0	47.0	A516-70 / A179	11.5	160	15	1,970	7,820	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	44.6	133.8	A516-70 / A179	7.5	230	15	2,000	11,174	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	2	43.2	86.4	A516-70 / A179	7.5	200	14	1,750	7,986	2020
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	42.3	42.3	A240-316L / A213-316L	20.0	160	22	2,000	6,030	2020
SK gas low price C3	SK ENERGY	SK ENERGY	KOREA	Heat Exchanger	1	36.7	36.7	A516+70N / A334-6	52.1	280	20	1,800	3,658	2020
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	36.6	36.6	A516-70 / A179	15.4	150	15	1,690	7,820	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	6	36.4	218.4	A516-70 / A179	14.5	160	15	1,550	8,788	2020
ECH2 MVR	SCT	Samsung Fine Chemical	KOREA	Heat Exchanger	1	35.7	35.7	SA516-70/SA213-304	1.5/1.8	135/100	12	2,570	6,000	2015
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	34.3	34.3	A516-70 / A179	7.0	150	14	1,780	7,570	2020
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	33.9	33.9	SA516-70N / SA179	17.0	65	17	1,626	7,737	2020
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	33.7	33.7	SA516-70N / SA179	24.2	340	21	1,550	8,260	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	2	28.0	56.0	A516-70 / A179	7.5	200	14	1,520	6,761	2020
ASPHALT PG	S-OIL	S-OIL	KOREA	Heat Exchanger	1	27.8	27.8	SA516-70N+316L / SA213-TP316L	15.5	202	16	1,750	8,413	2012
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	2	27.5	55.0	SA516-70N+HIC / SA179	4.2	185	16	1,524	8,013	2012
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	1	27.2	27.2	SA516-70N/SA179	48.4	230	26	1,050	8,144	2017
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	25.9	25.9	SA516-70N / SA179	22.0	65	20	1,710	9,314	2020
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	1	25.9	25.9	SA516-70N/SA179	48.5	426	40	1,200	7,085	2017
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	24.9	49.8	SA516-70 / SA179	8.7	240	14	1,510	7,497	2020
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	23.9	23.9	SA516-70N / SA179	24.2	340	21	1,600	5,140	2020
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	1	22.8	22.8	SA516-70N/SA179	48.5	426	38	1,150	6,535	2017
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	1	22.0	22.0	SA516-70N/SA179	37.3	221	20	1,000	7,067	2017
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	2	22.0	44.0	SA516-70N+HIC / SA179	7.7	185	16	1,621	8,053	2012
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	20.8	41.7	SA516-70N / SA213-TP304	25.0	340	19	1,296	6,827	2020
Debottleneck	EDWARDS	P.T. Patra - SK	INDONESIA	Heat Exchanger	1	19.4	19.4	SA516-70 / SA179	3.5	204	13	1,340	7,304	2019
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	19.1	19.1	SA516-60N / SA179	28.9	65	22	1,270	6,337	2020
RFCC	DAELIM	S-OIL	KOREA	Heat Exchanger	1	18.7	18.7	SA516-70N/SA179	37.3	260	23	1,200	5,819	2017
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	2	18.6	37.2	A516-70 / A179	15.5	100	14	1,160	7,000	2020

8. Experience (S&T type Heat Exchanger)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
mPE PLANT	DAELIM	DAELIM	KOREA	Heat Exchanger	1	18.5	18.5	SA516-70 / A179	42.8	150	24	1,200	5,244	2020
HTC ORP	UOP Malaysia	Hwanhwa Total	KOREA	Heat Exchanger	1	16.9	16.9	SA516-70/SA179	17.7	54	16	1,000	6,096	2018
Bang Pakong Project	TEI	EGAT	THAILAND	Heat Exchanger	4	16.6	66.4	SA516-70/SB338-2	10.0	60	13	1,330	9,500	2018
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	16.2	32.4	SA516-70N / SA179	8.7	240	13	1,310	6,486	2020
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	15.4	15.4	SA516-70 / SA179	6.8	150	16	1,180	7,019	2020
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	15.4	15.4	A516-70 / A179	6.8	150	13	1,370	5,560	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	4	14.6	58.4	A516-70+HIC / A179	19.6	160	17	980	7,145	2020
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	14.4	14.4	A516-70 / A179	10.0	150	13	1,180	6,360	2020
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	14.1	28.2	SA516-70N / SA179	52.0	400	40	990	6,367	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	14.0	56.0	A516-70 / A179	4.0	270	14	900	7,046	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	13.8	41.4	A516-70+HIC / A179	4.0	270	14	950	7,071	2020
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	1	13.6	13.6	SA516-70N / SA179	11.9	187	13	1,100	6,651	2012
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	13.2	13.2	A516-70 / A179	20.0	150	13	1,250	4,810	2020
LPG Recovery	S-OIL	S-OIL	KOREA	Heat Exchanger	1	13.2	13.2	SA516-70N+316L / SA213-TP317L	13.7	75	14	990	7,910	2011
Linear Alkyl Benzene	EDWARD	LABIX	THAILAND	Condenser	1	13.0	13.0	SA516-60HIC	10.5/FV	170	14	1,250	4,877	2014
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	3	13.0	39.0	SA516-70N+410S / SA216-TP410	17.5	210	14	1,205	6,465	2012
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	12.7	38.1	A516-70 / A179	4.0	270	14	860	5,980	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	12.7	38.1	A516-70 / A179	4.0	270	14	860	5,980	2020
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	3	12.7	38.1	A516-70 / A179	4.0	270	14	860	5,980	2020
Ethylene Plant	KPIC	KPIC	KOREA	Heat Exchanger	1	12.6	12.6	SA516-60 / SA334-6(High Flux)	8/19.4	-45/-45	10	650	3,953	2019
C5C6 Naphtha	S-OIL	S-OIL	KOREA	Heat Exchanger	1	12.5	12.5	SA516-70N / SA179	13.0	94	13	1,070	7,363	2010
#1 Aromatics	S-OIL	S-OIL	KOREA	Heat Exchanger	1	12.0	12.0	SA516-70 / SA179	8.1	150	12	965	7,485	2012
Ethylene Plant	KPIC	KPIC	KOREA	Heat Exchanger	1	11.4	11.4	SA516-60 / SA334-6(High Flux)	8/19.4	-45/-45	28	1,300	6,000	2019
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	10.7	10.7	SA516-70N / SA179	24.2	340	16	1,150	4,330	2020
#3 CDU	S-OIL	S-OIL	KOREA	Heat Exchanger	1	10.6	10.6	SA516-70N+410S / SA216-TP410	16.5/FV	130	13	1,100	4,859	2012
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	2	10.0	20.0	SA516-70N / SA179	13.3	185	12	874	7,792	2012
Duqm	TRD JV	DUQM REFINERY (DRPIC)	Oman	Heat Exchanger	2	9.9	19.8	A516-70 / A179	14.0	110	12	870	6,300	2020

8. Experience (S&T type Heat Exchanger)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
mPE PLANT	DAELIM	DAELIM	KOREA	Heat Exchanger	1	18.5	18.5	SA516-70 / A179	42.8	150	24	1,200	5,244	2020
HTC ORP	UOP Malaysia	Hwanhwa Total	KOREA	Heat Exchanger	1	16.9	16.9	SA516-70/SA179	17.7	54	16	1,000	6,096	2018
Bang Pakong Project	TEI	EGAT	THAILAND	Heat Exchanger	4	16.6	66.4	SA516-70/SB338-2	10.0	60	13	1,330	9,500	2018
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	2	16.2	32.4	SA516-70N / SA179	8.7	240	13	1,310	6,486	2020
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	1	9.0	9.0	SA516-70N+304L / SA213-TP304L	5.25/FV	162	12+3.2	940	7,533	2012
YNCC 2nd BD	HANWHA E&C	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	8.7	8.7	SA516-70 / SA213-TP304	6.0	130	14	1,030	7,076	2020
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	2	8.7	17.4	SA516-70N / SA213-TP317L	17.2	352	17	889	6,269	2012
#3 CDU Desalter	S-OIL	S-OIL	KOREA	Heat Exchanger	1	8.7	8.7	SA516-70 / B111-C44300	7.0	77	13	881	7,599	2011
HC-2	Pields Engineering	Deokyang	KOREA	Heat Exchanger	2	8.4	16.8	SA240-304L/SA213-304L	29.0	280	13	870	5,124	2018
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	1	7.6	7.6	SA516-70N+316L / SA213-TP316L	11.9	187	13	788	6,134	2012
HC-2	Pields Engineering	Deokyang	KOREA	Heat Exchanger	1	7.3	7.3	SA387-11/SA179	29.0	330	12	820	6,294	2018
Debutanizer	S-OIL	S-OIL	KOREA	Heat Exchanger	1	6.8	6.8	SA516-70N / SA213-TP316L	25.7	91	10	695	7,383	2011
HC-2	Pields Engineering	Deokyang	KOREA	Heat Exchanger	1	6.2	6.2	SA240-304L/SA213-304L	29.0	160	10	690	7,497	2018
HC-2	Pields Engineering	Deokyang	KOREA	Heat Exchanger	1	6.1	6.1	SA240-304L/SA213-304L	10.0	130	5	670	9,519	2018
Debutanizer	S-OIL	S-OIL	KOREA	Heat Exchanger	1	6.1	6.1	SA516-70N+304L / SA213-TP304L	14.8	138	13	679	7,506	2011
Reficar	CB&I	Ecopetrol	COLOMBIA	Heat Exchanger	1	5.0	5.0	SA240-S31803 / SA789-S31803	20.0	121	9	584	7,197	2012
PKI TA-3	JGC Philippines	Pilipinas KAO Inc.	PHILIPPINES	Heat Exchanger	1	4.8	4.8	A240-304 / A213-304	2.0	250	8	500	3,000	2020
YNCC 2nd BD	DAELIM	YEOCHUN NCC CO., LTD.	KOREA	Heat Exchanger	1	3.3	3.3	A516-70N+S5 / A334-1	18.0	150	12	830	5,070	2020
R/K Cooling	FORUS	FORUS	KOREA	Heat Exchanger	2	3.3	6.6	SA516-70N+304L / SA213-TP304L	9.0	100	10	539	6,963	2010
HC-2	Pields Engineering	Deokyang	KOREA	Heat Exchanger	2	2.8	5.6	SA387-11/SA179	42.0	265	10	490	6,218	2018
#2 PP Dryer	SK ENERGY	SK ENERGY	KOREA	Heat Exchanger	1	1.2	1.2	SA516-70N+410S / SA216-TP410	0.5	150	10	750	3,673	2010
NO.3 SRP SA/B-E3402	SK ENERGY	SK ENERGY	KOREA	Heat Exchanger	4	1.1	4.4	SA240-304 / SA213-304	7.0	343	10	610	571	2019
Ulsan PP	SKEC	Ulsan PP Co., Ltd.	KOREA	Heat Exchanger	1	0.5	0.5	A240-304 / A312-304	-	-	-	-	-	2020
NO.3 SRP SA/B-E3402	SK ENERGY	SK ENERGY	KOREA	Heat Exchanger	2	0.4	0.8	SA240-304 / SA213-304	7.0	343	10	450	574	2019
Dormitory underground	Hanwha Total	Hanwha Total	KOREA	Heat Exchanger	1	0.3	0.3	SA312-304/C1220T	5.1	70	5	305	1,000	2018
Ulsan PP	SKEC	Ulsan PP Co., Ltd.	KOREA	Heat Exchanger	1	0.1	0.1	SA240-316 / A213-316	5.5	177	-	4" x 2t	380	2020

8. Experience (surface Condenser)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	W	H	Length	
Nakagusuku biomass	Hitachi Power Solution	JFE Engineering	JAPAN	Surface Condenser	1	57.3	57.3	SS 400 / TTH340W			3,200	8,150	9,320	2020
Dania Beach	Tei	Black & Veatch	USA	Surface Condenser	1	646.0	646.0	A516-70 / B338-2			9,144	9,264	12,000	2020
Fukushima	Hitachi Power Solution	Iwaki biomass	JAPAN	Surface Condenser	1	122.9	122.9	SS 400 / TTH340W			5,300	14,520	9,000	2020
Kanden Kanda	Hitachi Power Solution	Kanden Kanda Biomass	JAPAN	Surface Condenser	1	86.0	86.0	SS 400 / TTH340W			3,400	3,800	10,480	2019
Sumilinkanda	Hitachi Power Solution	Sumilin Kanda Biomass	JAPAN	Surface Condenser	1	86.0	86.0	SS 400 / TTH340W			3,400	3,800	10,480	2019
Onahama	Hitachi Power Solution	Onahama Biomass	JAPAN	Surface Condenser	1	76.0	76.0	SS 400 / TTH340W	0.9	90	3,400	4,500	8,400	2019
Shimonoseki Biomass	Hitachi Power Solution	Shimonoseki Biomass Power	JAPAN	Surface Condenser	1	85.1	85.1	SS 400 / TTH340W	0.9	90	3,400	3,800	10,480	2019
Kaita Power	Hitachi Power Solution	Kaita Power Station	JAPAN	Surface Condenser	1	122.8	122.8	SS 400 / TTH340W	0.9	90	5,300	3,700	11,780	2019
Nihon Kaisui	Hitachi Power Solution	-	JAPAN	Surface Condenser	1	57.0	57.0	SS 400 / TTH340W	0.9	120	2,800	3,350	8,660	2019
Fuji/Kobe F/F	Hitachi Power Solution	Kobe / Fuji	JAPAN	Surface Condenser	1	523.0	523.0	SS 400 / TTH340W	3.4	60	8,900	7,800	16,820	2019
MHPS T-5	Hitachi Power Solution	MHPS	JAPAN	Surface Condenser	2	340.8	681.5	SS 400 / TTH340W	3.4	60	8,200	6,100	14,920	2020
Fuji/Kobe F/F	Hitachi Power Solution	Kobe / Fuji	JAPAN	Surface Condenser	1	489.0	489.0	SS 400 / TTH340W	3.4	60	8,900	7,800	16,820	2021
Daio Paper	Hitachi Power Solution	Daio Paper Corporation	JAPAN	Surface Condenser	1	77.4	77.4	SS 400 / TTH340W	0.9	120	3,000	5,200	7,640	2019
Biomass power	Hitachi Power Solution	Yokkaichi Power	JAPAN	Surface Condenser	1	60.9	60.9	SS 400 / TTH340W	0.9	90	3,500	3,170	5,780	2018
Bang Pakong	Tei	Black & Veatch	THAILAND	Surface Condenser	2	322.0	644.0	A516-70 / B338-2	7.0	34	6,500	8,683	8,900	2018
CEPO Handa Biomass	Hitachi Power Solution	Handa Biomass	JAPAN	Surface Condenser	1	76.2	76.2	SS400 / JIS TTH340W	0.9	120	3,000	2,925	9,920	2018
Nanatsujima Biomass	Hitachi Power Solution	Kyusyu Area Power	JAPAN	Surface Condenser	1	50.0	50.0	SS400 / JIS TTH340W	0.9	120	2,500	3,400	7,180	2017
Hachinohe Eco-Energy	Hitachi Power Solution	KHI	JAPAN	Surface Condenser	1	74.0	74.0	SS400 / JIS TTH340W	0.5	95	3,000	5,500	12,970	2018
Ssangyong Cement	Hitachi Power Solution	Ssangyong Cement Corp.	KOREA	Surface Condenser	1	63.7	63.7	SS400 / JIS TTH340W	1.0	100	5,950	4,100	9,750	2017
Fofu Biomass	Hitachi Power Solution	KHI	JAPAN	Surface Condenser	1	118.2	118.2	SS400 / JIS TTH340W	1.0	90	5,100	7,700	14,640	2017
No. 4 ST Power Plant	Hitachi Power Solution	ST power	JAPAN	Surface Condenser	2	76.7	76.7	SS400 / JIS TTH340W	0.9	80	5,800	4,400	10,190	2016
Rojana SPP3	Hitachi Power Solution	Rojana Power	THAILAND	Surface Condenser	1	66.3	66.3	SS400 / AI Brass	0.9	120	5,800	4,700	10,402	2016
Handa, 75MW Bio.	Hitachi Power Solution	Summit Handa Power	JAPAN	Surface Condenser	1	50.7	50.7	SS400 / JIS TTH340W	0.9	120	7,850	5,300	11,430	2016
Kobe, 22MW Bio.	Hitachi Power Solution	Paltech Energy	JAPAN	Surface Condenser	1	71.0	71.0	SS400/ JIS TTH340W	0.9	90	2,500	5,500	11,100	2016
Gala Assets	Hitachi Power Solution	Gala Assets Co.	MEXICO	Surface Condenser	1	33.9	33.9	SS400/ JIS TTH340W	0.9/FV	120/60	5,200	3,150	9,330	2016

8. Experience (Skid Module)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
AL-ZOUR	MTR	KNPC	KUWAIT	Membrane Skid	3	65.0	195.0	SA106-B	-	-	6,200	6,300	21,960	2017
Methane Gas Sale	UOP	HANWHA TOTAL	KOREA	Membrane Skid	1	50.0	50.0	SA106-B	-	-	6,100	4,000	10,700	2017
RAPID SCC	UOP	TOYO ENGINEERING	MALAYSIA	Valve Skid	1	70.0	70.0	SA106-B	-	-	3,900	4,000	21,000	2016
KNPC	UOP	KNPC	KUWAIT	Valve Skid	1	110.0	110.0	SA106-B	-	-	3,550	4,000	32,375	2016
MX	UOP	HYUNDAI OILBANK	KOREA	Valve Skid	1	110.0	110.0	SA106-B	-	-	3,550	4,000	32,800	2015
NSRP Complex	UOP	NSRP	VIETNAM	Membrane Skid	2	120.0	120.0	SA106-B	-	-	6,500	3,850	17,000	2015
PDH	UOP	SK E&C / SK GAS	KOREA	Valve Skid	1	92.0	92.0	SA106-B	-	-	8,600	4,300	32,000	2015
LR2 Refinery	UOP	LAFFAN REFINERY	QATAR	Valve Skid	1	42.0	42.0	SA106-B	-	-	3,200	3,150	18,600	2015
UHV Plant	UOP	SK E&C	THAILAND	Valve Skid	1	110.0	110.0	SA106-B	-	-	4,278	4,000	32,350	2014
Aromatic Complex	UOP	SAMSUNG	KOREA	Valve Skid	1	50.0	50.0	SA106-B	-	-	4,000	3,980	31,000	2013

9. Experience (OFFSHORE)

Project Name	Client	End-User	Location	Commodity	Q'ty	Weight (Each)	Weight (Total)	Material	Design		Dimension (mm)			Year
									Press. (kg/cm2)	Temp. (°C)	Th'k	I.D	Length	
Baronia GDU	KPF	PETRONAS CARIGALI SDN	MALAYSIA	Glycol Contactor	1	58.7	58.7	SA516-70N+SS316L	137/FV	65	92	2,000	8,200	2016
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Filter Coalescer	2	3.9	7.8	SA516-70N/ SS316L	89/FV	85	28	600	2,900	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	63.4	126.8	SA516-60	89/FV	85	107	2,345	3,500	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	21.5	43.0	SA516-60	89/FV	85	76	1,600	2,400	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Guard Bed	2	28.8	57.6	SA516-60	89/FV	85	93	2,000	3,500	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Filter	2	2.8	5.6	SA516-60	89/FV	85	31	548	1,700	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Filter	2	1.9	3.8	SA516-60	89/FV	85	24	409	1,900	2015
Catcher FPSO	UOP	Premier Oil UK Limited	NORTH SEA	Heat Exchanger	2	4.0	8.0	SA516-70N/ SS316L	20/90.7	85	26	500	2,300	2015
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	5	5.9	29.5	SA516-70 HIC	95/FV	80/150	36	900	4,101	2014
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	5	5.7	28.5	SA516-70 HIC	73.5/FV	80/150	37	1,050	4,020	2014
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	5	4.3	21.5	SA516-70 HIC	40/FV	80/150	21	1,150	4,470	2014
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	5	6.2	31.0	SA516-70 HIC	25/FV	80/150	21	1,600	5,091	2014
Akal G-Jack-Up Rig	JORD	PEMEX	MEXICO	Separator	1	20.9	20.9	SA516-70 HIC	15/FV	80/150	30	3,200	7,870	2014

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