

2019 EDITION

| THE BEST TECHNOLOGY & EQUIPMENT FOR CUSTOMER |



U.S & R

INNOBIZ
기술혁신경영인증기업

ISO 9001

ISO 14001

OHSAS 18000



DAE
KYUNG
ENGINEERING &
CONSTRUCTION



DAEKYUNG ENGINEERING
& CONSTRUCTION CO., LTD.

❖ CONTENTS

Company Information

- Location & Picture
- History of DKEC
- Business Information
- Company Capacity

Certificate & Facility

- Certificate for Quality
- Certificate of Local License
- Facility & Equipment
- Facilities Pictures

Experience

- Product Pictures
- Experience List





LOCATION & FACTORY



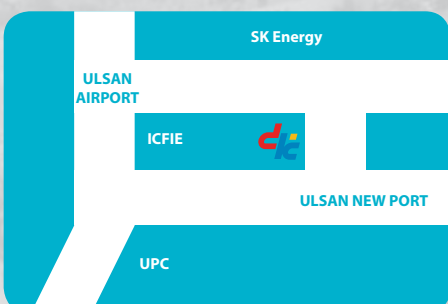
Head Office & Fabrication Shop No.1



Fabrication Shop No.2



Subsidiary : DKMC(Machinery)



Detail Location

- ICFIE : Industrial Complex for Foreign Invested Enterprises (외국인투자단지)
- UPC : Ulsan Petrochemical Complex (석유화학단지)



SHOP NO.1 & 2



Head Office & Fabrication

Shop No. 1

ADDRESS : 40-30, YONGJAM-RO, NAM-GU,
ULSAN, KOREA (5 km from Ulsan Port)
Total Area : 13,000 m² / Roofed Area : 6,800m²



Fabrication

Shop No. 2

ADDRESS : 67, SHINYECHUN-RO, NAM-GU,
ULSAN, KOREA
Total Area : 6,000 m² / Roofed Area : 1,700 m²



History of DKEC

July 2017

-Acquired of ISO 14001 Certificate (KGS)

-Acquired of OHSAS 18000 Certificate (KGS)

Jan. 2017

-Acquired of Promotion of Technology (INNO-BIZ) Innovation for SMEs Certificate

Sep. 2016

-Acquired of Promising Export Firm Certificate

Mar. 2014

-Bought New Shop of Head Office and No.1 Shop (Former SEAH E&T Shop)

-Acquired Corporate Family of IBK Bank

May. 2013

-Acquired License of Construction Work in Korea (Installation and Construction)

Nov. 2010

-Acquired of ASME U & S Code Stamp

Sep. 2009

-Acquired for ISO 9001 Certificate (KGS)

Dec. 2008

-Registered Corporation of Korea Venture Company (Klbo)

Aug. 2007

-Acquired License of High Pressure Gas Control Law in Korea

Mar. 2006

-Started Independence Business from DKME and Continued Sub-Contract of DKME

Jan. 2004

-Started Fabrication of Equipment Business and Sub-Contract of Daeyung Machinery & Engineering Co., Ltd. (DKME)
(No.2 Shop of DKEC is same with No.4 Shop of DKME)



Business Information

1. Fabrication of Equipment

- Heat Exchanger (Shell and Tube Type / Catalyst Cooler)
- Pressure Vessel
- Reactor & Agitator
- Tower & Column
- Steam Drum
- Dryer
- Storage Tank
- Conveyor
- Structure Skid & Piping

2. Maintenance, Construction and Installation

- Site Installation (Machine and etc.)
- Piping Work
- Steel Structure
- Heat Exchanger Retubing
- Repair & Maintenance

3. Design, Technical Service

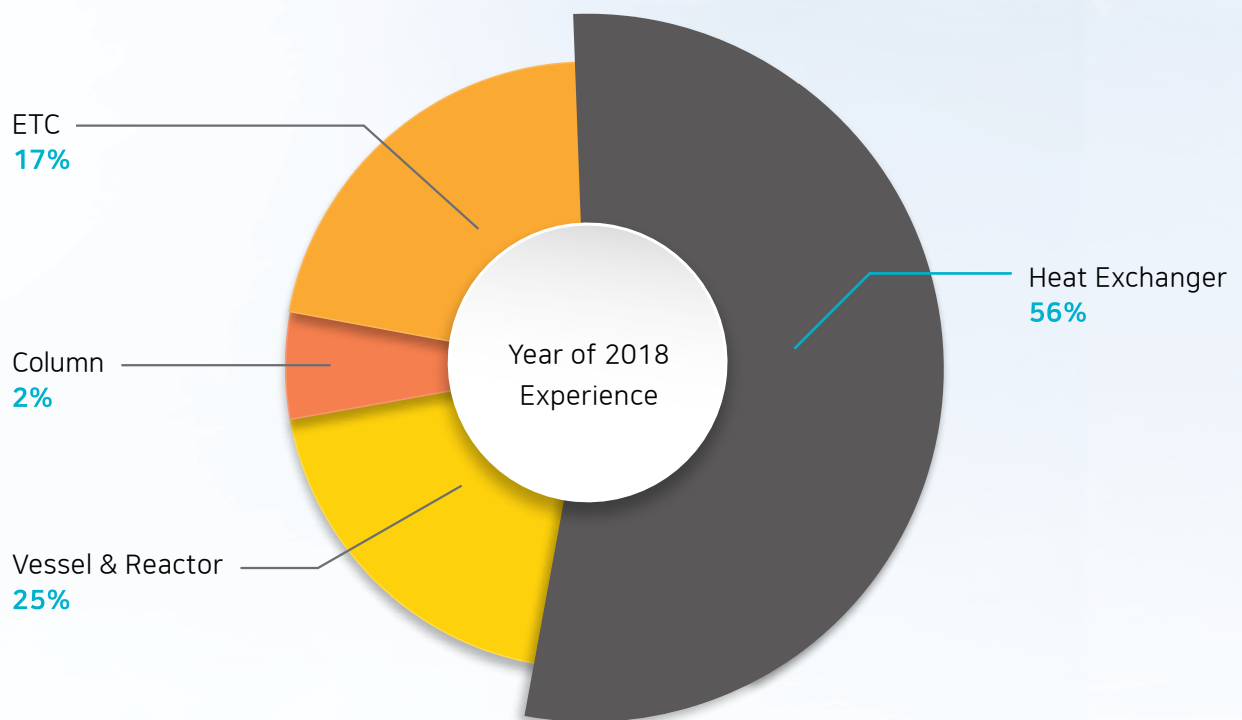
- Detail Engineering (Drawing, Strength Calculation)
- Inspection Service (UT, RT, MT, PT, Hydrostatic Test)



Company Capacity

Currency : 1,000 per US-Dollar(USD)

No.	Description		Diameter (mm)	Length (mm)	Thickness (mm) (Shell / Head)	Weight (Ton)
1	HEAT EXCHANGER	Max.	6,000	50,000	150	250
		Sweet Spot	1,000~3,000	30,000	10~100	150
2	VESSEL & REACTOR	Max.	6,000	60,000	180	250
		Sweet Spot	1,000~4,000	50,000	10~80	150
3	TOWER	Max.	5,000	80,000	150	250
		Sweet Spot	1,000~3,000	60,000	10~50	150



Max. Capacity of Volume : 8,000 Ton/Year (Total of No.1 & No.2 Shop)

Certificates for Quality



ISO 9001



ISO 14001



OHSAS 18000

Facility & Equipment

No.1 & No.2 Shop Total

	Description	Capacity / Spec.	Q'ty	Remark
LIFTING & MOVING	GANTRY CRANE	30 ton	3	
	GANTRY CRANE	20 ton	1	
	OVERHEAD CRANE	20 ton	5	
	OVERHEAD CRANE	10 ton	3	
	OVERHEAD CRANE	5 ton	2	
FORMING & CUTTING	BENDING ROLLER	Max.50mm	1	
	TURNING ROLLER	250 ton	4	
	TURNING ROLLER	150 ton	4	
	TURNING ROLLER	100 ton	8	
	TURNING ROLLER	50 ton	10	
	TURNING ROLLER	30 ton	20	
	TURNING ROLLER	10 ton	20	
	PLASMA CUTTING M/C	200A	2	
BEND SAWING M/C	500A	1		
WELDING	ARC WELDING M/C	20K/15KW	15	
	TIG WELDING M/C	500A/300A	30	
	CO2 WELDING M/C	500A/600A	20	
	SUBMERGE WELDING M/C	1000A	6	
	GOUGING WELDING M/C	800A	4	
	DRY OVEN	0 ~ 400°C	4	
COMPRESSOR	AIR COMPRESSOR	-	2	
	PORTABLE AIR COMPRESSOR	-	4	
	HYDRAULIC TEST PUMP	500kg/cm ²	1	
	PNEUMATIC TESTER	100kg/cm ²	1	
INSPECTION	ULTRA SONIC THICKNESS GAUGE	1~200mm(0.1mm) / 1~125mm(0.01mm)	2	
	MICRO METER	0~25mm, 25~50mm	2	
	VERNIR CALIPERS	0~200mm, 0~1550mm	2	
	CYLINDER & DIAL GAUGE	10~35mm, 50~160mm, 250~450mm & 0~10mm	8	
	TEMPERATURE INDICATOR	-30 ~ 500°C	2	
	CLAMP ON AC/DC TESTER	DC/AC : 600V, DC/AC : 1000A	1	R : 42MΩ
	DEAD WEIGHT TESTER	0.5 ~ 100kg/cm ²	1	
	PRESSURE GAUGE & RECORDER	0~350kg/cm ² & 50kg/cm ² , 100kg/cm ²	85	
	HARDNESS TESTER	TELEBRINELL(Ø10)	1	
	COATING TH'K TESTER	0~1250µm	1	
	PORTABLE ENDOSCOPE CAMERA	Ø9.5, 70~75°, 3m	1	
	HYDRAULIC TORQUE WRENCH	0~70 Mpa, Max. 15,617NM	3	
	SURFACE ROUGHNESS TESTER	360µm(-200µm~+160µm)	1	
	GAS LEAK DETECTOR	-	1	
	FILM VIEWER	-	1	
PMI DETECTOR	NITON / XRF (MODEL : 800 SERIAL) - USA	1		
FERRITE SCOPE	FERITSCOPE MP30E-S (FISCHER, USA)	1		



Facility Picture



PAINT & SHOT BLAST SHOP

SIZE : 23,000L x 7,500W x 6,000H(mm)



FURNACE (P.W.H.T & S.R)

SIZE : 13,000L x 4,350W x 4,600H(mm)



CNC BTA M/C (Subsidiary DKMC)



VERTICAL LATHE M/C (Subsidiary DKMC)

SIZE : 6,000 ϕ x1,600H



3 ROLL BENDING MACHINE

(Capacity : Max. Th'k 50mm / W 4,000mm)



HEAD FORMING

(SUB-CONTRACTOR GEUMGOG)



Experience



HEAT EXCHANGER



ITEM : HOT COMBINED FEED EXCHANGER

- SPECIAL FEATURE : INNER BORE WELDING
- CUSTOMER : HYOSUNG CORP.
- PROJECT : DH-1
- MATERIAL : A240-TP304 / A213-TP304
- SIZE : 22T x 1,650 ID x 17,700 L
- WEIGHT : 58,000kg
- BUILT YEAR : 2005 (175)



ITEM : HOT COMBINED FEED EXCHANGER

- SPECIAL FEATURE : INNER BORE WELDING
- CUSTOMER : HYOSUNG CORP.
- PROJECT : DH-2
- MATERIAL : A240-TP304 / A213-TP304
- SIZE : 22T x ID2,350 x 20,600L
- WEIGHT : 148,400kg
- BUILT YEAR : 2013 (A305)



MOCK UP TEST & PICTURE OF INNER BORE WELDING

- BUILT YEAR : 2013 (A305)

HEAT EXCHANGER



ITEM : HYBRID STYLE CATALYST COOLER

- CUSTOMER : SK ENERGY
- PROJECT : #2 FCC REVAMP PJT
- MATERIAL : A516-Gr.70+N / A213-TP T11
- SIZE : 55T x ID2,440 x 14,000L
- WEIGHT : 133,000kg
- BUILT YEAR : 2012 (A002)



ITEM : CATALYST COOLER BUNDLE

- CUSTOMER : SK ENERGY
- PROJECT : #2 FCC REVAMP PJT
- MATERIAL : A213-TP T11
- BUILT YEAR : 2012 (A002)



ITEM : CATALYST COOLER

- CUSTOMER : HYUNDAI HEAVY INDUSTRIES
- PROJECT : SHAZAND ARAK RFCC PJT / IRAN
- MATERIAL : SA516-Gr.70 / A213-TP T11
- SIZE : 46T x ID2,348 x 12,703L
- WEIGHT : 134,100kg
- BUILT YEAR : 2008 (EC8015)

HEAT EXCHANGER



ITEM : DC204 CIRCUL GAS COOLER

- CUSTOMER : HANHWA TOTAL CO., LTD.
- PROJECT : PP PLANT H/EX. STAND BY
- MATERIAL : SA516-70N / SA213-TP304
- SIZE : 13T/28T x ID1370 x 5000L
- WEIGHT : 50,500 kg
- BUILT YEAR : 2017 (EC7001)



ITEM : CUM PURIFICATION COLUMN REBOILER

- CUSTOMER : S-OIL / DAELIM INDUSTRIAL CO., LTD.
- PROJECT : RUC
- MATERIAL : SA516-70N / SA213-TP316L
- SIZE : 74T/45T x ID2350 x 6000L
- WEIGHT : 126,300 kg
- BUILT YEAR : 2016 (EC6036)



ITEM : HYDROGEN DISCHARGE CONDENSER

- CUSTOMER : S-OIL / DAELIM INDUSTRIAL CO., LTD.
- PROJECT : RUC
- MATERIAL : SA516-70N / SA789-S32750
- SIZE : 32T/10T x ID1600/2700 x 6000L
- WEIGHT : 42,400 kg
- BUILT YEAR : 2016 (EC6036)

BOILER & SKID



ITEM : DPC PURIFICATION TOWER REBOILER

- CUSTOMER : LOTTE CHEMICAL/HYUNDAI ENG'G
- MATERIAL : SA516-70 / SA213-TP316L
- SIZE : 30T x ID1,690 x 4,100L
- WEIGHT : 28,800kg
- BUILT YEAR : 2018



ITEM : WASTE HEAT BOILER

- CUSTOMER : SK ENERGY
- PROJECT NAME : #1 FCC REVAMP PJT
- MATERIAL : SA516-Gr.70+N / SA192
- SIZE : 45T x ID1,803 x 12,000L
/ 30T x ID1,280 x 7,000L
- WEIGHT : 13,600kg
- BUILT YEAR : 2018



ITEM : WASTE HEAT BOILER

- CUSTOMER : LOTTE CHEMICAL/HYUNDAI ENGINEERING
- MATERIAL : SA516-70 / SA179
- SIZE : 13T x ID1,220 x 4,000L
- WEIGHT : 47,607kg
- BUILT YEAR : 2013 (EC2045/3024)

VESSEL, REACTOR & COLUMN



ITEM : HIGH PRESSURE STEAM DRUM

- CUSTOMER : HYUNDAI E & C
- PROJECT NAME : UCH-2
- MATERIAL : SA516-Gr.70
- SIZE : 89T x 1,830 ID x 12,000 L
- WEIGHT : 117,000kg
- BUILT YEAR : 2012 (EC2002)



ITEM : SKID FOR VACUUM SYSTEM

- CUSTOMER : EDWARDS / SKI
- PROJECT NAME : NEXLENE
- MAIN MATERIAL : A106-B / A312-316L
- SIZE : 4,250Wx 6,000Lx4,194H, etc.
- WEIGHT : 25,000kg / unit (4 Units)
- BUILT YEAR : 2013 (EC3044)



ITEM : RETURN COLUMN CONDENSER

- CUSTOMER : SK ENERGY
- PROJECT : NCC #1 EU
- MATERIAL : SA516-Gr.70
- SIZE : 17T x ID1,822 x 6,100L
- WEIGHT : 52,100kg
- BUILT YEAR : 2008 (EC8010)

VESSEL, REACTOR & COLUMN



ITEM : No.2 AMINE REGENERATOR

- SPECIAL FEATURE :TRAY & PACKING
- CUSTOMER : SK ENERGY
- PROJECT NAME : HOU
- MATERIAL : SA516-Gr.70+AS204-304L CLAD
SA516-70 + HIC
- SIZE : (13+3)T x ID2,700 x 24,400L
- WEIGHT : 65,000kg
- BUILT YEAR : 2014 (EC4035)



ITEM : No.2 AMINE REGENERATOR

- SPECIAL FEATURE : WET H2S / AMINE SERVICE
- CUSTOMER : SK ENERGY
- PROJECT NAME : HOU CHPS
- MATERIAL : SA516-Gr.70+SA240-304L
SA516-Gr.70N+HIC
- SIZE : (13+3)T x ID3,700 x 24,370L
- WEIGHT : 65,000kg
- BUILT YEAR : 2014 (EC4035)



ITEM : L-CO2 STORAGE DRUM

- CUSTOMER : DEOKYANG
- PROJECT NAME : L-CO2
- MATERIAL : SA516-Gr.70N+S5
- SIZE : 36T x ID4,000 x 41,500L
- WEIGHT : 183,550kg
- BUILT YEAR : 2015 (EC4041)



VESSEL, REACTOR & COLUMN



ITEM : REACTOR(AGITATOR)

- CUSTOMER : MATSUMOTO YUSHI-SEIYAKU
- PROJECT NAME : PHAMARCHY
- MAIN MATERIAL : A240-TP316L
- SIZE : 16T x ID1,950 x 2,871L
- WEIGHT : 12,750kg
- BUILT YEAR : 2015 (EC4046)



ITEM : DECOKE DURM FOR SCORE FURNACE

- CUSTOMER : KPIC / GS E&C
- PROJECT NAME : ONE
- MATERIAL : SA516-Gr.70 + A240-410S LINING
- SIZE : (20+10)T x ID5,200 x 16,900L
- WEIGHT : 76,700kg
- BUILT YEAR : 2015 (EC5100)



ITEM : AMINE DRAIN DRUM

- CUSTOMER : S-OIL / DAELIM INDUSTRIAL CO., LTD.
- PROJECT : RUC
- MATERIAL : SA516-70N + HIC
- SIZE : 19T x ID2100 x 8200L
- WEIGHT : 15,630 kg
- BUILT YEAR : 2016 (EC6035)

VESSEL, REACTOR & COLUMN



ITEM : COS ADSORBERS

- CUSTOMER : S-OIL / DAELIM INDUSTRIAL CO., LTD.
- PROJECT : RUC
- MATERIAL : SA516-60N + S5
- SIZE : 49T x ID2600 x 10300L
- WEIGHT : 48,000 kg
- BUILT YEAR : 2016 (EC6009)



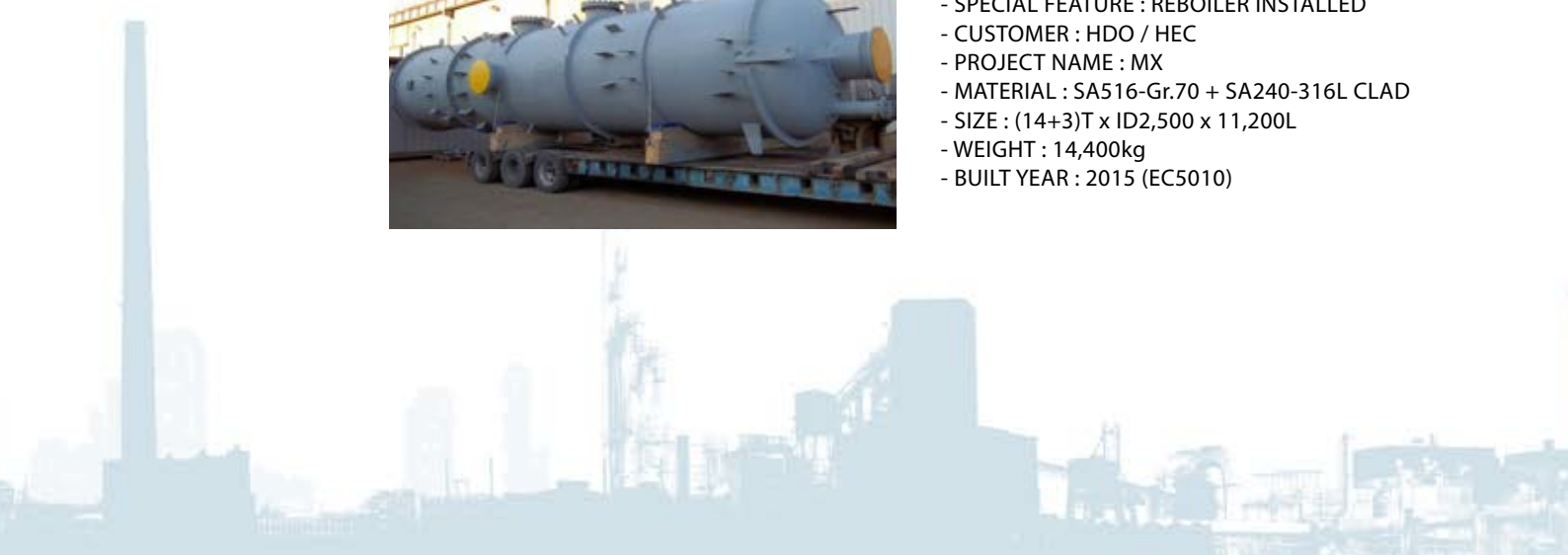
ITEM : CLAY TREATERS

- SPECIAL FEATURE : CLAY PACKING
& INERT BALL
- CUSTOMER : HDO / HEC
- PROJECT NAME : MX
- MATERIAL : SA516-Gr.70N
- SIZE : 38T x ID3,600 x 18,600L
- WEIGHT : 73,700kg
- BUILT YEAR : 2015 (EC5010)



ITEM : SOLVENT REGENERATOR

- SPECIAL FEATURE : REBOILER INSTALLED
- CUSTOMER : HDO / HEC
- PROJECT NAME : MX
- MATERIAL : SA516-Gr.70 + SA240-316L CLAD
- SIZE : (14+3)T x ID2,500 x 11,200L
- WEIGHT : 14,400kg
- BUILT YEAR : 2015 (EC5010)



VESSEL, REACTOR & COLUMN



ITEM : STH - 202 BALL TANK

- CUSTOMER : SAMYANG CO., LTD.
- PROJECT NAME : MX
- MATERIAL : SA516-70
- SIZE : 16T x ID5,000
- WEIGHT : 17,400 kg
- BUILT YEAR : 2017



ITEM : RECOVERY COLUMN

- SPECIAL FEATURE : REBOILER & H/EX ASSEMBLY / TRAY
- CUSTOMER : HYOSUNG CORP.
- PROJECT NAME : PP3
- MATERIAL : SA516-Gr.70N
- SIZE : 29T x ID1,448 x 35,500L
- WEIGHT : 62,600kg
- BUILT YEAR : 2015 (EC5074)



ITEM : PROPYLENE DEGASSING COLUMN

- SPECIAL FEATURE : REBOILER & H/EX ASSEMBLY / TRAY
- CUSTOMER : HYOSUNG CORP.
- PROJECT NAME : PP3
- MATERIAL : SA516-Gr.70N
- SIZE : 35T x ID1,676 x 26,000L
- WEIGHT : 63,000kg
- BUILT YEAR : 2015 (EC5074)

VESSEL, REACTOR & COLUMN



ITEM : FEED SURGE DRUM

- CUSTOMER : HDO / HEC
- PROJECT NAME : MX
- MATERIAL : SA516-Gr.70
- SIZE : 18T x ID4,100 x 19,600L
- WEIGHT : 38,300kg
- BUILT YEAR : 2015 (EC5010)



ITEM : SEPARATOR OF HIGH PRESSURE

- CUSTOMER : SK ENERGY
- PROJECT NAME : HOU CHPS
- MATERIAL : A516-Gr.70+347 S.S OVERLAY
- SIZE : (137+5)T x 2,300D x 8,800L
- WEIGHT : 60,000kg
- BUILT YEAR : 2010 (EC9035)



ITEM : REACTOR TRAIN A/B/C

- CUSTOMER : BANGKOK SYNTHETICS
/ SUMITOMO HEAVY IND.
- PROJECT NAME : RATEX
- MATERIAL : SA516-Gr.70+AS204-316 CLAD
- SIZE : (32+3)T x ID2,700 x 6,896L
- WEIGHT : 52,100kg
- BUILT YEAR : 2015 (EC5012)



VESSEL, REACTOR & COLUMN



ITEM : REACTOR

- SPECIAL FEATURE : AGITATOR MOUNTING
- CUSTOMER : SUMITOMO SEIKA / HEAVY IND.
- PROJECT NAME : POYMERS
- MATERIAL : SA516-Gr.70 + A240-304 CLAD
- SIZE : (12+3)T x ID3,250 x 4,305L
- WEIGHT : 20,600kg
- BUILT YEAR : 2015 (EC4069)



ITEM : OXYGEN CONVERTER

- CUSTOMER : S-OIL / DAELIM
- PROJECT NAME : RUC
- MATERIAL : SA516-Gr.70N
- SIZE : 29T x ID3,600 x 7,700L
- WEIGHT : 35,900kg
- BUILT YEAR : 2016 (EC6009)



ITEM : LPG AMINE ADSORBER

- CUSTOMER : HANWHA TOTAL
- MATERIAL : SA516-70N +HIC
- SIZE : 26T x ID2,300 x 22,380L
- WEIGHT : 40,500 kg
- BUILT YEAR : 2018

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
1	e-TEC ENC	HYOSUNG CHEMICAL	VIETNAM	HSVC PP4	PP	H/EX	20	1800-7200	SA516-70+S5	SA334-6	31	2018 (EC8077)
2	e-TEC ENC	HYOSUNG CHEMICAL	VIETNAM	HSVC PP4	PP	VESSEL	49	4800-14550	SA516-70N+S5	-	48	2018 (EC8076)
3	KOREA FUJI FILTER	HYOSUNG CHEMICAL	VIETNAM	HSVC PP4	PP	FILTER HOUSING	10	3100-11050	SA516-70	-	3	2018 (EC8075)
4	GS CALTEX	GS CALTEX	KOREA			H/EX VESSEL	13	1400-4877	SA516-60	-	10	2018 (EC8072)
5	TISCO	MITSUI CHEM.	JAPAN			REACTOR	35	(32+3)2000-4500	SPV355+ SUS304 CLAD	-	2	2018 (EC8069)
6	GS CALTEX	GS CALTEX	KOREA			VESSEL	28	1550-4650	SA516-70N	-	3	2018 (EC8063) (EC8067)
7	KOREA FUJI FILTER	SKE ENERGY	KOREA	S		FILTER HOUSING	51	(48+3)350+3500	SA516-70N+ SA240-304L CLAD	-	4	2018 (EC8060)
8	KOREA FUJI FILTER	SKE ENERGY	KOREA	S		FILTER HOUSING	15	1450-2500	SA516-701N+HIC	-	23	2018 (EC8058) (EC8084)
9	SK ENGINEERING & CONSTRUCTION	SK ENERGY	KOREA	S		H/EX	25	1750-5800	SA516-70N	-	44	2018 (EC8051)
10	SK ENGINEERING & CONSTRUCTION	SK ENERGY	KOREA	S		COLUMN	33	(30+3)590-21700	SA516-70N+ SA240-316L CLAD	-	4	2018 (EC8050)
11	HYUNDAI ENGINEERING	LOTTE CHEMICAL	KOREA	HC2		H/EX	8	1070-4000	SA240-304	SA213-TP304	28	2018 (EC8023)
12	TOYO KOREA	KANTO DENKO	KOREA	KD GAS		COL VESSEL H/EX	7	400-4000	SA240-304	SA213-TP304	14	2018 (EC8022)
13	WATLOW	LG CHEMICAL	KOREA	R		HEATER HOUSING	14	945-5050	SA516-70	-	1	2018 (EC8018)
14	HANWHA TOTAL	HANWHA TOTAL	KOREA	-	-	ADSOBER	26	2300-18000	SA516-60N+HIC	-	1	2018 (EC8006)
15	KOLON INDUSTRIES	KOLON INDUSTRIES	KOREA	PR-5D/10D	-	H/EX	10	2000-6000	A240-316L	A240-316L	10	2018 (EC8001,2)
16	KOLON INDUSTRIES	KOLON INDUSTRIES	KOREA	PR-10D	-	H/EX	9	700-3000	A240-316L	B622-N10276	8	2017 (EC7098)
17	HANHWA E&C	HANWHA TOTAL	KOREA	NCC	-	STEAM DRUM	95	1500-8700	A516-70N+S5	-	3	2017 (EC7082)
18	SUMITOMO HEAVY. / TISCO	NICHIZO TEC	JAPAN	-	-	REACTOR (AGIATOR)	58	(55+3)-1190-2380	SA516-GR.70+ SA240-TP316 CALD	-	1	2017 (EC7068)
19	SUMITOMO HEAVY. / TISCO	ASAHI CLASS	JAPAN	-	-	REACTOR (AGIATOR)	26	(23+3)-3640-6200	SA516-GR.70+ SA240-TP304 CALD	-	1	2017 (EC7067)
20	SUMITOMO HEAVY. / TISCO	SHIMIZU CORPORATION	JAPAN	-	-	REACTOR (AGIATOR)	30	(27+3)-700-1400	SPV355+TP270H	-	1	2017 (EC7040)
21	HANWHA TOTAL	HANWHA TOTAL	KOREA	-	-	VESSEL	5	1510-2331	ALUMINUN AL5454	-	10	2017 (EC7037)
22	WATLOW	SK MATERIALS	KOREA	SS	-	VESSEL	10	8 - 4000	B163-N0600	-	1	2017 (7036)
23	S-OIL	S-OIL	KOREA	TA	-	H/EX	12	800-6,100	A182-F6a c.l.1	A268-TP405	1	2017 (7026)
24	WATLOW	TAEKWANG	KOREA	CCR	-	VESSEL	10	20 - 2800	B424-N0800H	-	2	2017 (7023)
25	S-OIL	S-OIL	KOREA	-	MEROX	VESSEL	32	4,300-7,620 (45,600kg)	SA516-GR.70N	-	1	2017 (7017)
26	SAMYANG	SAMYANG	KOREA	-	SORBITOL	TANK(BALL)	16	5,000	SA516-GR.70	-	1	2017 (7011)
27	HANHWATOTAL	HANHWATOTAL	KOREA	-	GAS	COLUMN	10	800-18,000	SA240-304	-	1	2017 (7010)
28	METS	DEOKYANG	KOREA	-	CO2	VESSEL	6	1,700-5,200	SA516-GR.70	-	2	2017 (6075)
29	METS	DEOKYANG	KOREA	-	CO2	H/EX	6	390-3,007	SA240-304	SA213-TP304	1	2017 (6075)
30	SUMITOMO HEAVY. / TISCO	Nikko Rica Corporation	JAPAN	-	-	REACTOR (AGIATOR)	82	(78+4)-1500-2000 (INTERNAL BUFFING #400 COIL #400 + E.P)	SA516-GR.70+ SA240-TP316 CALD	-	1	2016 (EC6084)
31	HYOSUNG	HYOSUNG	KOREA	JUMP	JUMP	VESSEL	7	2,800-5,000	SA516-GR.70	-	7	2016 (6095)
32	HYOSUNG	HYOSUNG	KOREA	JUMP	JUMP	H/EX	13	1,100-3,000	SA240-304	SA213-TP316L	13	2016 (6092)
33	SKE	SKE	KOREA	#1 FCC	#1 FCC	H/EX BUNDLE	15	500-4877	B424-N08825	B163-N08825	2	2016 (6086)
34	SUMITOMO HEAVY. / TISCO	NIKKO RICA CORP.	JAPAN	-	HYDROGEN	REACTOR	82	(78+4)-1,500-3,485 (INTERNAL BUFFING #400)	SA516-GR.70+ SA240-TP316 CLAD	-	1	2016 (6084)
35	KOLON	KOLON	KOREA	BTX	BTX	VESSEL	13	1,100-6561	SA516-GR.70	SA179	5	2016 (6054)
36	DAELIM	S-OIL	KOREA	RUC	RUC	H/EX	16	1,200-7,836	SA516-GR.70 / SA240-304	SA213-TP304	2	2016 (6052)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
37	GS E&C	KPIC	KOREA	ONE	NET	COLUMN	12	1,800 - 23,400	SA240-304	-	1	2016 (6044)
38	S-OIL	S-OIL	KOREA	TA	-	H/EX	12	1000-6,100	A266-4 + 410S W/O	A268-TP430	2	2016 (6039)
39	S-OIL	S-OIL	KOREA	MAINTEN.	-	H/EX	-	1,200-6100	-	SA179+HIC	23	2016 (6037/38/39)
40	DAELIM	S-OIL	KOREA	RUC	RUC	H/EX	74	(8+3)-2,350-6000	SA516-GR.70N+ SA240-TP316L / SA266-2 + 316L CLAD	SA213-TP316L	10	2016 (6036)
41	DAELIM	S-OIL	KOREA	RUC	-	H/EX	32	2700-4877	SA240-TP S32205	SA789-TPS32205	10	2016 (6036)
42	DAELIM	S-OIL	KOREA	RUC	RUC	VESSEL	11	(8+3)-1,350-3000	SA516-GR.70N+ SA240-TP304L CLAD	-	32	2016 (6035)
43	SKIPC	SKIPC	KOREA	TA	FEX310,370	H/EX BUNDLE	13	1350-6100	A387-T5 CL.2	A213-T5	5	2016 (6024)
44	S-OIL	S-OIL	KOREA	-	-	H/EX	-	940-6,100	-	SB111-C44300	2	2016 (6023)
45	S-OIL	S-OIL	KOREA	MAINTEN.	-	H/EX	-	940-6,100	-	SA268-TP430	2	2016 (6023)
46	S-OIL	S-OIL	KOREA	TA	-	H/EX	12	1500-6,100	B424-N08825	B163-N08825	2	2016 (6023)
47	SKE	SKE	KOREA	No.2 FCC	No.2 FCC	H/EX	18	1,090-8,471	SA516-GR.70N / SA240-TP410S CLAD	SA213-TP304L	2	2016 (6014)
48	GS CALTEX	GS CALTEX	KOREA	SWS	SWS	H/EX	16	(13+3)-1,360-5,400	SA516-60N +SB424-N08825	-	2	2016 (6012)
49	GS CALTEX	GS CALTEX	KOREA	SWS	SWS	H/EX	16	(13+3)-1,360-5,400	SA516-60N +SB424-N08825	-	2	2016 (6012)
50	DAELIM	S-OIL	KOREA	RUC	RUC	REACTOR	49	2,600-10,300	SA516-GR.60N+S5	-	7	2016 (6009)
51	HYOSUNG	HYOSUNG	KOREA	NEO	NEO	VESSEL	6.35	1,524-2,149	SB127-N04400	-	1	2016 (6004)
52	SKE	SKE	KOREA	TA	-	H/EX BUNDLE	-	-	B240-S32205	SA789-TPS32205	21	2015 (5104)
53	GS E&C	KPIC	KOREA	ONE	ONE	H/EX	16	1,450-9454	SA537-CL.1	SA334-GR.1	23	2015 (5101/6051)
54	GS E&C	KPIC	KOREA	ONE	ONE	VESSEL	24	(20+4)-5,200-11,580	SA516-GR.70 / SA240-TP410S CLAD	-	31	2015 (5100/6049)
55	HYOSUNG	HYOSUNG	KOREA	PP3	PP3	H/EX	15	650-9,513	SA240-304	SA213-TP304	6	2015 (5088)
56	HYOSUNG	HYOSUNG	KOREA	PP3	PP3	H/EX	17	1,250-6,220	SA516-GR.70	SA179	4	2015 (5086)
57	HYOSUNG	HYOSUNG	KOREA	PP3	PP3	H/EX	22	1,556-11,800	SA516-GR.70N	SA789-UNS31803	2	2015 (5074)
58	HYOSUNG	HYOSUNG	KOREA	PP3	PP3	TOWER	35	2,500-24,321 (58,271Kg)	SA516-GR.70N	-	2	2015 (5074)
59	HYUNDAI ENGINEERING	LOTTE VERSALIS	KOREA	SR	SR	H/EX	10	200-1,220	SA333-3	SA179	47	2015 (5073)
60	HYUNDAI ENGINEERING	LOTTE VERSALIS	KOREA	SR	SR	H/EX	32	1,450-5,490	SA537-CL.1	SA334-GR.3	36	2015 (5072)
61	HYOSUNG	HYOSUNG	KOREA	PP	PP	VESSEL	6	1,200-4,410	SA240-316L /SB444-N06625	-	1	2015 (5069)
62	GS CALTEX	GS CALTEX	KOREA	TA	REFINERY	H/EX	12	1800-9000	SA182-F53	SA789-TPS32750	6	2015 (5066)
63	HYOSUNG	HYOSUNG	KOREA	NEO3	NEO3	VESSEL	6	2,900-9,000	SA516-GR.70 +EPOXY COATING	-	3	2015 (5037)
64	HYOSUNG	HYOSUNG	KOREA	NEO3	NEO3	H/EX	8	1,100-3,800	SA240-316L	SA213-TP316L	14	2015 (5033)
65	HYOSUNG	HYOSUNG	KOREA	NEO3	NEO3	VESSEL	18	2,670-4,500	SA240-304L/316L	-	16	2015 (5032)
66	HYOSUNG	HYOSUNG	KOREA	MAINTEN.	-	H/EX COVER	58	(52+4)-OD2102	SA266-GR.4+ SB265-2 LINING	-	1	2015 (15-5040)
65	SUMITOMO HEAVY. / TISCO	MATSUMOTO YUSHI-SEIYAKU	JAPAN	PHAMAR-CHY	-	REACTOR	19	1,950-2,871 (INTERNAL BUFFING #400)	SA240-TP316L	-	1	2015 (14-046)
66	SKE	SKE	KOREA	2016 T/A	-	H/EX	-	1,350-7,730 (Tube Bundle)	SA182-F5	SA213-TP T5	62	2015 (095,096,104)
67	SK-INCHEON	SK-INCHEON	KOREA	MAINTEN.	-	H/EX	-	1350-6100 (BUNDLE)	SA516-GR.70	SA192	6	2015 (06-5034)
68	SAMSUNG C&T	SKGC	KOREA	NRP	NRP	H/EX	10	537-5,900	SA516-GR.70	SB111-C44300	3	2015 (15-5029-1)
69	SUMITOMO HEAVY. / TISCO	BANGKOK SYNTHETICS	THAILAND	NB Latex	-	REACTOR (AGIATOR)	35	(32+3)-2,700-6,896 (INTERNAL BUFFING #400 COIL #400 + E.P)	SA516-GR.70+ SA240-TP316 CLAD	-	3	2015 (15-5012)
70	HYUNDAI ENGINEERING	HYUNDAI OIL BANK	KOREA	MX	MIXED XYLENE	VESSEL	36	3,600-15,600 (143,000kg)	SA516-GR.70	-	38	2015 (15-5010)
71	ISU E&C	ISU CHEM.	KOREA	-	BAB UNIT	TOWER (COLUMN)	8	910-10,250	SB127-N04400 (ANNEALED)	-	1	2015 (15-5005)
72	ISU E&C	ISU CHEM.	KOREA	BAB PJT	BAB UNIT	H/EX	10	438-672	SA516-GR.70	SB163-N04400 (ANNEALED)	1	2015 (15-5005)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
73	DEOKYANG CO., LTD.	DEOKYANG	KOREA	L-CO2	L-CO2	VESSEL	36	4,000-41,500 (183,550kg)	SA516-GR.70N+S5	-	1	2015 (14-4041)
74	SUMITOMO HEAVY. / TISCO	ZEON CORP.	JAPAN	-	SBR	REACTOR (AGIATOR)	54	(51+3)-1,900-3,250 (INTERNAL BUFFING #200)	SA516-GR.70+ SA240-TP316L CLAD	-	2	2015 (14-070)
75	SUMITOMO HEAVY. / TISCO	SUMITOMO SEIKA PLOYMERS	KOREA	POLYMERS	POLYMERS	REACTOR (AGIATOR)	15	(12+3)-3,250-4,305 (INTERNAL BUFFING #600+E.P)	SA516-GR.70+ SA240-TP304 CLAD	-	4	2015 (14-069)
76	SUMITOMO HEAVY. / TISCO	MATSUMOTO YUSHI-SEIYAKU	JAPAN	PHAMARCHY	-	REACTOR (AGIATOR)	19	1,950-2,871 (INTERNAL BUFFING #400)	SA240-TP316L	-	1	2015 (14-046)
77	SKE	SKE	KOREA	2016 T/A	-	H/EX	-	1,350-7,730 (Tube Bundle)	SA182-F5	SA213-TP T5	62	2015 (095,096,104)
78	SK-INCHEON	SK-INCHEON	KOREA	MAINTEN.	-	H/EX	-	1350-6100 (BUNDLE)	SA516-GR.70	SA192	6	2015 (06-5034)
79	HYOSUNG	HYOSUNG	KOREA	DH-2	PROPYL-ENE	H/EX INNER BORE WELDING	12	2,350-26,300. (Surf. Area-5,264-M2) (Weight-148,400Kg)	SA240-TP304	SA213-TP304	2	2014 (A305)
80	GS CALTEX / DKME	GS CALTEX	KOREA	ENERGY OPTIMIZA-TION	REFINERY	H/EX	25	1,230-8,327	SA387-GR.5 CL.2	SA213-TP T5	2	2014 (A304)
81	GS CALTEX / DKME	GS CALTEX	KOREA	#1 CDU REVAMP	REFINERY	VESSEL	14	2,000-12,800	SA516-GR.60	-	1	2014 (A304)
82	GS CALTEX / DKME	GS CALTEX	KOREA	#1 CDU REVAMP	REFINERY	H/EX	21	1,210-8,368	SA516-GR.70	SA179	1	2014 (A302)
83	GS CALTEX / DKME	GS CALTEX	KOREA	#1 CDU REVAMP	REFINERY	H/EX	14	1,390-8,984	SA516-GR.70	SA179	1	2014 (A302)
84	HYOSUNG	HYOSUNG	KOREA	POK	POK	H/EX	13	1,050-8443	SA516-GR.70 /SA240-316L	SA789-UNS32205	17	2014 (4012)
85	SKE	SKE	KOREA	#1 FCC	#1 FCC	H/EX	-	1,000-3,000	SA516-GR.70	SB111-C44300	2	2014 (4006)
86	HYOSUNG	HYOSUNG	KOREA	DH-2	PROPYL-ENE	H/EX	23	1,860-11,288 (Surf. Area-1,357-M2)	SA516-GR.70N	SA179	22	2014 (4003)
87	SKE	SKE	KOREA	REVEMP	HOU CHIP	TOWER (COLUMN)	16	(13+3)-3,700-24,370 (WET H2S & AMINE SERVICE)	SA516-GR.70+ SA240-304L CLAD / HIC	-	2	2014 (07-4035)
88	SKGC	SKGC	KOREA	MAINTEN.	SM	H/EX	-	650-4860 (BUNDLE)	SA106-B	SA179	9	2014 (01-4002)
89	GS CALTEX / DKME	GS CALTEX	KOREA	MAINTEN.	REFINERY	VESSEL	5	1,000-2,300	SA240-TP304	-	2	2013 (A008)
90	EDWARDS	SKI	KOREA	NEXLENE	VACUUM SYSTEM	SKID	-	4,250W-6,000L-4,194H (25,000Kg)	SA283-C + SA106-B	-	4	2013 (3044)
91	BASF KOREA	BASF	KOREA	REVAMPING	SOLVENT	H/EX	10	570-2,700	SA240-TP304	SA213-TP304	2	2013 (3032)
92	CAPRO-LACTAM	CAPRO.	KOREA	-	PP	VESSEL	20	1,900-3,400	SA240-TP316L	-	1	2013 (3031)
93	EDWARDS	SKI	KOREA	NEXLENE	VACUUM SYSTEM	H/EX	12	1,240-3,418	SA516-GR.70	SA179	9	2013 (3021 / 2044)
94	KEP	KEP	KOREA	DOL	ENG. PLASTIC	TOWER (COLUMN)	12	1,000-18,000	SA240-TP S32750 / SA240-TP316L	-	2	2013 (3012)
95	SKE	SKI	KOREA	NO.4 CDU	REFINERY	H/EX	12	1,070-7,700	SA516-GR.70	SA179	2	2013 (3011)
96	SKE	SKI	KOREA	#1 FCC	FCC	STEAM DRUM	35	1,524-7,000	SA516-GR.70N	-	2	2013 (3008)
97	SKE	SKI	KOREA	#2 FCC	RFCC	H/EX CATALYST COOLER	48	1,880-8,684 (BUNDLE)	SA516-GR.70	SA312-347H	4	2013 (3005)
98	SKE	SKI	KOREA	NO.4 CDU	REFINERY	H/EX	-	1,318-6,100 (BUNDLE)	-	SA789-TP S31803 & SA182-GR.F51	5	2013 (3004)
99	S-OIL / DKME	S-OIL	KOREA	PP	PP	H/EX	13	1,200-6,000	SA516-GR.70	SA179	1	2013 (2048)
100	SKE	SKI	KOREA	#1 FCC	RFCC	H/EX WASTE HEAT BOILER	45	1,803-12,000 (42,000Kg)	SA516-GR.70	SA192	2	2013 (2045 / 3024)
101	GS CALTEX / DKME	GS CALTEX	KOREA	SAR	REFINERY	H/EX	8	1,010-9,695	SA240-TP304L	SA213-TP310S	1	2013 (2034)
102	SKE	SKI	KOREA	#5 CDU	CDU	H/EX	-	8 SCH.40-3,790	SA106-GR.B	SB171-C71500	1	2013 (2033)
103	SK E&C	SKI	KOREA	H-PJT	HBO	VESSEL	12	3,000-11,650	SA516-GR.70	-	2	2013 (2033)
104	YONGSAN CHEM.	YONGSAN CHEM.	KOREA	MAN-1	-	H/EX	26	1,650-6,100	SA516-GR.70 / SA179	SA179	1	2013 (2033)
105	GS CALTEX / DKME	GS CALTEX	KOREA	MAINTEN.	REFINERY	H/EX	-	1,275-6,100 (BUNDLE)	-	SA213-TP S32205	2	2013 (2020)
106	SK E&C	SKI	KOREA	NEXLENE	NEXLENE	H/EX	10	1,010-7,800	SA516-GR.70	SA179	15	2013 (2008)
107	KEP	KEP	KOREA	K2Q	ENG. PLASTIC	TOWER (COLUMN)	12	1,950-35,050	SA240-TP304	-	5	2013 (2007)
108	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	VESSEL	5	700-2,000	SA240-TP316L	-	6	2013 (2040/41)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
109	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	H/EX	10	565-2,000	SA516-GR.70	SA213-TP316L	2	2013 (2039/44)
110	TOYO KOREA	KPIC	KOREA	EOG	EOG	VESSEL	12	4,000-5,100	SA240-TP304L	-	7	2013 (3026)
111	KPIC	KPIC	KOREA	EOG	EOG	H/EX	12	1,030-8,042	SA516-GR.70	SA179	1	2013 (2033)
112	SK ENERGY / DKME	UOP	KOREA	#1 FCC	FCC	H/EX CATALYST COOLER	40	2,180-11,795 (90,000Kg)	SA516-GR.70	SA213-TP T11	2	2013 (2015)
113	SK ENERGY / DKME	UOP	KOREA	#2 FCC	FCC	H/EX CATALYST COOLER	55	2,440-14,000 (133,000Kg)	SA516-GR.70	SA213-TP T11	3	2013 (2016)
114	SK GAS CORP.	SKI	KOREA	NO.3 AEU REVAM.	BTX	H/EX FINNED	-	8 SCH.40-2,045	SA106-GR.B	-	2	2012 (2028)
115	SKE	SKI	KOREA	REVAMPING	REFINERY	H/EX	-	450-6,100 (BUNDLE)	-	SA213-TP S31803	2	2012 (2021)
116	GS CALTEX / DKME	GS CALTEX	KOREA	RFCC	REFINERY	H/EX	-	1,275-6,100 (BUNDLE)	-	SA213-TP S32205	1	2012 (2012)
117	SK E&C	SKI	KOREA	NEXLENE	NEXLENE	H/EX	13	1,150-7,177	SA516-GR.70	SA179	15	2012 (2008)
118	KEP	KEP	KOREA	K2Q-1	K2Q-1	TOWER (COLUMN)	9	2,400-17,750	B575-N10276	-	5	2012 (2007)
119	SK GAS CORP.	SKI	KOREA	NO.3 AEU REVAM.	BTX	H/EX	14	1,140-8,021	SA516-GR.70	SA179	2	2012 (2006/28)
120	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	PIPING	-	8 (5,000kG)	SB162-NO.2200 (NICKEL ALLOY)	-	4	2012 (2005)
121	HYUNDAI ENG.	UCHI-IL POWER	PAKISTAN	UCH-2	POWER	STEAM DRUM	89	1,830-12,000 (117,000kg)	SA516-GR.70	-	10	2012 (2002)
122	DAEWOO INTERNA. / DKME	CTCI	MALAYSIA	KIMANIS	HP/LP	STEAM DRUM	72	1,800-8,500	SA516-GR.70	-	12	2012 (11-074)
123	SAMSUNG EVERLAND	KP CHEM.	KOREA	KP CHEM	-	H/EX	13	1,400-7,234	SA516-GR.70	SA179	4	2012 (11-073)
124	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	H/EX	6.3	620-7,015	SB424-NO8825	SB163-NO8825	1	2012 (11-072/A012)
125	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	H/EX	16	1,208-7,761 (36,000Kg)	SA516-GR.70	SA213-TP T5	5	2012 (11-072/2030)
126	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	VESSEL	19	1,100-7,100	SA516-GR.70N+HIC	-	4	2012 (11-071)
127	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	VESSEL	27.2	(24+3.2)-1,900-9,820	SA387-GR.22+ A240- TP347SS CLAD	-	1	2012 (11-071)
128	SKE	SKI	KOREA	NO.2 SAR	REFINERY	H/EX	10	1,529-5,459	SA516-GR.70	SA179	2	2012 (11-070)
129	KEP	KEP	KOREA	KEP	ENG. PLASTIC	H/EX	-	1,353-2,300 (BUNDLE)	NA574	SA213-TP S32750	2	2012 (11-068)
130	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	H/EX	8	1,100-2,990	SA240-TP316L	SA213-TP316L	6	2012 (11-063, 2025&27)
131	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	H/EX	6	700-2,996	SA240-TP304	SA213-TP316L	24	2012 (11-062)
132	KEP	KEP	KOREA	KEP	ENG. PLASTIC	TOWER (COLUMN)	9	2,700-20,960 (147,700Kg)	SA240-TP304	-	1	2012 (11-061)
133	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	VESSEL	8	1,100-6,756	SA240-TP316L	-	10	2012 (11-059)
134	SKE / DKME	SKI	KOREA	#1 FCC	RFCC	H/EX CATALYST COOLER	48	1,880-8,684 (BUNDLE)	SA516-GR.70	SA213-TP T11 / SA192	2	2012 (11-055)
135	HYOSUNG	UOP	KOREA	PDH	PDH	H/EX	30	1,800-10,526 (54,300kg)	SA516-GR.70N	SA179	2	2012 (11-054)
136	SKE	SKI	KOREA	HOU T/A	REFINERY	VESSEL	29	2,800-10,000	SA516-GR.70N+HIC	-	7	2012 (11-053)
137	SK LUBRICANTS	SKI	KOREA	LUBRICANT	LUBRICANT	VESSEL	26	1,758-4,155	SA516-GR.70	-	1	2012 (11-048)
138	TAEKWANG	TAEKWANG	KOREA	HP	PP	VESSEL	12	4,400-6,901	SA240-TP304L	-	11	2012 (11-030A)
139	GS CALTEX	GS CALTEX	KOREA	RFCC	REFINERY	H/EX	-	650-6,100 (BUNDLE)	-	SB466-C71500 (70/30-CU/Ni)	6	2012 (2018)
140	SK LUBRICANTS	SKI	KOREA	-	HBO	H/EX	12	972-7,508	SA387-GR.5-CL.2	SA213-TP T5	2	2012 (11-072/A012)
141	HYOSUNG	HYOSUNG	KOREA	NEO-2	NF3 GAS	VESSEL	10	1,600-2,710	SA240-TP304	-	9	2012 (2043/35)
142	KEP	KEP	KOREA	K2P	ENG. PLASTIC	TOWER (COLUMN)	12	1,950-35,050	SA240-TP304	-	2	2012 (2003/4)
143	ISU E&C	ISU CHEM.	KOREA	ULSAN	NaSH	H/EX	5	700-4,705	SA240-TP304	SA213-TP304	3	2012 (2014)
144	ISU CHEM.	ISU CHEM.	KOREA	REVAMPING	ONSAN T/A	H/EX	10	440-4,308	SA516-GR.70	SA179	1	2012 (2019)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL. JOB NO.)
145	HYOSUNG	HYOSUNG	KOREA	NEO-1	NF3 GAS	H/EX	23	420-3,237	SA240-TP316L	SA213-TP316L	4	2012 (2010)
146	SK E&C	KEPCO	KOREA	POWER	POWER	VESSEL	52	1,796-11,000	SA516-GR.70	-	8	2012 (2001)
147	GS CALTEX / DKME	GS CALTEX	KOREA	RFCC	RFCC	H/EX	-	438-5,487 (BUNDLE)	SA240-TP304	SA213-TP304	2	2012 (11-066)
148	SAMSUNG EVERLAND	HONAM PETRO.	KOREA	HPC	REFINERY	H/EX	10	1,930-13,997 (49,900Kg)	SA240-TP304	SA213-TP304	5	2012 (11-050)
149	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	VESSEL	4.8	500-5,000	SB162-NO.2200 (NICKEL ALLOY)	-	2	2011 (11-058)
150	SKE	SKI	KOREA	RECC	REFINERY	H/EX	12	737-6,096	SA179	SA179	5	2011 (11-041/42)
151	LOTTE CHEM.	-	KOREA	LOTTE	PTA	VESSEL	76	1,500-6,588	SA516-GR.70	-	3	2011 (11-036)
152	HYOSUNG	HYOSUNG	KOREA	PP-1	PP	H/EX	15	1,350-2,015	SA240-TP304	SA213-TP304	6	2011 (11-033/57)
153	HYOSUNG	HYOSUNG	KOREA	PP-1	PP	VESSEL	6	1,800-5,750	SA240-TP304	-	7	2011 (11-032)
154	TAEKWANG	TAEKWANG	KOREA	HP	-	VESSEL	10	2,400-4,410	SA240-TP304L	-	5	2011 (11-030B)
155	KEP	KEP	KOREA	Q-PJT	ENG. PLASTIC	PIPING	-	10 & 12 (2,000Kg)	SA312-TP S31803	-	1	2011 (11-029)
156	SAMYANG GENEX	SAMYANG	KOREA	TA	SUGER	H/EX	6	6-500-3,698	SA240-TP304L	SA213-TP304L	9	2011 (11-027)
157	HYOSUNG	HYOSUNG	KOREA	PE	PE	VESSEL	12	500-1,000	SA240-TP S32750	-	2	2011 (11-019)
158	HITACHI / DKME	-	UZBEKI-STAN	TASHIKENT	POWER	STEAM DRUM	33	1,500-4,000	SA516-GR.70	-	2	2011 (11-012)
159	KEP	KEP	KOREA	K2Q	ENG. PLASTIC	TOWER (COLUMN)	6	1,250-11,780	SA240-TP S32750	-	1	2011 (11-005)
160	KEP	KEP	KOREA	KEP	ENG. PLASTIC	TOWER (COLUMN)	6	2,400-19,025	SA240-TP304	-	1	2011 (10-057)
161	SKE	SKI	KOREA	REVAMPING	REFINERY	H/EX GENERATOR	13	2,000-7,365	SA516-GR.70	SA192	2	2011 (10-053)
162	KPI	KPI	KOREA	REVAMPING	ETHYLENE	H/EX HELIX	13	1,625-6,000 (30,000Kg)	SA516-GR.70	SA179	1	2011 (10-052)
163	HYOSUNG	HYOSUNG	KOREA	PX	PX	H/EX	8	460-6,000	SA240-TP316L	SA213-TP316L	4	2011 (10-050)
164	SAMSUNG TOTAL	SAMSUNG TOTAL	KOREA	-	PTA	H/EX	22	1,950-6,000 (52,700Kg)	SA516-GR.70	SA179	2	2011 (10-047)
165	GS CALTEX / DKME	GS CALTEX	KOREA	NAPHTHA	NAPHTHA	VESSEL	13	2,300-8,070	SA516-GR.60	-	2	2011 (10-045/46)
166	HYUNDAI ENG. / DKME	ABUDHABI GAS	UAE	HAPSAN-5	UTILITY	STEAM DRUM	46	2,000-6,000	SA516-GR.70	-	8	2011 (10-043)
167	YNCC	YNCC	KOREA	NCC	C3	TOWER (COLUMN)	16	1,000-17,850	SA516-GR.70	-	1	2011 (10-041)
168	SAMSUNG TOTAL	SAMSUNG TOTAL	KOREA	REVAMPING	PTA	H/EX	-	1,200-5,800 (BUNDLE)	-	SA789-TP S31803	1	2011 (10-040)
169	GS POWER	GS CALTEX	KOREA	MTPX	PX	H/EX	13	1,380-6,096	SA516-GR.70	SA179	2	2011 (10-038)
170	SAMSUNG TOTAL	SAMSUNG TOTAL	KOREA	REVAMPING	-	H/EX	8	1,100-3,500	SA240-TP304	SA213-TP304	8	2011 (10-036/39)
171	KEP	KEP	KOREA	Q-PJT	ENG. PLASTIC	H/EX	-	1,353-2,300 (BUNDLE)	-	SA213-TP S329J4L	1	2011 (11-005)
172	HYOSUNG	HYOSUNG	KOREA	NEO-2	NF3 GAS	VESSEL	15	2,700-5,173	SA240-TP304	-	5	2011 (11-001, 10-060)
173	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	VESSEL	10	489-2,000	SA240-TP316L	-	18	2011 (10-060/63)
174	TOYO ENG.	GULF JAPAN	THAILAND	GULF	HP/IP	STEAM DRUM	70	1,670-7,472 (35,000Kg)	SA516-GR.70	-	8	2011 (11-013)
175	LOTTE E&C / DKME	HONAM PETRO.	KOREA	AL QTATRANA	POWER	STEAM DRUM	83	1,900-14,000 (112,850Kg)	SA516-GR.70	-	8	2010 (9058)
176	DAELIM INDUSTR.	HYUNDAI OIL BANK	KOREA	HDO NO.2	HOU	H/EX	21	1,240-5,640	SA516-GR.70 HIC	SA179	4	2010 (9051)
177	HYOSUNG / DKME	HYOSUNG	KOREA	PP-1	PP	H/EX CYCLE GAS COOLER	12	1,110-11,890 (24,700Kg)	SA516-GR.70-HIC	SA179	1	2010 (9050)
178	SKE / DKME	SKI	KOREA	HOU	VRDS	VESSEL	140	(137+3)-2,300-4,230 (58,000Kg)	SA516-GR.70+SS347 OVERLAY (BEND WELDING)	-	1	2010 (9035)
179	HYOSUNG / DKME	HYOSUNG	KOREA	PP-1	PP	TOWER (COLUMN)	12.7	589-12,000	SA240-TP316L	-	8	2010 (8061)
180	DAELIM IND. / DKME	HYUNDAI OIL BANK	KOREA	HDO NO.2	HOU	H/EX	10	2,420-6,765	SA516-GR.70	SA213-TP T11	4	2010 (2913)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
181	SKE	SKI	KOREA	REVAMPING	REFINERY	H/EX	11	584-5,873	SA516-GR.70 HIC	SA179	1	2010 (10-057)
182	HYOSUNG	HYOSUNG	KOREA	TA	H2	VESSEL	9	1,200-4,100	SA516-GR.60	-	3	2010 (10-034)
183	SKE	SKI	KOREA	MAINTEN.	MAINTEN.	H/EX	-	1,400-6,1000 (BUNDLE)	-	SA192	48	2010 (10-029)
184	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	TOWER (COLUMN)	12.7	589-12,000	SA240-TP316L	-	4	2010 (10-028)
185	SKE	SKI	KOREA	#2 FCC	T/A	H/EX	136	1,500-9,000 (DEBONDING REPAE)	-	SA182-F22+SS321 OVERLAY	2	2010 (10-024)
186	KEP	KEP	KOREA	Q-PJT	ENG. PLASTIC	H/EX	-	2,650-1,350 (BUNDLE)	-	SA213-TP S329J4L	3	2010 (10-017/15)
187	KEP	KEP	KOREA	K1Q	ENG. PLASTIC	TOWER (COLUMN)	12	2,300-23,000	SA240-TP S32750	-	1	2010 (10-011)
188	-	KPI	KOREA	REVAMPING	ETHYLENE	H/EX	-	1,714-7,200 (BUNDLE)	-	SA179	2	2010 (10-010)
189	KEP	KEP	KOREA	K1Q	ENG. PLASTIC	TOWER (COLUMN)	8	2,720-21,000	SA240-TP304	-	2	2010 (10-001/2)
190	HYOSUNG	HYOSUNG	KOREA	REVAMPING	PTA	VESSEL	12.7	914-1,740	SB127-N04400	-	1	2010 (01-005)
191	SK E&C	SK-INCHEON	KOREA	INCHEON CLX	CLEAN FUEL	H/EX	10	584-5,900	SA516-GR.70	SA213-TP316	3	2009 (9039)
192	SAMSUNG ENG. / DKME	S-OIL	KOREA	PX	PX	H/EX	15	1,150-5,507	SA516-GR.70N	SA179	7	2009 (9029)
193	MODEC / DKME	PETROBRAS	BRAZIL	CID DEANGRA	FPSO	VESSEL	24	(21+3)-1,372-4,674	SA516-GR.70+ SA240-TP316L CLAD	-	7	2009 (9023)
194	SKE	SKI	KOREA	#2 FCC	T/A	H/EX	136	1,500-9,000 (DEBONDING REPAE)	-	SA182-F22+SS321 OVERLAY	4	2009 (9012)
195	KBR / DKME	EXXON	USA	BORGER	GASOLINE	VESSEL	70	1,625-5,383	SA516-GR.70	-	2	2009 (9005)
196	SKE	SKI	KOREA	MAINTEN.	MAINTEN.	H/EX	10	465-5,130	SA240-TP317L	SA213-TP317L	1	2009 (8061)
197	SKE	SKI	KOREA	2009 T/A	MAINTEN.	H/EX HELIX	-	1,299-6,090 (HELIX BUNDLE)	SA266-GR.2	SA179	1	2009 (8061)
198	SKE / DKME	SKI	KOREA	#4 MDU	MDU	REACTOR	36	1,676-15,545 (TEST PRESS.: 75 Bar)	SA516-GR.70N+HIC	-	1	2009 (8052)
199	SKE	SKI	KOREA	MAINTEN.	MAINTEN.	H/EX	-	1,470-6,200 (BUNDLE)	-	SA213-TP T5 & SA213-TP317L	10	2009 (07-037)
200	HYOSUNG	HYOSUNG	KOREA	REVAMPING	PP	VESSEL	8	589-12,000	SA240-TP316L	-	12	2009 (9037/38)
201	HYOSUNG	HYOSUNG	KOREA	NH3	NH3	TOWER (COLUMN)	10	950-1,500	SA240-TP304	-	4	2009 (8061/9045)
202	KBR / DKME	EXXON	USA	BORGER	GASOLINE	VESSEL HP	105	1,194-6,613 (TEST PRESS : 204Bar)	SA516-GR.70N	-	7	2009 (9005)
203	SKE	SKI	KOREA	#1 FCC	RFCC	H/EX CATALYST COOLER	28	1,880-6,000 (BUNDLE)	SA516-GR.70N	SA213-TP T11	2	2008 (8057)
204	SKE	SKI	KOREA	MAINTEN.	REFINERY	VESSEL	36	2,100-18,420	SA516-GR.70N+HIC	-	2	2008 (8052)
205	SAMSUNG TOTAL	SAMSUNG TOTAL	KOREA	FEEDSTOCK	-	H/EX	13	1,050-3,700	SA517-GR.60	SA179	3	2008 (8050)
206	EXXONMOBIL / DKME	EXXON	SINGAPORE	SPT/SME	REFINERY	VESSEL	62	3,500-13,000 (115,000Kg)	SA516-GR.70N+S5	-	6	2008 (8045)
207	SK E&C	SKI	KOREA	SDA	REFINERY	VESSEL	72	3,400-12,100 (147,800Kg)	SA516-GR.70+S5	-	10	2008 (8043/51)
208	SAIPEM / DKME	ENGRO CHEMICAL.	PAKISTAN	FERTILIZER	AMMONIA	H/EX	19	940-10,058	SA516-GR.70	SA179	7	2008 (8042)
209	SUNCOR / DKME	SUNCOR	CANADA	VOYAGEUR	OIL SAND	H/EX	25.4	1,778-9,598 (74,000Kg)	SA516-GR.70	SA192	5	2008 (8040)
210	SAMSUNG EVERLAND	HPC	KOREA	NCENT	-	H/EX	13	1,300-10,603	SA516-GR.70	SA179	2	2008 (8028)
211	SKE	SKE	KOREA	#3 PROCESS	MAINTEN.	H/EX	-	536-6,100 (BUNDLE)	-	SA789-TP S31803	2	2008 (8027)
212	SKE	SKE	KOREA	NRC REVAMP.	REFINERY	VESSEL	41	3,855-21,471 (125,400Kg)	SA516-GR.70N+S5	-	4	2008 (8023)
213	FORST WHEELER / DKME	SHELL SINGAPORE	SINGAPORE	BUKOM	REFINERY	H/EX	16	1,308-7,315	SA516-GR.70	SA179	3	2008 (8019)
214	HHI / JGC / DKME	UOP	IRAN	SHAZAND ARAK	RFCC	H/EX CATALYST COOLER	46	2,438-12,703 (134,100Kg)	SA516-GR.70	SA213-TP T11	1	2008 (8015)
215	HYOSUNG	HYOSUNG	KOREA	REVAMPING	DH	VESSEL	32	4,000-13,450 (60,000Kg)	SA516-GR.60	-	1	2008 (8014)
216	SKE	SKI	KOREA	NCC#1	REFINERY	H/EX	17	1,822-6,100 (52,000Kg)	SA516-GR.70	SA179	2	2008 (8010/11)

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (THK)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL. JOB NO.)
217	SAMSUNG TOTAL	SAMSUNG TOTAL	KOREA	MAINTEN.	MAINTEN.	H/EX HELIX	13	872-5,870 (HELIX)	SA516-GR.60	SA179	1	2008 (8009)
218	SKE	SKE	KOREA	FCC	RFCC	VESSEL	16	4,000-15,300	SA335-GR. P11 / SA516-GR.70	-	1	2008 (8004)
219	SUNCOR / DKME	SUNCOR	CANADA	VOYAGEUR	OIL SAND	H/EX	27	1,397-7,315 (40,000Kg)	SA516-GR.70	SA179	6	2008 (8003)
220	IHI / DKME	MITSUI CHEM.	JAPAN	-	UTILITY	VESSEL DEAREATOR	16	1,732-3,824	SA516-GR.70	-	3	2008 (8002)
221	SKE	SKE	KOREA	MAINTEN.	RFCC	H/EX	18	1,346-6,096	SA516-GR.70	SA179	2	2008 (07-036)
222	SUNCOR / DKME	SUNCOR	CANADA	FIREBAG	OIL SAND	H/EX	26	1,067-6,096	SA516-GR.70	SA179	4	2008 (07-033)
223	DSM DALTIM / DKME	ABB LICENSE	INDONESIA	MAINTEN.	MAINTEN.	H/EX HELIX	8	1,105-7,501 (HELIX BUNDLE)	SA240-TP S31803	SA213-TP S31803	1	2008 (07-032)
224	BECHTEL / DKME	SHELL CANADA	CANADA	AOSP	REFINERY	H/EX	28	1,220-7,315 (49,930Kg)	SA516-GR.70	SA179	6	2008 (07-031)
225	HYOSUNG	HYOSUNG	KOREA	DH-1	DH	H/EX	15	1,332-4,500	SA516-GR.70	SA179	2	2008 (07-030)
226	SKE	SKE	KOREA	NO.4 DISTILLATION	REFINERY	H/EX	-	8-2,000 (BUNDLE)	-	SA213-TP S329J4L	2	2008 (07-029)
227	SKE	SKE	KOREA	HOU	VDU	VESSEL	21	3,810-9,906	SA516-GR.60	-	1	2008 (07-028)
228	SAMSUNG BP	SAMSUNG BP	KOREA	PERFORMER	PTA	H/EX	-	6-14,800 (BUNDLE)	-	SB163-N08825	2	2008 (8059)
229	HYOSUNG	HYOSUNG	KOREA	3000MTPY F2	NF3 GAS	VESSEL	10	590-12,000	SA240-TP316L	-	6	2008 (8012/13)
230	YOUSUNG	YOUSUNG	KOREA	HPPO	HPPO	H/EX & VESSEL	27	1,200-8,572	SA537-CL.1+S5	SA179	4	2007 (2645)
231	ISU CHEM.	ISU CHEM.	KOREA	MAINTEN.	LAB	H/EX HELIX	-	580-4,800 (HELIX BUNDLE)	SA266-GR.2	SA179	2	2007 (07-15)
232	SKE	SKE	KOREA	#2 2007 T/A	REFINERY	H/EX	16	1,500-8,700 (SHELL)	SA213-TP11	SA213-TP T11	6	2007 (07-027)
233	HHI / DKME	-	THAILAND	ROJANA	POWER	VESSEL DEAREATOR	12	2,000-4,700	SA516-GR.70	-	3	2007 (07-026)
234	SKE	SKE	KOREA	#2 FCC	FCC	H/EX	33	(30+3)-1,250-8,963	SA516-GR.70 / SA240-TP410S CLAD	SA213-TP410S	3	2007 (07-023)
235	SKE	SKE	KOREA	#2 2007 T/A	BDO	H/EX D-TYPE	15	1,800-11,344	SA516-GR.70	SA213-TP304	1	2007 (07-022)
236	ISU CHEM.	ISU CHEM.	KOREA	TA	LAB	H/EX	10	630-6,039	SA516-GR.70	SA179	4	2007 (07-020)
237	GS E&C / DKME	KEPCO	KOREA	BUCHEON	POWER	STEAM DRUM	20	1,560-10,927	SA516-GR.70	-	2	2007 (07-019)
238	HYOSUNG	HYOSUNG	KOREA	DH-E	DH	H/EX	10	1,482-7,000	SA516-GR.70	SA179	5	2007 (07-017/18)
239	SKE	SKE	KOREA	#1 SUL	REFINERY	H/EX HELIX	-	800-1,920 (HELIX BUNDLE)	SA516-GR.70	SA179	2	2007 (07-016)
240	SKE	SKE	KOREA	NEW FCC	FCC	H/EX	15	940-8,189	SA516-GR.70	SA179	4	2007 (07-012/13)
241	SKE	SKE	KOREA	#2 PP GPR	PP	VESSEL	21	2,940-12,200	SA240-TP304	-	2	2007 (07-011/7)
242	YUSUNG	SKC	KOREA	HPPO	HPPO	VESSEL	31	2,800-8,500 (38,000Kg)	SA240-TP304L	-	9	2007 (07-006)
243	SKE	SKE	KOREA	FCC T/A	FCC	H/EX	10	1,095-3,658	SA387-GR.11-CL.2	SA213-TP T11	12	2007 (07-004/5)
244	SKE	SKE	KOREA	#2 2007 T/A	REFINERY	H/EX	13	1,219-7,431	SA516-GR.70	SA179	3	2007 (07-003)
245	SK E&C	SKI	KOREA	L-PJT	REFINERY	H/EX	15	1,020-7,661	SA516-GR.70	SA179	8	2007 (07-002)
246	HYOSUNG	HYOSUNG	KOREA	MAINTEN.	PP	VESSEL	10	760-1,800	SA240-TP304	-	4	2006 (06-001/3/4)
247	KEP	KEP	KOREA	Q-PJT	ENG, PLASTIC	H/EX	-	1,350-3,500 (BUNDLE)	-	SA213-TP S329J4L	1	2006 (06-001)
248	SKE	SKE	KOREA	2006 T/A	REFINERY	H/EX	-	650-9,000 (BUNDLE)	-	SA213-TP T11	2	2006 (06-001)
249	HYOSUNG / DKME	HYOSUNG	KOREA	HCFE REVAMP	PROPYLENE	H/EX INNER BORE WELDING	22	1,650-17,700 (Surf. Area-2,100-M2) (Weight-58,000Kg)	SA240-TP304	SA213-TP304	2	2005 (A305)
250	SKC	SKC	KOREA	HPPO	HPPO	VESSEL EVAPORATOR	20	1,200-6,000	SA537-CL.1	-	1	2007

NO	CUSTOMER	CLIENT (LICENSER)	LOCATION	PROJECT	PROCESS	ITEM	SIZE (TH'K)	SIZE (I.D - LEN.)	MATERIAL (SHELL)	MATERIAL (TUBE)	QTY	YEAR (DEL.) (JOB NO.)
DUPLIX												
1	DAELIM	S-OIL	KOREA	RUC	-	H/EX	32	2700-4877	SA240-TP S32205	SA789-TPS32205	10	2016 (6036)
2	SKE	SKE	KOREA	TA	-	H/EX BUNDLE	-	-	A240-S32205	SA789-TPS32205	21	2015 (5104)
3	GS CALTEX	GS CALTEX	KOREA	TA	REFINERY	H/EX	12	1800-9000	SA182-F53	SA789-TPS32750	6	2015 (5066)
4	KEP	KEP	KOREA	DOL	ENG. PLASTIC	TOWER (COLUMN)	12	1,000-18,000	SA240-TP S32750 / SA240-TP316L	-	2	2013 (3012)
5	KEP	KEP	KOREA	KEP	ENG. PLASTIC	H/EX	-	1,353-2,300 (BUNDLE)	NAS74	SA213-TP S32750	2	2012 (11-068)
6	KEP	KEP	KOREA	Q-PJT	ENG. PLASTIC	PIPING	-	10 & 12 (2,000kg)	SA312-TP S31803	-	1	2011 (11-029)
7	HYOSUNG	HYOSUNG	KOREA	PE	PE	VESSEL	12	500-1,000	SA240-TP S32750	-	2	2011 (11-019)
8	KEP	KEP	KOREA	K2Q	ENG. PLASTIC	TOWER (COLUMN)	6	1,250-11,780	SA240-TP S32750	-	1	2011 (11-005)
9	KEP	KEP	KOREA	K1Q	ENG. PLASTIC	TOWER (COLUMN)	12	2,300-23,000	SA240-TP S32750	-	1	2010 (10-011)
10	DSM DALTIM / DKME	ABB LICENSE	INDONESIA	MAINTEN.	MAINTEN.	H/EX HELIX	8	1,105-7,501 (HELIX BUNDLE)	SA240-TP S31803	SA213-TP S31803	1	2008 (07-032)
NON-FERRUS												
1	HANWHA TOTAL	HANWHA TOTAL	KOREA	-	-	VESSEL	5	1510-2331	ALUMINUN AL5454	-	10	2017 (EC7037)
2	WATLOW	SK MATERIALS	KOREA	SS	-	VESSEL	10	8 - 4000	B163-N0600	-	1	2017 (7036)
3	SKE	SKE	KOREA	TA	-	H/EX BUNDLE	-	-	B240-S32205	SA789-TPS32205	21	2015 (5104)
4	WATLOW	TAEKWANG	KOREA	CCR	-	VESSEL	10	20 - 2800	B424-N0800H	-	2	2017 (7023)
5	SKE	SKE	KOREA	#1 FCC	#1 FCC	H/EX BUNDLE	15	500-4877	B424-N08825	B163-N08825	2	2016 (6086)
6	S-OIL	S-OIL	KOREA	TA	-	H/EX	12	1500-6,100	B424-N08825	B163-N08825	2	2016 (6023)
7	KEP	KEP	KOREA	K2Q-1	K2Q-1	TOWER (COLUMN)	9	2,400-17,750	B575-N10276	-	5	2012 (2007)
8	HYOSUNG	HYOSUNG	KOREA	PP	PP	VESSEL	6	1,200-4,410	SA240-316L / SB444-N06625	-	1	2015 (5069)
9	HYOSUNG	HYOSUNG	KOREA	MAINTEN.	-	H/EX COVER	58	(52+4)-OD2102	SA266-GR.4+ SB265-2 LINING	-	1	2015 (15-5040)
10	GS CALTEX	GS CALTEX	KOREA	SWS	SWS	H/EX	16	(13+3)-1,360-5,400	SA516-60N +SB424-N08825	-	2	2016 (6012)
11	GS CALTEX	GS CALTEX	KOREA	SWS	SWS	H/EX	16	(13+3)-1,360-5,400	SA516-60N +SB424-N08825	-	2	2016 (6012)
12	HYOSUNG	HYOSUNG	KOREA	NEO	NEO	VESSEL	6.35	1,524-2,149	SB127-N04400	-	1	2016 (6004)
13	HYOSUNG	HYOSUNG	KOREA	REVAMPING	PTA	VESSEL	12.7	914-1,740	SB127-N04400	-	1	2010 (01-005)
14	ISU E&C	ISU CHEM.	KOREA	-	BAB UNIT	TOWER (COLUMN)	8	910-10,250	SB127-N04400 (ANNEALED)	-	1	2015 (15-5005)
15	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	PIPING	-	8 (5,000kg)	SB162-NO.2200 (NICKEL ALLOY)	-	4	2012 (2005)
16	HYOSUNG	HYOSUNG	KOREA	NEOCHEM	NF3 GAS	VESSEL	4.8	500-5,000	SB162-NO.2200 (NICKEL ALLOY)	-	2	2011 (11-058)
17	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	H/EX	6.3	620-7,015	SB424-N08825	SB163-N08825	1	2012 (11-072/A012)
18	SUMITOMO HEAVY. / TISCO	SHIMIZU CORPORATION	JAPAN	-	-	REACTOR (AGIATOR)	30	(27+3)-700-1400	SPV355+TP270H	-	1	2017 (EC7040)
LOW ALLOY												
1	S-OIL	S-OIL	KOREA	TA	-	H/EX	12	800-6,100	A182-F6a cl.1	A268-TP405	1	2017 (7026)
2	SKI PC	SKI PC	KOREA	TA	FEX310,370	H/EX BUNDLE	13	1350-6100	A387-T5 CL.2	A213-T5	5	2016 (6024)
3	SKE	SKE	KOREA	2016 T/A	-	H/EX	-	1,350-7,730 (Tube Bundle)	SA182-F5	SA213-TP T5	62	2015 (095,096,104)
4	GS CALTEX / DKME	GS CALTEX	KOREA	ENERGY OPTIMIZATION	REFINERY	H/EX	25	1,230-8,327	SA387-GR.5 CL.2	SA213-TP T5	2	2014 (A304)
5	SK LUBRICANTS	SKI	KOREA	H-PJT	HBO	VESSEL	27.2	(24+3.2)-1,900-9,820	SA387-GR.22+ A240- TP347SS CLAD	-	1	2012 (11-071)
6	SK LUBRICANTS	SKI	KOREA	-	HBO	H/EX	12	972-7,508	SA387-GR.5-CL.2	SA213-TP T5	2	2012 (11-072/A012)
7	SKE	SKE	KOREA	#2 2007 T/A	REFINERY	H/EX	16	1,500-8,700 (SHELL)	SA213-TP11	SA213-TP T11	6	2007 (07-027)
8	SKE	SKE	KOREA	FCC T/A	FCC	H/EX	10	1,095-3,658	SA387-GR.11-CL.2	SA213-TP T11	12	2007 (07-004/5)

