



KOREA

 Ministry of SMEs and Startups |  **KBIZ** Korea Federation of SMEs

 **أديبك** |  **ADNOC** Host

31 October - 3 November 2022
Abu Dhabi, United Arab Emirates



THE STRAINER SPECIALTY COMPANY

PRE-QUALIFICATION

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1. COMPANY PROFILE

1.1 Greeting in Brief

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1.4 Organization Chart

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1.1 Greeting in Brief

Since 1989, WOOSUNG FLOWTEC Co.,Ltd has produced all kinds of strainers, filters and customized products and we've done our best to meet customer's needs and satisfactions with three mottos - "Best quality", "Reasonable price", and "On time delivery"

As inexpensive insurance, STRAINERS from WOOSUNG FLOWTEC CO., LTD. have widely applied and utilized in Onshore plant(Oil & Gas industry, Petro-chemistry, Power Plant, Fresh water, unit, etc.) Offshore plant (FPSO, Drill ship, Platform, etc.,)

WOOSUNG FLOWTEC has done our best to globalize by export our products to the world-wide.



CEO Yeongje Cho

“Best quality, Reasonable price, On time delivery”

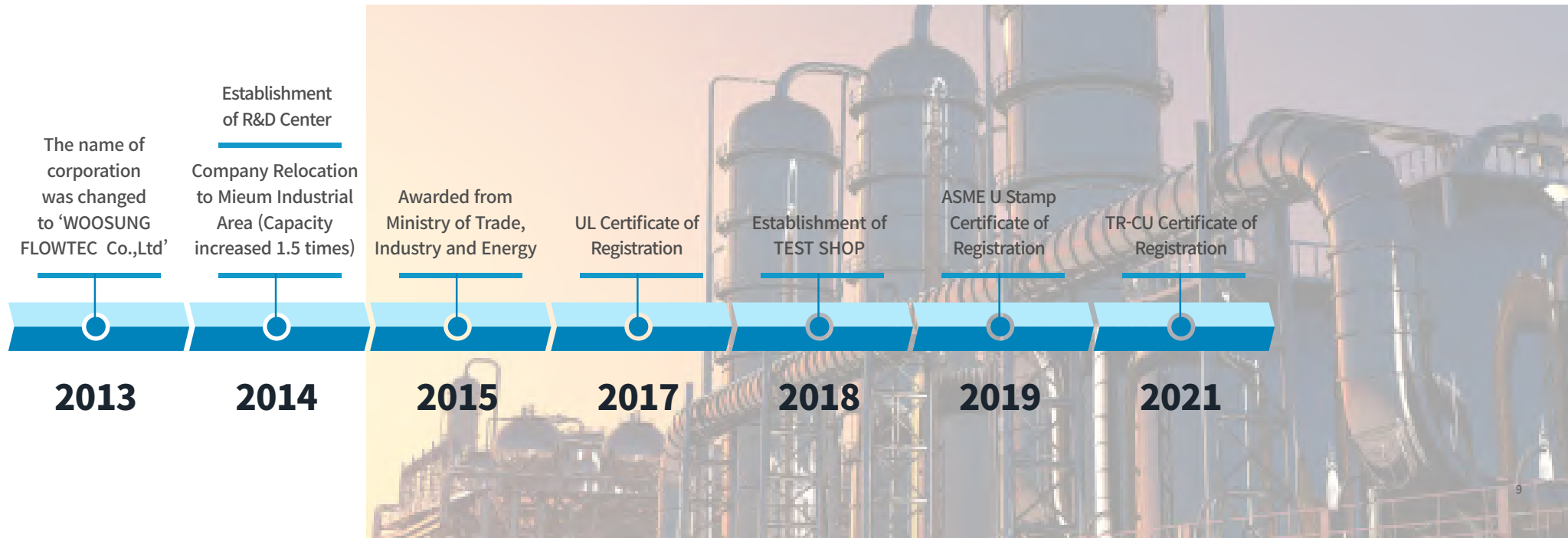
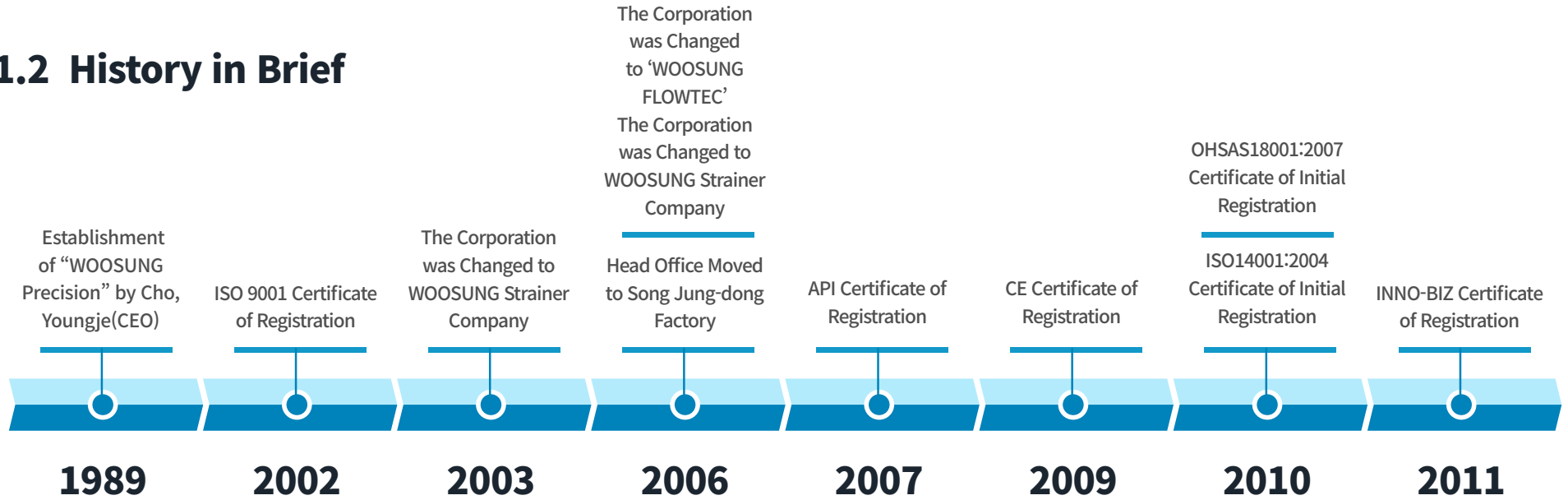


Head office & 1st Factory View

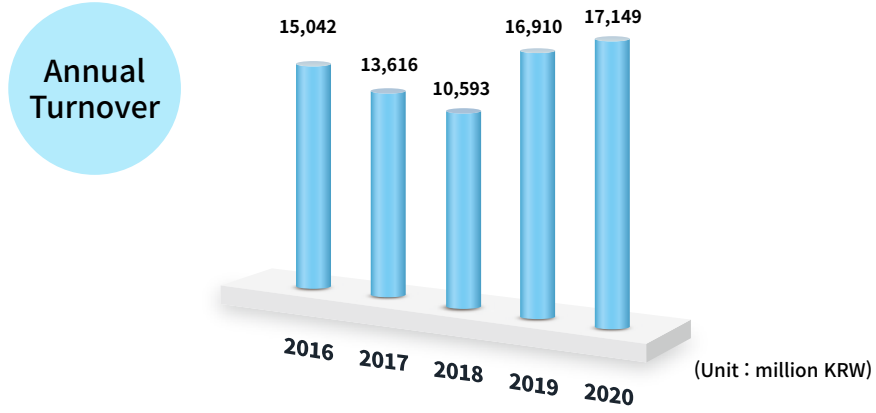


2nd Factory View

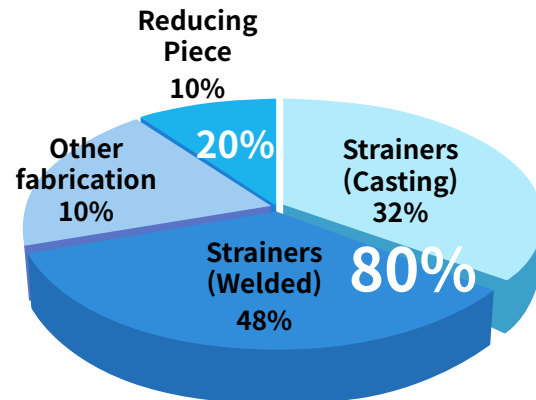
1.2 History in Brief



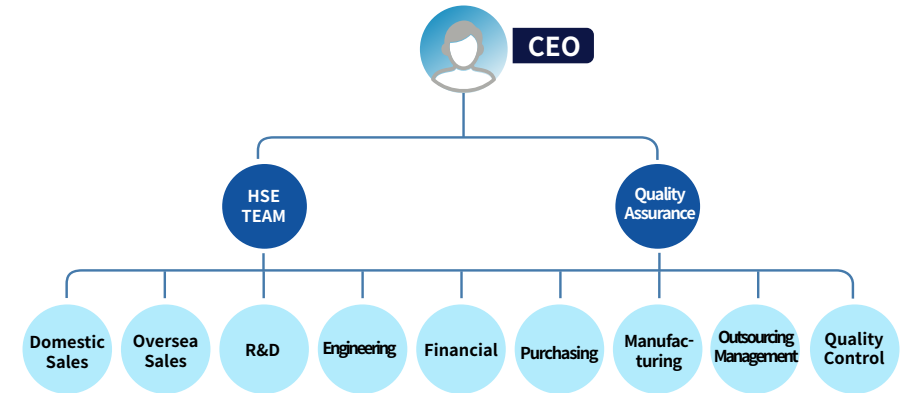
1.3 Annual Turnover and Sales



Annual Sales Ratio



1.4 Organization Chart



1.5 OVERSEAS NETWORK



	YONEDA(Japan)		HSD(China-Dalian)		FASTLINE(Oman)
	HANKOOK ENG(Singapore)		CM Marine(China-Shenzhen)		ALMADAR(Bahrain)
	Next Petroleum(Malaysia)		DAFF(Abu Dhabi)		UNITED ENG(Kuwait)
	HYPRECISION(India)		DUTCO(UAE)		Hosanna (Nigeria)
	ATTATECH(Thailand)		AWJ (Saudi Arabia)		CORPEQ(Mexico)
	NSIC(Vietnam)		TI SYSTEMS(Russia)		Renaissance T&C(Qatar)
			IOS(Egypt)		CUNADO(Spain)

2. FACTORY INFORMATION

2.1 HSE of Factory

2.2 Introduction

2.3 Find US and Contact US

2.4 List of Machine and Equipment



FACTORY INFORMATION

2.1 HSE of Factory

HSE POLICY

Health Safety Environment

We try to address customer, employee, the general concerned satisfaction as we contribute to improve risk about the potential environmental aspects and safety and preservation of health. We keep for the product that is safe, make cleaner and pressure vessel, the production process, paint coating and process in all production.

We also try to improve work condition by establishing measures of reducing risk by monitoring and proper the safety level of management, so that it doesn't happen. Control of the worker's safety and preservation of health, and continue to improve environment aspects, as establish measures of major risk and environmental influence through responsibility of risk in all process about design, purchase, production and delivery for products, in an order for cleaner and safer process.

We try to make efforts in order that it doesn't occur the risk of injury and occupational disease and in order to ensure an available level of training and technical aspects through HSE activities for evaluation.

We prepare the corporate atmosphere that is to the staff to understand and to participate on voluntary basis through establishing and promoting HSE goals.

We try to achieve HSE related domestic laws and other requirements by setting high level of them, as set up enhanced internal standards.

WOOSUNG FLOW TEC
The President of Company
CHO YOUNG-JE

EVACUATION MAP FOR FACTORY

Health Safety Environment

FACTORY (A-G BAY)

Exit routes: Exit 1, Exit 2, Exit 3, Exit 4, Exit 5, Exit 6, Exit 7, Exit 8, Exit 9, Exit 10, Exit 11, Exit 12, Exit 13, Exit 14, Exit 15, Exit 16, Exit 17, Exit 18, Exit 19, Exit 20, Exit 21, Exit 22, Exit 23, Exit 24, Exit 25, Exit 26, Exit 27, Exit 28, Exit 29, Exit 30, Exit 31, Exit 32, Exit 33, Exit 34, Exit 35, Exit 36, Exit 37, Exit 38, Exit 39, Exit 40, Exit 41, Exit 42, Exit 43, Exit 44, Exit 45, Exit 46, Exit 47, Exit 48, Exit 49, Exit 50, Exit 51, Exit 52, Exit 53, Exit 54, Exit 55, Exit 56, Exit 57, Exit 58, Exit 59, Exit 60, Exit 61, Exit 62, Exit 63, Exit 64, Exit 65, Exit 66, Exit 67, Exit 68, Exit 69, Exit 70, Exit 71, Exit 72, Exit 73, Exit 74, Exit 75, Exit 76, Exit 77, Exit 78, Exit 79, Exit 80, Exit 81, Exit 82, Exit 83, Exit 84, Exit 85, Exit 86, Exit 87, Exit 88, Exit 89, Exit 90, Exit 91, Exit 92, Exit 93, Exit 94, Exit 95, Exit 96, Exit 97, Exit 98, Exit 99, Exit 100.

HSE ACTIVITIES

Health Safety Environment

LABOR & MANAGEMENT JOINT PATROL

- Safety check all of site
(Every other week Tuesday 2 PM)

STRETCHING & YTM

Carry out YTM with manager attending and inform worker of today's hazard (Before work start)



2.2 Introduction

Company Address

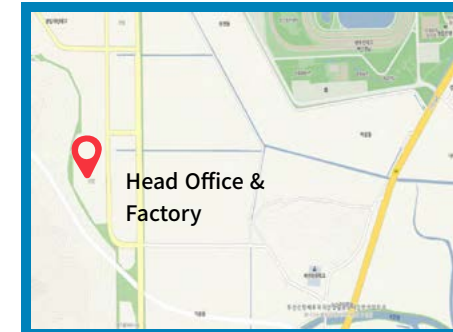
Company Name	WOOSUNG FLOWTEC Co.,Ltd	Owned by	Young-je Cho
Address	Head Office & 1st Factory	27, Mieum-sandan 3-ro, Gangseo-gu, Busan, Republic of Korea TEL : 82-51-831-1533 FAX : 82-51-831-1534	
	2nd Factory	48, Noksan-sandan 27-ro, Gangseo-gu, Busan, Republic of Korea TEL : 82-51-831-1533 FAX : 82-51-831-1534	

Factory Area

Description	Ground Area	Building Area	Total Floor Space	Outside Area	Ownership
1st Factory	8,321 m ²	5,736 m ²	7,464 m ²	2,585 m ²	Owner <input checked="" type="checkbox"/> Lease <input type="checkbox"/>
2nd Factory	1,515 m ²	909 m ²	944 m ²	606 m ²	Owner <input checked="" type="checkbox"/> Lease <input type="checkbox"/>
Total	9,836 m²	6,645 m²	8,408 m²	3,191 m²	

2.3 Find US and Contact US

Head Office (Busan Mieum)



The Corporation was Changed to 'WOOSUNG FLOWTEC'
The Corporation was Changed to WOOSUNG Strainer Company

TEL. +82-51- 831-1532
FAX. +82-51- 831-1534

E-Mail : biz@woosungflowtec.com

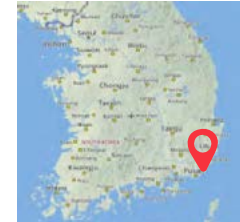
2nd Factory (Busan Noksan)



2nd Factory
48, Noksan-sandan 27-ro, Gangseo-gu,
Busan, Republic of Korea

TEL. +82-51- 831-1532
FAX. +82-51- 831-1534

E-Mail : biz@woosungflowtec.com



2.4 List of Machine and Equipment

Name of Equipment	Capacity	Maker	Q'ty
LATHE	JUMBO 1000*3000	TUDA SEISAKUSH, CO	1
	DYNA-1200	KYOKUTO	1
	HL580 * 2000G	HWACHEON	1
	580*1500	HWACHEON	1
	TIPL-5 (530*1050)	Tongil	1
	CLL1000	CHUBU KOKI	1
BORING MACHINE	90TL (DIA700 * 1300L)	Hamburg Rieckermann	1
MILLING MACHINE	TMVH-2	Tongil	1
DRILLING MACHINE	DA1300R	Daewoo	1
	SDR1500	JOGWANG	1
	RE2-1450A	OOYA	1
	DUA560	Woochang	1
	HTD-025	Heenam Precision	1
	WSDT 13MM	Heenam Precision	1
TUNING MACHINE	D2000 * H1500	NKK	1
HOIST	0.5/2/2.8/5/10 Ton	BANDO CRANE	4+5+4+8+2=23
CO2 WELDER	MAG600	Daewoo	10
	NW-650GX	Daewoo	1
TIG WELDER	350A	NEWCENTURY WELDER	22
	350A/500A	NEWCENTURY WELDER	15
ARC WELDER	12KW	NEWCENTURY WELDER	1
	DANDI-500	NEWCENTURY WELDER	1
PLASMA MACHINE	120A	NEWCENTURY WELDER	4
HYDROSTATIC MACHINE	1500*1300	-	1
	2000*900	-	1
	4600*1600	Kyungsae	1
FOLKLIFT	3 TON	Clark	3

SCREW COMPRESSOR	2000L	KYUNGWON	1
		KYUNGWON	1
	50HP	KYUNGWON	1
TURN TABLE	1HP / 3HP	-	4+1=5
	SEME-AUTOMATIC	-	1
	930*770	-	1
	1150*1200	-	1
ROLLER	3HP		1
O2 CUTTER	3750*1220*3100		1
CUTTER	6.5T*2515	AIZAWA SHEARS	1
CONVEYER PAINTING ROOM	1100*1300*1300	CHUNGSONG MACHINERY	1
LARGE PAINTING ROOM	2000*2200*2200	CHUNGSONG MACHINERY	1
SHOT BLASTER	2300*2300*2500	CHUNGSONG MACHINERY	1
LARGE DRY ROOM	1100*1300*1300	CHUNGSONG MACHINERY	1
DRY ROOM	3200*2600*2200	CHUNGSONG MACHINERY	1
	2600*2600*2200	CHUNGSONG MACHINERY	1
INLET MOLD	1300*2700	-	1
CUTTER	1500*700	-	1
PRESS MACHINE	0.5 TON	-	1
PUNCHING MACHINE	900*400 / 1700*1300	AMADA	2
	3000*110	NAGAO IRON WORKS	2
HYDRAULIC TORQUE WRENCH	S11000 / S25000	ENERPAC	2
SPOT WELDER	SC680A / SC680H	NEWCENTURY WELDER	1+2=3
	TETRA-222H	NEWCENTURY WELDER	1
	SPOT 1500A	NEWCENTURY WELDER	1
ROTATOR	TE-F	-	1
ROLLING MACHINE	800*400~2700*1650	-	6
ROTATOR	2HP	-	1
GRINDER	300*200	HANKOOK	1
RADIOGRAPHY ROOM			1

3. EXPERIENCE

Experience Of Domestic

Experience Of Overseas – END USER

Experience Of Overseas - EPC

3.1 Onshore

3.2 Offshore

3.3 Overseas



▪ Experience Of Domestic ▪



▪ Experience Of Overseas – END USER ▪



▪ Experience Of Overseas – END USER ▪



▪ Experience Of Overseas - EPC ▪





Onshore

3.1 Onshore

Customer	End User	Project	Products	Q,ty	Date	Location
SAMSUNG SAUDI ARABIA (SSA)	ARAMCO	HUGRS	Y STR, TEE STR, BUCKET STR etc	135EA	2021.08	Saudi Arabia
SAMSUNG ENGINEERING	LONGSON	LSP High density polyethylene (HDPE)	Y STR, TEE STR etc	232EA	2020.05	Thailand
SAMSUNG ENGINEERING	LONGSON	LSP polypropylene (PP)	Y STR, TEE STR, BUCKET STR etc	189EA	2020.05	Thailand
SAMSUNG ENGINEERING	ADNOC	ADNOC REFINING Crude Flexibility Project(CFP)	Y & TEE & BUCKET STRAINER (UL:5EA, 44EA)	461EA	2019.09	U.A.E
SAMSUNG ENGINEERING	ADNOC	ADNOC REFINING Waste Heat Recovery Project(WHRP)	Y & TEE STRAINER (UL:2EA, 8EA)	38EA	2019.11	U.A.E
SAMSUNG ENGINEERING	PTTGC	Olefins Reconfiguration Project(ORP)	Dummy Spool	819EA	2019.06	Thailand
SAMSUNG ENGINEERING (THAIAND)	PTTGC	On-Purposed Teg Project	Y & TEE STRAINER	8EA	2019.04	Thailand
SAMSUNG ENGINEERING (THAIAND)	PTTLNG	In-Plant Power Generation Project	Y & TEE & BUCKET STRAINER	10EA	2018.07	Thailand
SAMSUNG ENGINEERING	PTT	WANGNOI (WCS)	T STRAINER	22EA	2018.01	Thailand
SAMSUNG ENGINEERING	PETRONAS	RAPID #6	Y , T & BASKET STRAINER	110EA	2017.11	Malaysia
SAMSUNG ENGINEERING	PETRONAS	RAPID #11	Y , T & BASKET STRAINER	114EA	2017.11	Malaysia
SAMSUNG ENGINEERING	SAMSUNG ELECTRONICS	Pyeongtaek Semiconductor P-PJT UT	Y STR 20" etc	113EA	2016.10	Korea
SAMSUNG ENGINEERING	ENI IRAQ B.V.	ENI - IRAQ ZUBAIR OIL FIELD DEVELOPMENT	Y STR, TEE STR	111EA	2016.06	Iraq
SAMSUNG ENGINEERING	ARAMCO	SHAYBAH IGHC #4	Y- STRAINER	211EA	2014.04	Saudi Arabia
SAMSUNG ENGINEERING	Skikda	Skikda Refinery PJT	Y-STRAINER 16" etc	60EA	2014.03	Algeria
SAMSUNG ENGINEERING	SAUDI ARAMCO TOTAL	SHAYBAH	BUCKET STRAINER etc	211EA	2013.09	Saudi Arabia
SAMSUNG ENGINEERING		MA'ADEN ALUMINUM ROLLING	Y-STRAINER 16" etc	8EA	2012.05	Saudi Arabia
SAMSUNG ENGINEERING	Samsung Ingenieria Energia S.A.DE C.A	NORTE 2 CCGT POWER PJT	Y- STRAINER	6EA	2012.01	Mexico
SAMSUNG ENGINEERING		WASIT COGEN & GENERATION	TEE STRAINER 18" etc	11EA	2012.01	Saudi Arabia
SAMSUNG ENGINEERING	PETRONAS CARIGALISDN.BHD	PCSB SOGT PROJECT	BUCKET- STRAINER etc	83EA	2011.12	Malaysia
SAMSUNG ENGINEERING	PETROTRIN	PETROTRIN ULSD PJT	Y- STRAINER	79EA	2011.07	Trinidad and Tobago
SAMSUNG ENGINEERING	Ruwais Fertilizer Industries	FERTIL EXPANSION PROJECT (FERTIL-2)	Y- STRAINER etc	172EA	2011.07	U.A.E
SAMSUNG ENGINEERING	CHIYODA	PACKAGE4(COKER UNIT)FOR JUBAIL	T-TYPE STRAINER	500EA	2011.02	Saudi Arabia
SK Engineering & Construction	SK Energy	S-PJT(VRDS) 2nd	TEE STRAINER	12EA	2019.07	Korea
SK Engineering & Construction	SK IPC	Blo energy	TEE STRAINER	5EA	2019.07	Korea
SK Engineering & Construction	SK Energy	S-PJT(VRDS)	Y STR, TEE STR, BUCKET STR	199EA	2019.07	Korea
SK Engineering & Construction	KOREA SOUTH-EAST POWER Co.	GOSUNG GREEN POWER(2nd)	Y STRAINER	11EA	2019.05	Korea
SK Engineering & Construction	PTTGC POLYOLS	POLYOLS(2ND)	TEE & Y STRAINER	83EA	2019.04	Thailand

3.1 Onshore

Customer	End User	Project	Products	Q,ty	Date	Location
SK Engineering & Construction	PTTGC POLYOLS	POLYOLS	TEE & Y STRAINER	311EA	2019.01	Thailand
SK Engineering & Construction	KOREA SOUTH-EAST POWER Co.	GOSUNG GREEN POWER	Y & TEE STRAINER	22EA	2018.07	Korea
SK Engineering & Construction	SK Energy	S-PJT(2ND)	TEE STRAINER	15EA	2018.06	Korea
SK Engineering & Construction	SK Energy	S-PJT	Y & TEE STRAINER	24EA	2018.03	Korea
SK Engineering & Construction	SK Energy	NO.2 SRP EXPENSION	TEE STRAINER	8EA	2018.02	Korea
SK Engineering & Construction	Boryeong LNG Terminal Co., Ltd	Boryeong LNG	Y & TEE STRAINER	6EA	2018.02	Korea
SK Engineering & Construction	SK ENERGY	SBM NO.5 01A	TEE STR, BUCKET STR	34EA	2017.12	Korea
SK Engineering & Construction	Nghi Son Refinery & Petrochemical Limited Liability Company	NSRP Complex_ADD	TEMPORARY STR 6"	6EA	2017.12	Vietnam
SK Engineering & Construction	Nghi Son Refinery & Petrochemical Limited Liability Company	NSRP Complex_ADD	TEMPORARY STR 6"	1EA	2017.11	Vietnam
SK Engineering & Construction	SK GAS Co., Ltd	SKG Ulsan BALL TANK	Y STR, TEE STR, BUCKET STR	8EA	2017.11	Korea
SK Engineering & Construction	Nghi Son Refinery & Petrochemical Limited Liability Company	NSRP Complex_ADD	TEMPORARY STR 6"	4EA	2017.09	Vietnam
SK Engineering & Construction	Fort Hills Energy Limited Partnership	FORT HILLS SECONDARY EXTRACTION (SB) Add	Y STR 3"	1EA	2017.08	Canada
SK Engineering & Construction	E-CL S.A.	RED DRAGON / PIEM PROJECT	Y, BUCKET, DUPLEX STR, TEMPORARY STR	14EA	2017.06	Chile
SK Engineering & Construction	SK INNOVATION	LIBS#10,#11 PROJECT	TEMPORARY STRAINER 6"	11EA	2017.06	Korea
SK Engineering & Construction	Nghi Son Refinery & Petrochemical Limited Liability Company	NSRP Complex	TEMPORARY STR 20"	9 EA	2016.12	Vietnam
SK Engineering & Construction	SK IPC	Process development	Y STR, TEE STR	25EA	2016.11	Korea
SK Engineering & Construction	ARAMCO OVERSEAS COMPANY B.V.	JAZAN PJT(PKG #9) UNIT J05	TEE STR, BUCKET STR, Y STR, TEMPORARY STR	184EA	2016.11	Saudi Arabia
SK Engineering & Construction	ARAMCO OVERSEAS COMPANY B.V.	JAZAN PJT(PKG #9) UNIT J70/J77	TEE STR, Y STR, TEMPORARY STR	59EA	2016.11	Saudi Arabia
SK Engineering & Construction	Fort Hills Energy Limited Partnership	FORT HILLS SECONDARY EXTRACTION (M1)	Y STR 4"	2EA	2015.11	Canada
SK Engineering & Construction	Fort Hills Energy Limited Partnership	FORT HILLS SECONDARY EXTRACTION (M2)	Y STR 6"	3EA	2015.11	Canada
SK Engineering & Construction	Fort Hills Energy Limited Partnership	FORT HILLS SECONDARY EXTRACTION (SB)	Y STR, TEMPORARY STR	178EA	2015.11	Canada
SK Engineering & Construction	SK GAS Co., Ltd	SK GAS ULSAN PDH	TEE, Y, TEMPORARY STR, BELL MOUTH	156EA	2015.06	Korea
DAELIM INDUSTRIAL	Hyundai Chemical	HPC PCK-3	TEE STR, Y STR, TEMPORARY STR	92EA	2020.12	Korea
DAELIM INDUSTRIAL	PETROCHEMICAL DIVISION OF DAELIM	EPO PJT(2nd)	TEE STR	3EA	2019.06	Korea
DAELIM INDUSTRIAL	PETROCHEMICAL DIVISION OF DAELIM	EPO PJT	TEE & BUCKET & TEM STR.	10EA	2019.04	Korea
DAELIM INDUSTRIAL	SAN BUENAVENTURA POWER LTD. CO.	Philippines San Buenaventura 500MW Supercritical CFPP 2 nd	Y & TEE & BUCKET	17EA	2017.11	Philippines
DAELIM INDUSTRIAL	SAN BUENAVENTURA POWER LTD. CO.	Philippines San Buenaventura 500MW Supercritical CFPP 3 rd	Y STR 6"	2EA	2017.11	Philippines

3.1 Onshore

Customer	End User	Project	Products	Q,ty	Date	Location
DAELIM INDUSTRIAL	DAELIM Philippines Inc.	Philippines Pagbilao 420MW unit 3 Coal Fired Power	TEE STR 12", 14"	7EA	2017.09	Philippines
DAELIM INDUSTRIAL	SAN BUENAVENTURA POWER LTD. CO.	Philippines San Buenaventura 500MW Supercritical CFPP 1 st	DUPLEX STR, Y STR, TEMPORARY STR	11EA	2017.09	Philippines
DAELIM INDUSTRIAL	PETROCHEMICAL DIVISION OF DAELIM	E-PROJECT	TEE STR, TEMPORARY STR	4EA	2017.05	Korea
DAELIM INDUSTRIAL	TNB MANJUNG FIVE SDN BHD	Malaysia TNB Fast Track 3A	TEMPORARY STR 18"	3EA	2017.04	Malaysia
DAELIM INDUSTRIAL	DAELIM Industrial Co., Ltd.	Poseung Biomass Cogeneration	Y STR, TEE STR	28EA	2017.03	Korea
GS E&C Corporation	LG CHEMICAL	LG CHEM 6AA Project	B & Y STR 24" etc	141EA	2018.06	Korea
GS E&C Corporation	KUWAIT OIL COMPANY (K.S.C)	New Water Centre(NWC) IN NORTH KUWAIT 2 nd	BIRD SCREEN	11EA	2017.12	Kuwait
GS E&C Corporation	KUWAIT OIL COMPANY (K.S.C)	New Water Centre(NWC) IN NORTH KUWAIT 2 nd	DUPLEX, Y, CONICAL STR, BIRD SCREEN	94EA	2017.08	Kuwait
GS E&C Corporation	ABU DHABI OIL REFINING COMPANY (TAKREER)	RUWAI REFINERY WEST (RRW) UNIT RESTORATION PJT	Y STR, BUCKET STR, TEE STR	95EA	2017.10	U.A.E
GS E&C Corporation	KOREA PETROCHEMICAL IND. CO., LTD.	KPIC ONE PJT_1st	Y STR, TEE STR, BUCKET STR	95EA	2017.10	Korea
GS E&C Corporation	KOREA PETROCHEMICAL IND. CO., LTD.	KPIC ONE PJT_2nd	Y STR, TEE STR	29EA	2017.10	Korea
GS E&C Corporation	KOREA PETROCHEMICAL IND. CO., LTD.	KPIC ONE PJT_3rd	Y STR, TEE STR	6EA	2017.10	Korea
GS E&C Corporation	KOREA PETROCHEMICAL IND. CO., LTD.	KPIC ONE PJT for NET System 1st	Y STR, TEE STR	11EA	2017.10	Korea
GS E&C Corporation	Egyptian Refining Company (ERC) S.A.E.	ERC Refinery PJT	Y & TEE & BUCKET &	221EA	2017.07	Egypt
GS E&C Corporation	Uz-Kor Gas Chemical LLC	UGCC EHTYLENE PLANT	TEE STRAINER 6" etc	45EA	2013.11	Uzbekistan
GS E&C Corporation	KNOC	BLACKGOLD	Y-STRAINER 2" etc	67EA	2013.01	Canada
Hyundai Engineering Co., Ltd	Sonelgaz	BISKRA 1600MW CCPP	FILTER FOR T-STRAINER 20"	16EA	2019.04	Algeria
Hyundai Engineering Co., Ltd	Sonelgaz	JUJEL 1600MW CCPP	FILTER FOR T-STRAINER 20"	16EA	2019.04	Algeria
Hyundai Engineering Co., Ltd	PETRONAS	MELAKA	BUCKET STR. 24" etc	128EA	2018.09	Malaysia
Hyundai Engineering Co., Ltd	P.T.Asahimas Chemical	ACS PHASE-VI	Cone Strainer	8EA	2018.06	Indonesia
Hyundai Engineering Co., Ltd	PT. PLN(PERSERO)	KALSEL TENG 2 CFSP (2X100M) Project	Y, TEE, DUPLEX STR	20EA	2018.06	Indonesia
Hyundai Engineering Co., Ltd	JSC "TAKHIATASH TPP"	TAKHIATASH POWER PLANT EFFICIENCY IMPROVEMENT	Y, TEE, DUPLEX STR	36EA	2018.06	Uzbekistan
Hyundai Engineering Co., Ltd	OLTN YO'L GTL	UZBEKISTAN GAS TO LIQUID PJT	B, Y & TEE STRAINER etc	375EA	2018.06	Uzbekistan
Hyundai Engineering Co., Ltd	KUWAIT NATIONAL PETROLEUM COMPANY	KUWAIT AL-ZOUR LNG IMPORT PJT	B-STRAINER 30" etc	125EA	2018.06	Kuwait
Hyundai Engineering Co., Ltd	Tanjung Power Indonesia	Therma Visayas Energy PJT (TVEP)	Y-STRAINER 1", 4"	4EA	2017.08	Indonesia
Hyundai Engineering Co., Ltd	Therma Visayas, Inc.,	Therma Visayas Energy PJT (TVEP)	Y, TEE STR, DUPLEX STR	25EA	2016.04	Philippines
Hyundai Engineering Co., Ltd	Aboitiz Power	TVEP THERMA VISAYAS PJT	T-STRAINER 3" etc	100EA	2016.04	Philippines
Hyundai Engineering Co., Ltd	ASHUGANJ POWER	ASHUGANJ	Y-STRAINER 8" etc	20EA	2014.11	Bangladesh

3.1 Onshore

Customer	End User	Project	Products	Q,ty	Date	Location
Hyundai Engineering Co., Ltd	Sonelgaz	AIN ARNAT	B-STRAINER 10" etc	34EA	2014.07	Algeria
Hyundai Engineering Co., Ltd	the Ministry of Oil and Gas of Turkmenistan	TURKMENBASHI OIL REFINERIES	T-STRAINER 1" etc	270EA	2015.11	Turkmenbashi
Hyundai Engineering Co., Ltd	KENGEN	OLKIARIA 2ND	Y-STRAINER 4" etc	34EA	2013.05	Kenya
Hyundai Engineering & Construction	Hyundai Chemical	HPC PCK-1	TEE STR, Y STR, TEMPORARY STR	522EA	2020.11	Korea
Hyundai Engineering & Construction	CGN DAESAN	Daesan Biomass	BUCKET STR 20" etc	20EA	2019.02	Korea
Hyundai Engineering & Construction	Sarulla Operations Ltd	SARULLA GEOTHERMAL POWER PJT(IPON)	BUCKET STR 30" etc, Y STR, TEE STR	15EA	2017.05	Indonesia
Hyundai Engineering & Construction	Mirfa International Power & Water Company	MIRFA INDEPENDENT WPP	Y STR	2EA	2017.03	U.A.E
Hyundai Engineering & Construction	PDVSA PETROLEO, S.A. (PDVSA)	PDVSA RPLC DEEP	BUCKET STR, TEE STR, Y STR	290EA	2016.12	Venezuela
Hyundai Engineering & Construction	ADWEA & GDF	MIRFA	STRAINER 38" etc	94EA	2016.01	U.A.E
Hyundai Engineering & Construction	Mirfa International Power & Water Company	MIRFA INDEPENDENT WPP	Y, TEE, BUCKET STR, DUPLEX STR	64EA	2015.11	U.A.E
Hyundai Engineering & Construction	PDVSA	RPLC DEEP CONVERSION	BUCKET STRAINER 24" etc	226EA	2014.02	Venezuela
Hyundai Engineering & Construction	Vietnam Electricity	MONG DOUNG1	STRAINER 40" etc	56EA	2013.06	Vietnam
POSCO E&C	COSTA NORTE LNG TERMINAL, S. DE R. L.	PANAMA COSTA NORTE LNG	TEE STR, Y STR	12EA	2017.08	Panama
SAMSUNG C&T	Sonelgaz	ALGERIA MEGA DEAL CCPP (Mostaghanem Project)	BUCKET, DUPLEX, Y STR etc	66EA	2018.1	Algeria
SAMSUNG C&T	PETRONAS	RGT-2	Y-STRAINER 3", 4"	2EA	2017.11	Malaysia
SAMSUNG C&T	Singapore LNG Corporation	SINGAPORE LNG TERMINAL PHASE3 EX.(SLNG)	DUPLEX STR, Y STR etc	7EA	2016.11	Singapore
SAMSUNG C&T	Sonelgaz	ALGERIA MEGA DEAL CCPP (NAAMA Site)	BUCKET, DUPLEX, Y STR etc	63EA	2016.10	Algeria
SAMSUNG C&T	SAMSUNG TOTAL PETROCHEMICALSCO., LTD	STC NCC RECOVERY SECTION OPIMIZATION	TEE, Y STR	3EA	2015.01	Korea
Hanwha Engineering & Construction Corporation	Hanwha Total Petrochemical Corporation	SM#2 RX	Y-STRAINER	1EA	2019.02	Korea
Hanwha Engineering & Construction Corporation	Hanwha Total Petrochemical Corporation	A0J	TEE & Y-STRAINER	65EA	2019.01	Korea
Hanwha Engineering & Construction Corporation	Hanwha Chemical Corporation	THE PROJECT	BUCKET, TEE & Y-STRAINER	273EA	2018.12	Korea
Hanwha Engineering & Construction Corporation	Hanwha Total Petrochemical Corporation	CFU/ARO2 DEBOTTLENECKING	TEE STR, TEMPORARY STR	6EA	2017.02	Korea
Hanwha Engineering & Construction Corporation	Hanwha Total Petrochemical Corporation	EVA2 Reamping	TEE STRAINER 3"	2EA	2016.06	Korea
SEA LOUISIANA LLC	LOTTE CHEMICAL	LOTTE CHEMICAL MEG	BIRD SCREEN 4"	5EA	2017.02	USA
SEA LOUISIANA LLC	LOTTE CHEMICAL	LOTTE CHEMICAL MEG	BELL MOUTH 42"	5EA	2017.02	USA
SEA LOUISIANA LLC	LOTTE CHEMICAL	LOTTE CHEMICAL MEG	TEE STRAINER 24"	109EA	2017.01	USA
LOTTE E&C	Hyundai Chemical	HPC PCK-2	TEE STR, Y STR, TEMPORARY STR	389EA	2020.08	Korea
LOTTE E&C	LOTTE BP CHEMICAL CO.,LTD	A-PROJECT	TEE & Y, TEMPORARY STR	15EA	2019.02	Korea

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Customer	End User	Project	Products	Q,ty	Date	Location
LOTTE E&C	PT. PERUSAHAAN LISTRIK NEGARA (PERSERO)	GRATI CCPP PJT	BUCKET STR 20" etc DUPLEX STR 12", Y STR 4"	21EA	2017.07	Indonesia
LOTTE E&C	KOREA DISTRICT HEATING CORP.	Gwangju-Jeonnam District energy	BUCKET STR, TEE STR DUPLEX STR, Y STR	21EA	2016.12	Korea
LOTTE E&C		DAEGU INNOCITY	TEE STRAINER 12" etc	11EA	2013.11	Korea
DAEWOO E&C	KOREA SOUTHERN POWER CO.,LTD	NAM-JEJU COMBINED CYCLE POWER PLANT	Y,DUPLEX, TEMPORARY STR.	18EA	2019.08	Korea
DAEWOO E&C	KOREA WESTERN POWER CO.,LTD	Shin-Pyeongtaek Combined Cycle Power Plant Project	BUCKET STR, Y STR	50EA	2018.03	Korea
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	Y-STRAINER 1 1/2"	197EA	2017.12	Kuwait
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	Y-STRAINER 2"	3EA	2017.12	Kuwait
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	Y-STR	7EA	2017.11	Kuwait
DAEWOO E&C	S-OIL	S-OIL Residue Upgrading Complex	BELL MOUTH 48" etc	14EA	2017.10	Korea
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	BUCKET STR, TEE STR, Y STR	56EA	2017.10	Kuwait
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	Y STR 16" etc	238EA	2017.09	Kuwait
DAEWOO E&C	KIPIC/ FDH JV	KNPC ZOR PJT at Al-Zour	BUCKET STR, TEE STR, Y STR	135EA	2017.09	Kuwait
DAEWOO E&C	KOREA WESTERN POWER CO.,LTD	GUNSAN THERMAL POWER GENERATION	Y-STRAINER 600# 8"	2EA	2009.12	Korea
KEPCO KSP	GUNSAN THERMAL POWER GENERATION	SITE OF COMBINED CYCLE MAJOR COMPONENTS	FILTER	2EA	2010.04	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Sin Seocheon	Y STR	7ea	2019.03	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Sin Seocheon	DUPLEX STR	6ea	2019.01	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOREA SOUTH-EAST POWER Co.	Yeongheung ZLD	TEMPORARY STR. 26" etc	26EA	2018.04	Korea
Doosan Heavy Industries & Construction Co., Ltd.	MEW	DOHA RO	TEMPORARY STR. 26"	7EA	2017.12	Kuwait
Doosan Heavy Industries & Construction Co., Ltd.	Vietnam Machinery Installation Corp. (LILAMA)	SONG HAU 1 (2x600MW) THERMAL POWER PLAN (TURBIN)	DUPLEX STR, Y STR	16EA	2017.10	Vietnam
Doosan Heavy Industries & Construction Co., Ltd.	MEW	DOHA RO	TEMPORARY STR. 16"	80 EA	2017.10	Kuwait
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Seoul Power TG	Y-STRAINER 2 1/2"	2EA	2017.08	Korea
Doosan Heavy Industries & Construction Co., Ltd.	Vietnam Machinery Installation Corp. (LILAMA)	SONG HAU 1 (2x600MW) THERMAL POWER PLANT (BOP)	Y-STRAINER 8", 10", 12"	8EA	2017.07	Vietnam
Doosan Heavy Industries & Construction Co., Ltd.	Vietnam Machinery Installation Corp. (LILAMA)	SONG HAU 1 (2x600MW) THERMAL POWER PLANT (BLR)	DUPLEX STR 6", Y STR, TEMPORARY STR	6EA	2017.05	Vietnam
Doosan Heavy Industries & Construction Co., Ltd.	MEW	DOHA VESSEL REMIN	TEMPORARY STRAINER 6"	11EA	2017.05	Kuwait
Doosan Heavy Industries & Construction Co., Ltd.	Doosan Heavy Industries Muscat LLC	AL ANSAB PH.2	BUCKET STRAINER 300A	1EA	2017.03	Oman
Doosan Heavy Industries & Construction Co., Ltd.	KOREA ELECTRIC POWER CORPORATION(KEPCO)	BNPP #1-4	DUPLEX STR 150# 3", 4", 5", 6"	24EA	2016.12	U.A.E
Doosan Heavy Industries & Construction Co., Ltd.	ENGIE ENERGIA CHILE S.A.	RED DRAGON / PIEM FGD	TEMPORARY STRAINER 3", 4", 5", 34", Y STR 4", 5"	23EA	2016.12	Chile
Doosan Heavy Industries & Construction Co., Ltd.	KoreaDistrict Heating Corp.	Hwasung, Dongtan #1&2 District Energy	Y-STRAINER 8" etc	18EA	2016.06	Korea

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Customer	End User	Project	Products	Q,ty	Date	Location
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Seoul Power #1,2 HRSG	Y-STR, TEMPORARY STR	28EA	2016.05	Korea
Doosan Heavy Industries & Construction Co., Ltd.	SALINE WATER CONVERSION CORPORATION	RAS AL KHALIJ	Y-STRAINER 3"	2EA	2016.03	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.	SALINE WATER CONVERSION CORPORATION	YANBU3	DUPLEX-TYPE STR. 5"	1EA	2016.03	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.	Saudi Electricity Company	DUBA #1&2 HRSG	Y-STRAINER 12" etc	8EA	2015.12	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.		SALEM HAVOR HRSG	Y-STRAINER 6" etc	6EA	2015.12	USA
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	SIN BORYEONG TG #1&2	DUPLEX OIL STR 150# 3", 4"	4EA	2015.09	Korea
Doosan Heavy Industries & Construction Co., Ltd.	MARAFIQ	MARAFIQ #5&6	DUPLEX OIL STRAINER 2"	2EA	2015.05	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.	KOREA ELECTRIC POWER CORPORATION(KEPCO)	SIN HANUL #1 & 2	Y-STRAINER 4"	2EA	2015.05	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOREA SOUTH-EAST POWER CO.	YEOSU #1 POWER PLANT	DUPLEX-TYPE STR 4"	1EA	2015.04	Korea
Doosan Heavy Industries & Construction Co., Ltd.	Hyundai Engineering & Construction	Talimarjan Thermal Power Plant Expansion	Y-STRAINER 6" etc	8EA	2015.03	Uzbekistan
Doosan Heavy Industries & Construction Co., Ltd.	HANAM ENERGY SERVICE	HANAM CHP	TEE STRAINER 16"	1EA	2015.01	Korea
Doosan Heavy Industries & Construction Co., Ltd.		HANAM CHP	TEE STRAINER 150# 16"	1EA	2015.01	Korea
Doosan Heavy Industries & Construction Co., Ltd.	OCI	SAEMANGEUM BOP&BLR	BUCKET , TEE , Y STRAINER etc.	36EA	2014.12	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	SIN BORYEONG TG #1,2	DUPLEX STRAINER 150# 3", 4"	4EA	2014.11	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOREA HYDRO & NUCLEAR POWER CO.,LTD	SIN HANUL	Y STRIANER 150# 4"	2EA	2014.09	Korea
Doosan Heavy Industries & Construction Co., Ltd.	Hanwha Engineering & Construction	YANBU2 BLR	BUCKET STRAINER 150# 8" etc.	6EA	2014.07	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	SIN BORYEONG 1,2	DUPLEX STRAINER 300# 6" etc.	6EA	2014.04	Korea
Doosan Heavy Industries & Construction Co., Ltd.	KOREA ELECTRIC POWER CORPORATION(KEPCO)	BNPP #1-4	DUPLEX STRAINER 150# 3", 4", 5", 6"	24EA	2014.04	U.A.E
Doosan Heavy Industries & Construction Co., Ltd.		Se Jong Cogeneration	TEE STRAINER 150# 18"	1EA	2013.06	Korea
Doosan Heavy Industries & Construction Co., Ltd.		Yang Ju Cogeneration	TEE STRAINER 150# 18"	1EA	2013.04	Korea
Doosan Heavy Industries & Construction Co., Ltd.		Se Jong Cogeneration	BUCKET STRAINER 150# 1 2"	3EA	2013.03	Korea
Doosan Heavy Industries & Construction Co., Ltd.	DAELIM Industrial Co., Ltd.	Pocheon LNG Power Plant	TEE STRAINER 150# 20"	2EA	2013.02	Korea
Doosan Heavy Industries & Construction Co., Ltd.	AES-VCM	MongDuong2 BLR	DUPLEX STRAINER 300# 4"	8EA	2012.12	Vietnam
Doosan Heavy Industries & Construction Co., Ltd.	Hanjin Heavy Industries	Yangju CHPP	Y STRAINER 300# 2"	2EA	2012.12	Korea
Doosan Heavy Industries & Construction Co., Ltd.	AES-VCM	MongDuong2 BOP	DUPLEX STRAINER 3",4",8"	48EA	2012.12	Vietnam
Doosan Heavy Industries & Construction Co., Ltd.		Yang Ju Cogeneration	Y STRAINER 600# 3/4",2"	2EA	2012.12	Korea
Doosan Heavy Industries & Construction Co., Ltd.		Sin-Gori #1&2	Y STRAINER 300# 3"	3EA	2012.12	Korea
Doosan Heavy Industries & Construction Co., Ltd.	General Electric	Erzin CC Power Plant	Y STRAINER 1500# 3",600# 3"	4EA	2012.10	Turkey

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Customer	End User	Project	Products	Q,ty	Date	Location
Doosan Heavy Industries & Construction Co., Ltd.	Hanwha Engineering & Construction	YANBU2 BLR	DUPLEX STRAINER 600# 1.1/2"	124EA	2012.09	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.	KOREA SOUTH-EAST POWER Co.	Yeongheung unit 5&6	DUPLEX STRAIENR 300# 6"	2EA	2012.08	Korea
Doosan Heavy Industries & Construction Co., Ltd.		Marafiq MED	Bucket STRAINER 36"	26EA	2012.06	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.		RRP2 TG	Y STRAINER 300# 4"	4EA	2012.04	Saudi Arabia
Doosan Heavy Industries & Construction Co., Ltd.		QATALUM PJT	BUCKET STRAINER 18" etc	18EA	2011.11	Qatar
KOLON GLOBAL CORPORATION	Busan City Gas / SK E&C	Myeongii District Energy	BUCKET STRAINER 20"	3EA	2016.11	Korea
KOLON e Engineering	KIPIC	ZOR	TEE STRAINER 14" etc.	107EA	2018.05	Kuwait
KOLON e Engineering	KIPIC	KLNG	Y STRAINER 150# 3" etc.	18EA	2018.04	Kuwait
GE POWER SYSTEMS KOREA	SIEMENS	BEER TUVIA	Y STRAINER	10EA	2019.03	Israel
GE POWER SYSTEMS KOREA	PT. PERUSAHAAN LISTRIK NEGARA (PERSERO)	GRATI CCPP(PEAKER) EXTENSION PJT 450MW	Y-STRAINER 2"	8EA	2017.07	Indonesia
GE POWER SYSTEMS KOREA		ERZIN	Y-STRAINER 3"	1EA	2017.05	Turkey
GE POWER SYSTEMS KOREA	SIEMENS	Santo Domingo de Los Oileros CC Conversion	TEMPORARY STR 3" etc	4EA	2016.12	Peru
Hyundai Heavy Industries Turbomachinery	IPP	FUJAIH 3 CEP	BUCKET STRAINER 20" etc	5EA	2021.04	UAE
Hyundai Heavy Industries Turbomachinery	IRT	JAWA9&10 CEP	BUCKET STR. 14"	2EA	2019.03	Indonesia
Hyundai Heavy Industries Turbomachinery	CGN DAESAN	Daesan Biomass	BUCKET STR. 8"	3EA	2018.11	Korea
Hyundai Heavy Industries Turbomachinery	PETRONAS	MELAKA BFP	BUCKET STR. 14"	3EA	2018.11	Malaysia
Hyundai Heavy Industries Turbomachinery	PT. PLN(PERSERO)	MUARA TAWAR BFP	DUPLEX STR. 10" etc	24EA	2018.06	Indonesia
Hyundai Heavy Industries Turbomachinery	KOREA SOUTH-EAST POWER Co.	SIN GORI 5&6	DUPLEX STR. 1-1/2"	12EA	2018.06	Korea
Hyundai Heavy Industries	SEC	SHUQAIQ	Y STRAINER 300# 1/2"	12EA	2015.03	Saudi Arabia
Hyundai Heavy Industries	DS POWER CO.,LTD	OSAN CHPP	BUCKET STR 150# 68", 26"	4EA	2015.02	Korea
Hyundai Heavy Industries	PTB Kuwait	Az-Zour North IWPP	TEE STRAINER 150# 30"	99EA	2014.09	Kuwait
BHI	IHI	NNEG	Y STRAINER	1EA	2019.08	Thailand
BHI	TPSC	SULSEL BARRU2	Y STRAINER	10EA	2019.07	Indonesia
BHI	MEW	SABIYAH CCGT	Y STRAINER	18EA	2019.10	Kuwait
BHI	Pohang ENI	POHANG 3sintering	TEM & Y STRAINER	8EA	2018.04	Korea
BHI	Pohang ENI	POHANG SRF	Y STRAINER	2EA	2018.03	Korea
BHI	SEPCO III	Azzour South Third Stage Conversion Project	Y-STR 2500LB 2-1/2" etc	9EA	2018.04	Kuwait
BHI	FOSTER WHEELER NORTH AMERICA	CLECO CANAL HEAT RECOVERY UNIT	Y-STRAINER 2" etc	3EA	2017.07	U.S.A.

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Customer	End User	Project	Products	Q,ty	Date	Location
BHI	AIE	HADREA PJT HRSG	Y-STRAINER 3" etc	3EA	2017.05	Israel
BHI	POSCO	Thermal Power Plant Retrofit	Y-STRAINER 300LB 2 1/2"	1EA	2017.04	Korea
BHI	POSCO	Thermal Power Plant Retrofit	BUCKET STRAINER 14", Y-STRAINER 10" etc	2EA	2017.02	Korea
BHI	TOSHIBA PLANT SYSTEMS & SERVICES CORPORATION	EGCO BANPONG Utilities SPP	Y-STRAINER 900LB 1 1/2"	4EA	2016.07	Thailand
BHI	POSCO-G	KWANG YANG #2 SINTER WHRB	BUCKET STR 10K 100A	4EA	2016.02	Korea
BHI	SIEMENS	WIRYE CHP	Y-STRAINER 2500LB 3" etc	7EA	2016.02	Korea
BHI	Calpine Mid-Merit II, LLC	YORK 2 HRSG	Y-STRAINER 2500LB 2 1/2" etc	4EA	2016.02	Pennsylvania
BHI	DAEWOO E&C	POCHON IPP	Y-STRAINER 6" etc	10EA	2015.10	Korea
BHI	CSP	BRAGIL CSP	Y STRAINER 2500# 4"	6EA	2013.10	Brazil
BHI	SIEMENS	DAEGU HRSG	Y-STRAINER 2500# 3 " 900# 3"	5EA	2013.09	Korea
Emerson Process Management Korea Ltd	MINISTRY OF OIL(SCOP)	KARBALA REFINERY PROJECT	BUCKET STRAINER 18" etc	12EA	2017.02	Iraq
HYORIM IND. INC.	PENGERANG LNG(TWO) SDN BHD.	RGT-2 TERMINAL PJT	BUCKET STRAINER 4"	2EA	2016.09	Malaysia
HYORIM IND. INC.	TNB MANJUNG FIVE SDN BHD	FAST TRACK 3A	DUPLEX OIL STRAINER 10"	1EA	2015.08	Malaysia
HyoSung GoodSprings	SK ENERGY	C3	TEE STRAINER	1EA	2019.07	Korea
HyoSung GoodSprings	KOREA HYDRO & NUCLEAR POWER CO.,LTD	Sin Wolsong	DUPLEX STRAINER 1-1/2"	2EA	2019.08	Korea
HyoSung GoodSprings	KOREA SOUTHERN POWER CO., LTD	NAM-JEJU COMBINED CYCLE POWER PLANT	DUPLEX STRAINER 6"	4EA	2019.07	Korea
HyoSung GoodSprings	GS E&C	DANJIN BIOMASS	BUCKET STRAINER 12",16"	4EA	2019.08	Korea
HyoSung GoodSprings	KOREA SOUTH-EAST POWER Co	GOSUNG GREEN POWER COP / CEP / BFP / LPHDP	BUCKET STR 28",20",16" TEMPORARY 18",12"	22EA	2019.02	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Sin Seocheon SWCP	DUPLEX STR. 32"	1EA	2018.10	Korea
HyoSung GoodSprings	PT. PERUSAHAAN LISTRIK NEGARA (PERSERO)	GRATI ADD-ON PJT CEP	TEE STRAINER 16"	3EA	2017.12	Indonesia
HyoSung GoodSprings	EVN	DOOSAN / VINH TAN4	BUCKET STRAINER 22"	3EA	2017.08	Vietnam
HyoSung GoodSprings	Sonelgaz	SCT / ALGERIA(MOSTAGHANEM)	BUCKET STRAINER 12"	4EA	2017.08	Algeria
HyoSung GoodSprings	CALIK ENERJI	MARY 3	Y-STRAINER 10"	8EA	2017.07	Turkey
HyoSung GoodSprings	Tanjung Power Indonesia	KALSEL-1 COAL FIRED POWER PLANT	BUCKET STRAINER 10"	8EA	2017.07	Indonesia
HyoSung GoodSprings	GS POWER CO.,LTD	ANYANG Combined Heat & Power plant#2 CEP	BUCKET STRAINER 14"	6EA	2017.06	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	GE/JEJU CCPP/CEP	BUCKET STRAINER 8"	6EA	2017.05	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	GE/JEJU CCPP/BFP	BUCKET STRAINER 6"	6EA	2017.04	Korea

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Customer	End User	Project	Products	Q,ty	Date	Location
HyoSung GoodSprings	DAELIM ENERGY	POSEUNG BIOMASS	BUCKET STRAINER 10"	2EA	2017.03	Korea
HyoSung GoodSprings	Sonelgaz	SCT / ALGERIA MEGA DEAL CCPP (NAAMA Site)	BUCKET STRAINER 12"	4EA	2016.10	Algeria
HyoSung GoodSprings	Sarulla Operations Ltd	SARULLA	Y-STRAINER 4"	2EA	2016.09	Indonesia
HyoSung GoodSprings	EEHC	WEST DAMIETTA	DUPLEX-TYPE STR 8"	6EA	2016.08	Egypt
HyoSung GoodSprings	PODOLSK	THERMOGAS MACHALA	Y-STRAINER 6"	6EA	2016.08	Russia
HyoSung GoodSprings	Therma Visayas, Inc.,	TVEP COP	BUCKET STRAINER 20"	4EA	2016.08	Philippines
HyoSung GoodSprings	KoreaDistrict Heating Corp.	Hwasung, Dongtan #1&2 District Energy BFP	Y-STRAINER 16"	4EA	2016.08	Korea
HyoSung GoodSprings	KOREA DISTRICT HEATING CORP.	HANSOL SeenTec/ Gwangju -Jeonnam District energy	BUCKET STRAINER 10"	3EA	2016.07	Korea
HyoSung GoodSprings	E-CL S.A.	SK E&C / RED DRAGON	BUCKET STRAINER 24"	2EA	2016.07	Chile
HyoSung GoodSprings	EEHC	WEST DAMIETTA	DUPLEX-TYPE STR 8"	12EA	2016.07	Egypt
HyoSung GoodSprings	EEHC	WEST DAMIETTA	TEE STRAINER 18"	8EA	2016.05	Egypt
HyoSung GoodSprings	Sonelgaz	BISKRA CCPP BFP	BUCKET STRAINER 14"	8EA	2016.04	Algeria
HyoSung GoodSprings	Sonelgaz	JJEL CCPP BFP	BUCKET STRAINER 14"	8EA	2016.04	Algeria
HyoSung GoodSprings	CHUNCHEON ENERGY CO.,LTD	POSCO E&C / CHUNCHEON ENERGY LP	BUCKET STRAINER 4"	2EA	2016.03	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Doosan/Seoul Power	BUCKET STRAINER 12"	4EA	2016.03	Korea
HyoSung GoodSprings	EVN	DOOSAN / VINH TAN4	BUCKET STRAINER 22"	6EA	2016.03	Vietnam
HyoSung GoodSprings	SAFI ENERGY COMPANY	DAEWOO E&C / SAFI BFP	BUCKET STRAINER 18"	4EA	2016.01	Morocco
HyoSung GoodSprings	KOREA ELECTRIC POWER CORPORATION(KEPCO)	JAE BNPP	DUPLEX OIL STR 1 1/2"	12EA	2015.12	U.A.E
HyoSung GoodSprings	SEC -PPP	SAMSUNG C&T / RABIGH2 BFP	BUCKET STRAINER 10"	8EA	2015.09	Saudi Arabia
HyoSung GoodSprings	Pocheon Power	DAEWOO E&C /Pocheon CCPP	BUCKET STRAINER 18"	4EA	2015.09	Korea
HyoSung GoodSprings	Pocheon Power	DAEWOO E&C /Pocheon CCPP	BUCKET STRAINER 16"	3EA	2015.08	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired SCWP	REDUCING PC'S 00"	10EA	2015.07	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired GSP	BUCKET STR 14", TEMPORARY STR, Y STR	8EA	2015.06	Korea
HyoSung GoodSprings	TNB MANJUNG FIVE SDN BHD	DAELIM /FAST TRACK 4A	BUCKET STRAINER 28"	3EA	2015.06	Malaysia
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired GSP	TEMPORARY STR 10"	6EA	2015.06	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired CBP	TEMPORARY STR 18"	6EA	2015.05	Korea
HyoSung GoodSprings	TNB MANJUNG FIVE SDN BHD	DAELIM /FAST TRACK 4A	TEMPORARY STR 10"	8EA	2015.04	Malaysia
HyoSung GoodSprings	SEC -PPP	SAMSUNG C&T / RABIGH2	BUCKET STRAINER 22"	6EA	2015.04	Saudi Arabia

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Customer	End User	Project	Products	Q,ty	Date	Location
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired SCWP	DUPLEX-TYPE STR 32"	2EA	2015.04	Korea
HyoSung GoodSprings	SEC -PPP	SAMSUNG C&T / RABIGH2	BUCKET STRAINER 22"	6EA	2015.04	Saudi Arabia
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired BFP	BUCKET STRAINER 20"	4EA	2015.04	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired COP	BUCKET STRAINER 28"	6EA	2015.04	Korea
HyoSung GoodSprings	Samsung C&T	RABIGH2 BFP	BUCKET STR 10" / 22"	10EA	2015.03	Saudi Arabia
HyoSung GoodSprings	DS POWER CO.,LTD	Osan District heating and cooling HP BFP	BUCKET STRAINER 14"	2EA	2015.02	Korea
HyoSung GoodSprings	DS POWER CO.,LTD	Osan District heating and cooling LP BFP	Y-STRAINER 5"	2EA	2015.02	Korea
HyoSung Goodsprings	DAELIM Industrial Co., Ltd.	FAST TRACK 3A	BUCKET STR 28" etc.	10EA	2015.02	Malaysia
HyoSung Goodsprings	KEPCO	OSAN POWER LP/HP BFP	BUCKET STR 14" etc.	4EA	2015.02	Korea
HyoSung GoodSprings	KOREA WESTERN POWER CO.,LTD	Taeon Thermal Power Plant Unit 9&10 Project COP	BUCKET STRAINER 28"	6EA	2015.01	Korea
HyoSung GoodSprings	KOREA WESTERN POWER CO.,LTD	Taeon Thermal Power Plant Unit 9&10 Project LPHDP	TEMPORARY STR 10"	4EA	2015.01	Korea
HyoSung GoodSprings	KOREA WESTERN POWER CO.,LTD	Taeon Thermal Power Plant Unit 9&10 Project	BUCKET STRAINER 20"	6EA	2015.01	Korea
HyoSung GoodSprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	Shin Boryeong Coal-Fired GSP	DUPLEX-TYPE STR 10"	1EA	2015.01	Korea
HyoSung GoodSprings	KOREA WESTERN POWER CO.,LTD	Taeon Thermal Power Plant Unit 9&10 Project CBP	TEMPORARY STR 18"	6EA	2015.01	Korea
HyoSung Goodsprings	POSCO	KHABAT BFP	BUCKET STRAINER 12"	6EA	2014.12	Iraq
HyoSung Goodsprings	Korea Electric Power Corporation	YEOSU #1 BFP	BUCKET STRAINER 14"	9EA	2014.11	Korea
HyoSung Goodsprings	Korea Electric Power Corporation	YEOSU #1 COP	BUCKET STRAINER 24"	2EA	2014.11	Korea
HyoSung Goodsprings	KOREA WESTERN POWER CO.,LTD	Taeon #9,10	BUCKET STRAINER 20"/16"	6EA	2014.11	Korea
HyoSung Goodsprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	SIN BORYEONG 1,2 GSP	BUCKET STRAINER etc.	12EA	2014.10	Korea
HyoSung Goodsprings	KOREA WESTERN POWER CO.,LTD	Taeon #9,10 LPHDP	TEMPOARY STRAINER 10"	4EA	2014.10	Korea
HyoSung Goodsprings	SK E&C	HANAM BFP	BUCKET STRAINER 18"	2EA	2014.10	Korea
HyoSung Goodsprings	KOREA WESTERN POWER CO.,LTD	Taeon #9,10 COP	BUCKET STRAINER 28"	6EA	2014.09	Korea
HyoSung Goodsprings	SK E&C	HANAM COP	BUCKET STRAINER 12"	6EA	2014.09	Korea
HyoSung Goodsprings	KOREA WESTERN POWER CO.,LTD	Taeon #9,10 CBP	TEMPORARY STR 18"	6EA	2014.09	Korea
HyoSung Goodsprings	KOREA SOUTHERN POWER CO.,LTD	SamCheok Green Power LPHDP	TEMPORARY STR 10"	2EA	2014.09	Korea
HyoSung Goodsprings	KOREA SOUTHERN POWER CO.,LTD	SamCheok #1.2 COP / CBP	BUCKET STR 28" etc.	6EA	2014.09	Korea
HyoSung Goodsprings	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	SIN BORYEONG 1,2	BUCKET STR 20"/16"	6EA	2014.08	Korea
SHIN SHIN MACHINERY CO., LTD	KOMIPO (KOREA MIDLAND POWER CO., LTD.)	GE/JEJU LNG CCPP CWP EC22	Y-STRAINER 16"	4EA	2017.04	Korea

3.1 Onshore

Customer	End User	Project	Products	Q,ty	Date	Location
SHIN SHIN MACHINERY CO., LTD.	CHUNCHEON ENERGY CO.,LTD	POSCO E&C / CHUNCHEON ENERGY MCWP & ACWP	BUCKET STRAINER 48"	3EA	2016.02	Korea
DAE-A PUMP CO.,LTD	GS POWER CO.,LTD	ANYANG Combined Heat & Power plant] #2	BUCKET STRAINER 28"	4EA	2017.04	Korea
DUKJI	Hyundai Engineering & Construction	Talimarjan Thermal Power Plant Expansion	BUCKET STRAINER 6"	8EA	2015.05	Uzbekistan
E-TEC E&C Limited	Solvay Fluor Korea Co.,Ltd	F1EC PJT	Y-STRAINER 300# 3" etc	14EA	2009.06	Korea
E-TEC E&C Limited	Gunjang energy Co.,Ltd	LP PJT	BUCKET STRAINER 8"	2EA	2016.11	Korea
HOSAN	Hyundai Heavy Industries	UAE BNPP 3&4	DUPLEX STR 150# 1 1/2"	6EA	2015.02	U.A.E
HOSAN	Hyundai Heavy Industries	AMOS & ANAA BFP	DUPLEX STR 150# 1 1/2"	16EA	2015.01	Algeria
HOSAN	Hyundai Heavy Industries	JEDDAH SOUTH	WATER STR. 150# 8"	38EA	2014.11	Saudi Arabia
HOSAN	Hyundai Heavy Industries	AZ-ZOUR NORTH	DUPLEX STR 150# 1 1/2"	20EA	2014.11	Kuwait
HOSAN	Hyundai Heavy Industries	TALIMARJAN CWP	WATER STR. 150# 1"	16EA	2014.09	Uzbekistan
HOSAN	Hyundai Heavy Industries	POSCO KHABAT	DUPLEX STR 150# 1 1/2"	6EA	2014.08	Iraq
HOSAN	Hyundai Heavy Industries	BUK-PYEONG THERMAL P/P 1&2	Multi type duplex 24", 20"	5EA	2014.05	Korea





Offshore

3.2 Offshore

Customer	End User	Project	Products	Q,ty	Date
Daewoo Shipbuilding & Marine Engineering	INPEX	H6054 (ICHTHY HULL/TOPSIDE)	CONE STRAINER, TEE STRAINER	223EA	2014.02
Daewoo Shipbuilding & Marine Engineering	UK Government	7044/UK MARS TANKER	WATER STR 600A etc	192EA	2014.09
Daewoo Shipbuilding & Marine Engineering	Maersk Drilling	3305 / Jack-Up Rig	WATER STRAINER 16" etc	83EA	2014.11
Daewoo Shipbuilding & Marine Engineering	Transocean	3511 / DRILL SHIP	WATER STR 700A etc	166EA	2014.12
Daewoo Shipbuilding & Marine Engineering	UK Government	7044/UK MARS TANKER	WATER STR 600A etc	114EA	2015.03
Daewoo Shipbuilding & Marine Engineering	3031/3032	SONGA	WATER STRAINER 12" etc	546EA	2013.04
Daewoo Shipbuilding & Marine Engineering	3034/3035	SONGA	WATER STRAINER 12" etc	546EA	2013.11
Daewoo Shipbuilding & Marine Engineering	ALLSEAS	H3401	WATER STR 650A etc	200EA	2012.07
Daewoo Shipbuilding & Marine Engineering	HEEREMA MARINE	H3402	WATER STR 650A etc	135EA	2011.07
Daewoo Shipbuilding & Marine Engineering	TOTAL	CLOV	T - STRAINER etc	186EA	2011.08
Daewoo Shipbuilding & Marine Engineering	CAROLINA MARINE. INC	CAROLINA DEEPWATER	MUD BOX 5K 80A etc	292EA	2010.02
Daewoo Shipbuilding & Marine Engineering	HEEREMA MARINE	HEEREMA LAUNCH	WATER STR 650A etc	12EA	2010.03
Daewoo Shipbuilding & Marine Engineering	ODEBRECHT DRILLSHIP ODN	H3609	WATER STR 650A etc	139EA	2010.09
Daewoo Shipbuilding & Marine Engineering	ODEBRECHT DRILLSHIP ODN	H3610	WATER STR 650A etc	139EA	2010.12
Daewoo Shipbuilding & Marine Engineering	Petroserv	H3028	WATER STR 650A etc	269EA	2010.12
Daewoo Shipbuilding & Marine Engineering	ODEBRECHT OIL&GAS	ODEBRECHT DRILLSHIP H3603/4	MUD BOX 5K 80A etc	292EA	2009.09
Samsung Heavy Industries	Reliance	KG D6 Ruby FPSO(HULL)	STRAINER etc	35EA	2020.08
Samsung Heavy Industries	Reliance	KG D6 Ruby FPSO(TOP)	STRAINER etc	25EA	2020.12
Samsung Heavy Industries	ENI	Coral South Development	STRAINER & MUD BOX	188EA	2018.12
Samsung Heavy Industries	BP	MAD DOGII	STRAINER & MUD BOX	333EA	2018.1
Samsung Heavy Industries	BP	MAD DOGII	BIRD SCREEN	28EA	2018.1
Samsung Heavy Industries	TOTAL	EGINA HULL	STRAINER	41EA	2015.07
Samsung Heavy Industries	TOTAL	EGINA TOPSIDE	STRAINER	69EA	2015.06
Samsung Heavy Industries	PETRONAS	2126(FLNG)	STRAINER	34EA	2015.06
Samsung Heavy Industries	STENA DRILL SHIP	2097(SEMI-RIG)	STRAINER	177EA	2015.03
Samsung Heavy Industries	STATOIL	7118(JACK UP RIG)	STRAINER	49EA	2015.04
Samsung Heavy Industries	OCEAN RIG	7121	MUD DUMP VALVE, BASKET STRAINER	36EA	2014.09
Samsung Heavy Industries	SEADRILL	7120	MUD DUMP VALVE, BASKET STRAINER	31EA	2014.09

3.2 Offshore

Customer	End User	Project	Products	Q,ty	Date
Samsung Heavy Industries	SEADRILL	7119	MUD DUMP VALVE, BASKET STRAINER	36EA	2014.07
Samsung Heavy Industries	Maersk Drilling	7105	TEMPORARY STRAINER	2EA	2013.03
Samsung Heavy Industries	SEADRILL	7109	MUD DUMP VALVE, BASKET STRAINER	20EA	2013.03
Samsung Heavy Industries	SHELL	2030(FLNG)	STRAINER	191EA	2013.04
Samsung Heavy Industries	SEADRILL	7110	MUD DUMP VALVE, BASKET STRAINER	20EA	2013.05
Samsung Heavy Industries	Pacific Drilling	7112	MUD DUMP VALVE, BASKET STRAINER	36EA	2013.05
Samsung Heavy Industries	Pacific Drilling	7112	MUD DUMP VALVE, BASKET STRAINER	36EA	2013.05
Samsung Heavy Industries	SEADRILL	7111	MUD DUMP VALVE, BASKET STRAINER	20EA	2013.06
Samsung Heavy Industries	SEADRILL	7114	MUD DUMP VALVE, BASKET STRAINER	20EA	2013.08
Samsung Heavy Industries	OCEAN RIG	7104	MUD DUMP VALVE, BASKET STRAINER	21EA	2013.09
Samsung Heavy Industries	Pacific Drilling	7116	MUD DUMP VALVE, BASKET STRAINER	22EA	2013.01
Samsung Heavy Industries	PRIDE DRILL SHIP	7091	MUD DUMP VALVE, BASKET STRAINER	20EA	2012.04
Samsung Heavy Industries	OCEAN RIG	7094	MUD DUMP VALVE	17EA	2012.05
Samsung Heavy Industries	SEADRILL	7098	MUD DUMP VALVE, BASKET STRAINER	30EA	2012.06
Samsung Heavy Industries	SEADRILL	7093	MUD DUMP VALVE, BASKET STRAINER	20EA	2012.07
Samsung Heavy Industries	Pacific Drilling	7095	MUD DUMP VALVE, BASKET STRAINER	33EA	2012.07
Samsung Heavy Industries	OCEAN RIG	7096	MUD DUMP VALVE	16EA	2012.08
Samsung Heavy Industries	Pacific Drilling	7097	MUD DUMP VALVE	25EA	2012.01
Samsung Heavy Industries	OCEAN RIG	7103	MUD DUMP VALVE	16EA	2012.01
Samsung Heavy Industries	Maersk Drilling	7099	TEMPORARY STRAINER	11EA	2012.11
Samsung Heavy Industries	Maersk Drilling	7101	TEMPORARY STRAINER	11EA	2012.12
Samsung Heavy Industries	DELBA MARITINA (Petrobras)	7086	MUD DUMP VALVE	16EA	2011.04
Samsung Heavy Industries	DELBA MARITINA (Petrobras)	7088	MUD DUMP VALVE	16EA	2011.06
Samsung Heavy Industries	DELBA MARITINA (Petrobras)	7088	BASKET STRAINER	5EA	2011.07
Samsung Heavy Industries	CHEVRON	JACK & MALO 7089	BASKET STRAINER	63EA	2011.08
Samsung Heavy Industries	SCHAHIN #1	7079	TEMPORARY STR. 150# 10" etc	14EA	2010.01
Samsung Heavy Industries	TANKER PACIFIC MANAGEMENT PTE.	7074	TEMPORARY STR. 150# 10"	11EA	2010.01
Samsung Heavy Industries	Gazflot #2	7075	TEMPORARY STR. 150# 8" etc	13EA	2010.02

3.2 Offshore

Customer	End User	Project	Products	Q,ty	Date
Samsung Heavy Industries	CARDIFF DRILLSHIP	7071	TEMPORARY STR. 150# 10"	8EA	2010.02
Samsung Heavy Industries	PRIDE INTERNATIONAL	7067	TEMPORARY STR. 150# 6" etc	3EA	2010.03
Samsung Heavy Industries	CARDIFF DRILLSHIP	7080	MUD DUMP VALVE	16EA	2010.04
Samsung Heavy Industries	SEADRILL	7045	BUCKET STRAINER 10K 45 0A	2EA	2010.04
Samsung Heavy Industries	MOSVOLD DRILLING LTD.	7081	MUD DUMP VALVE	16EA	2010.05
Samsung Heavy Industries	STENA DRILL SHIP	7078	BUCKET STRAINER 150# 10"	20EA	2010.06
Samsung Heavy Industries	ETESCO DRILL SHIP	7084	MUD DUMP VALVE	16EA	2010.08
Samsung Heavy Industries	SAIPEM	7064	TEMPORARY STR. 150# 4" etc	2EA	2009.11
Hyundai Heavy Industries	LLOG EXPLORATION CO., L.L.C.	King's Quay FPS HP-12(HULL)	WATER & Y STRAINER	8ea	2019.08
Hyundai Heavy Industries	LLOG EXPLORATION CO., L.L.C.	King's Quay FPS ME-0065 (TOPSIDE)	TEE STRAINER	18EA	2019.10
Hyundai Heavy Industries	TOTAL	BADAMYAR	STRAINER 150# 3" etc.	7EA	2015.06
Hyundai Heavy Industries	TOTAL	Moho-Nord FPU TOPSIDE	STRAINER 150# 18" etc.	69EA	2014.03
Hyundai Heavy Industries	RASGAS	FLOW ASSURANCE	STRAINER 2500# 2" etc.	16EA	2014.09
Hyundai Heavy Industries	QATARGAS	FLOW ASSURANCE	STRAINER 2500# 2" etc.	6EA	2014.09
Hyundai Heavy Industries	RASGAS	BARZAN	STRAINER 150# 8" etc.	54EA	2013.04
Hyundai Heavy Industries	BP	Q204	SURFACE VIV	28EA	2013.07
Hyundai Samho Heavy Industries	TOTAL	Moho-Nord FPU HULL	STRAINER 150# 16" etc.	30EA	2014.09





Overseas

3.3 Overseas

Customer	End User	Project	Products	Q,ty	Date	Location
TTS JV	BAPCO	BMP	STRAINER	534EA	2020.10	Bahrain
TTS JV	BAPCO	BMP ADD	STRAINER	328EA	2020.11	Bahrain
PSS JV	Thai Oil	Thai Oil CFP	STRAINER	400EA	Ongoing	Thailand
PSS JV	Thai Oil	Thai Oil CFP ADD	STRAINER	90EA	Ongoing	Thailand
TSHJ	KIPIC	AL-ZOUR #1	STRAINER	646EA	2018.04	Kuwait
CSTS	BP	TANGGUH ONSHORE	STRAINER	127EA	2018.02	Indonesia
YONEDA(TOYO)	Irkutsk oil company	IPPET	STRAINER	128EA	Ongoing	Russia
YONEDA(IKPT)	PLN	TIMOR	STRAINER	31EA	Ongoing	Indonesia
YONEDA(JGC)	KURARAY	HARMONY	STRAINER	486EA	2020.08	Thailand
YONEDA(JGC)	Chandra Asri	AA TANK	STRAINER	5EA	2020.10	Indonesia
YONEDA(TOYO)	INDORAMA	IEFCL2	STRAINER	150EA	2019.09	Nigeria
YONEDA(TOYO)	SCG	MOCD2	STRAINER	104EA	2019.12	Thailand
YONEDA(TOYO)	SCG	MOCD2(2nd)	STRAINER	15EA	2020.01	Thailand
YONEDA(IKPT)	PBI	B1MTBE	STRAINER	60EA	2019.05	Indonesia
YONEDA(IKPT)	PBI	B1MTBE(2nd)	STRAINER	4EA	2019.05	Indonesia
YONEDA(JGC)	TAGANITO	TAGANITO	STRAINER	3EA	2019.03	Philippines
YONEDA(JGC)	Pilipinas KAo	PKI PFM	STRAINER	48EA	2018.10.	Philippines
YONEDA(JGC)	PERSERO	M.TAWARA	STRAINER	32EA	2019.03	Indonesia
YONEDA(MHI)	Navoiyazot JSC	UNF	STRAINER	148EA	2018.06	Uzbekistan
YONEDA	Petro Rabigh	Rabigh 2 UOSP	STRAINER	6EA	2018.06	Saudi Arabia
YONEDA	MHPS	IHC 1294	STRAINER	4EA	2018.04	Japan
YONEDA	MHPS	H5325	STRAINER	2EA	2018.04	Japan
YONEDA(JGC)	Banagas	CGP3 (3 rd)	STRAINER	187EA	2018.04	Bahrain
YONEDA	MHPS	IHC	STRAINER	2EA	2018.03	Netherlands
YONEDA	MHPS	COSCO	STRAINER	1EA	2018.03	China
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (3 rd)	INJECTION NOZZLE	3EA	2018.03	Algeria
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (3 rd)	STRAINER	10EA	2017.10	Algeria
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (2 rd)	INJECTION NOZZLE	35EA	2017.09	Algeria

3.3 Overseas

Customer	End User	Project	Products	Q,ty	Date	Location
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (2 nd)	STRAINER	38EA	2017.09	Algeria
YONEDA(JGC)	BANAGAS	CGP3 (2 nd)	STRAINER	27EA	2017.08	Bahrain
YONEDA(SAIPEM)	PETAMINAR	BP TANGGUH	STRAINER	3EA	2017.07	Indonesia
YONEDA(JGC)	PETRON	LOBP (1 st)	STRAINER	31EA	2017.06	Philippines
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (1 st)	STRAINER	69EA	2017.05	Algeria
YONEDA(JGC)	SONATRACH	HMD (Hassi Messaoud) (1 st)	INJECTION NOZZLE	115EA	2017.05	Algeria
YONEDA(IKPT)	SRI	SRI U3 017/8A	STRAINER	105EA	2017.01	Indonesia
YONEDA(JGC)	Banagas	CGP3 (1 st)	STRAINER	108EA	2017.01	Bahrain
YONEDA	KOBELCO	ZAPSIB NEFEKHM	STRAINER	2EA	2017.01	Japan
YONEDA	KOBELCO	KT PROJECT	STRAINER	2EA	2017.01	Japan
YONEDA(IKPT)	SRI	SRI U3 018B	STRAINER	47EA	2016.12	Indonesia
YONEDA(Hitachi)	UMM AL HOUR	RSH 4576	STRAINER	30EA	2016.07	Qatar
YONEDA(KOBELCO)	PETRONAS	RAPID PROJECT-SCC	STRAINER	1EA	2016.07	Japan
YONEDA(Hitachi)	UMM AL HOUR	RSH 4574	STRAINER	26EA	2016.06	Qatar
YONEDA	HITACHI	RSH 4574	STRAINER	26EA	2016.06	Qatar
MHI	PETROBRAS	MODEC PETROBRAS MV24	STRAINER & SPARE	25EA	2015.12	Brazil
MHI	PETROBRAS	MODEC PETROBRAS MV25	STRAINER & SPARE	9EA	2014.05	Brazil
MHI	PETROBRAS	MODEC PETROBRAS MV26	STRAINER & SPARE	36EA	2013.08	Brazil
HK ENG	JURONG	STRAINERS P68	STRAINER	19EA	2017.11	Singapore
HK ENG	JURONG	STRAINER FOR 11-1120	STRAINER	59EA	2017.05	Singapore
HK ENG	JURONG	MUD BOX TOP UP REV2 11-1119	STRAINER	6EA	2017.03	Singapore
HK ENG	JURONG	DRU-4	STRAINER	70EA	2016.12	Singapore
HK ENG	SEMCORP	MUD BOX FOR GINA KROG	STRAINER	7EA	2016.08	Singapore
HK ENG	SEMCORP	STRAINER FOR GINA KROG	STRAINER	5EA	2016.08	Singapore
HK ENG	JURONG	Y-STR TOP UP REV1 FOR 1115	STRAINER	3EA	2016.03	Singapore
HK ENG	JURONG	STR TOP UP REV2 FOR 11-1115	STRAINER	3EA	2016.03	Singapore
HK ENG	JURONG	STR TOP-UP 11-1114	STRAINER	9EA	2016.01	Singapore
HK ENG	JURONG	STR TOP UP FOR 11-1114	STRAINER	5EA	2015.11	Singapore

3.3 Overseas

Customer	End User	Project	Products	Q,ty	Date	Location
HK ENG	JURONG	STRAINER TOP UP 11-1115	STRAINER	6EA	2015.08	Singapore
HK ENG	KEPPEL	65A DUPLEX FPSO ARMADA ALI	STRAINER	3EA	2015.08	Singapore
HK ENG	KEPPEL	BASKET FPSO ALI	STRAINER	5EA	2015.07	Singapore
HK ENG	JURONG	STRAINER FOR 11-1118	STRAINER	28EA	2015.04	Singapore
HK ENG	KEPPEL	BASKET STR FPSO ARMADA ALI	STRAINER	11EA	2015.04	Singapore
HK ENG	KEPPEL	DUPLEX STR FPSO ARMADA ALI	STRAINER	3EA	2015.04	Singapore
HK ENG	JURONG	STRAINER FOR 22-0331	STRAINER	49EA	2015.03	Singapore
HK ENG	JURONG	DRU-3	STRAINER	71EA	2015.03	Singapore
HK ENG	JURONG	STRAINER FOR 11-1115	STRAINER	52EA	2015.01	Singapore
HK ENG	JURONG	STRAINER FOR 11-1114	STRAINER	76EA	2014.12	Singapore
HK ENG	KEPPEL	C7 FPSO	STRAINER	2EA	2014.06	Singapore
HK ENG	JURONG	MUD BOX TOP-UP FOR 11-1112	STRAINER	48EA	2014.05	Singapore
HK ENG	JURONG	DRU-2	STRAINER	71EA	2014.03	Singapore
HK ENG	JURONG	DRU-7	STRAINER	70EA	2014.01	Singapore
HK ENG	KEPPEL	FPSO LAMSON	STRAINER	20EA	2013.08	Vietnam
TECHNIP FMC	SHELL	FLNG	STRAINER	20EA	2017.11	Australia
TEEKAY SHIPPING LIMITED		AL SHAMAL	STRAINER	12EA	2013.02	Canada
A.P.Moller-MAERSK	MAERSK	9091-9131	STRAINER(Spare)	1497EA	2015.05	Denmark
SASAKURA ENGINEERING		JPAN DRILLING	STRAINER	16EA	2015.03	Japan
SASAKURA ENGINEERING	PPL	PPL SHIPYARD - P2050	STRAINER	8EA	2013.07	Japan
ARAMCO ASIA	ARAMCO	SHAYBAH	STRAINER	9EA	2016.04	Japan
SEPSCO 3	KNPC	Az-Zour South CCGT-3	STRAINER	15EA	2018.06	Kuwait
FLUOR	KIPIC	AL-ZOUR (1 st)	STEAM RING	77EA	2018.01	Kuwait
FLUOR	KIPIC	AL-ZOUR (2 nd)	STEAM RING	4EA	2018.03	Kuwait
CCJV(CTCI & CHIYODA)	PETRONAS	RAPID #1 (2 nd)	STRAINER	125EA	2017.05	Malaysia
CCJV(CTCI & CHIYODA)	PETRONAS	RAPID #1 (1 st)	STRAINER	550EA	2016.12	Malaysia
TURCOMP	SAPURAKANCANA	SK310	STRAINER	17EA	2016.10	Malaysia
TURCOMP	PETRONAS	ZT385	STRAINER	2EA	2016.08	Malaysia

3.3 Overseas

Customer	End User	Project	Products	Q,ty	Date	Location
NEXT PETROLEUM	PETRONAS	HEC MDES	STRAINER	128EA	2019.03	Malaysia
NEXT PETROLEUM	EXXON MOBIL	GUA PIPING	STRAINER	2EA	2019.05	Malaysia
NEXT PETROLEUM	EXXON MOBIL	GUNTONG-A	STRAINER (Y)	6EA	2018.04	Malaysia
NEXT PETROLEUM	EXXON MOBIL	GUNTONG-A	STRAINER(Cone)	6EA	2017.08	Malaysia
NEXT PETROLEUM	EXXON MOBIL	TAPIS A	STRAINER	10EA	2015.04	Malaysia
EMERSON(MALAYSIA)	PETRONAS	NEW ANGGI COM	STRAINER	2EA	2018.04	Malaysia
EMERSON(SINGAPORE)	ARAMCO	JAZAN	STRAINER	3EA	2016.10	Singapore
EMERSON(SINGAPORE)	ARAMCO	JAZAN	STRAINER	3EA	2017.05	Singapore
ALIOGAZ KUKUH SDN BHD	PETRONAS	TALISMAN	STRAINER	2EA	2016.07	Malaysia
SEPADU TECH	PETRONAS	ANJUNG	STRAINER	8EA	2018.03	Malaysia
INO INTERNATIONAL	ORPIC	Liwa Plastics	STRAINER	3EA	2018.01	Oman
INO INTERNATIONAL	ORPIC	LIWA PRACTIC	STRAINER	2EA	2017.08	Oman
FASTLINE	OXY		BUCKET STRAINER	70EA	2017.10.	Oman
RASGAS	RASGAS	BARZAN, FAP	STRAINER	100EA	2014.01	Qatar
QATARGAS	QATARGAS	FAP	STRAINER	40EA	2015.07	Qatar
SSA	SECL SAUDI	TOCGC 2	STRAINER	2EA	2015.10	Saudi Arabia
SSA	SECL SAUDI	CO2	STRAINER	21EA	2015.04	Saudi Arabia
NSIC	PTSC	SHWE LIN PAN	STRAINER	14EA	2020.11	Vietnam
NSIC(TTCL)	DENKO	DENKO THILAWA OIL STORAGE	STRAINER	30EA	2019.06	Myanmar
NSIC	PNEC(Powerchina)	DUYEN HAI 3	STRAINER	57EA	2017.12	Vietnam
VELOCITY		MTC1 WELLHEAD PLATFORM	STRAINER	6EA	2019.05	Vietnam
VELOCITY		SAO VANG PJT	STRAINER	28EA	2019.01	Vietnam
VELOCITY	Vietsovpetro	CA TAM	STRAINER	15EA	2018.04	Singapore
PETROGAS PIPING	Salalah Methanol Company	SALALAH AMMONIA PJT	STRAINER	31EA	2019	Oman
PT. Tracon Industri	PT. REKAYASA	MUARA LABOH	STRAINER	25EA	2019.03	Indonesia
ATTATECH	PTT Terminal	PTT Sriracha Oil Terminal	STRAINER	2EA	2018.06	Thailand
PTTME	PTTME		STRAINER	8EA	2014.06	Thailand
Jan De Nul Dredging N.V.			STRAINER	91EA	2014.05	Belgium

3.3 Overseas

Customer	End User	Project	Products	Q,ty	Date	Location
Hoang Linh Ind	PTSC		STRAINER	4EA	2016.05	Vietnam
EASTERN SEA COMPANY LTD	PTSC	LAMSON	STRAINER	4EA	2015.04	Vietnam
SOT	EXXON MOBIL	NORTH GAS	STRAINER	1EA	2019.01	Malaysia
SEPADU TECH	SAPUA ENERGY	PEGAGA(1)	STRAINER	2EA	2019.03	Malaysia
Spirax Sarco		CCGT POWER PLANT PJT	STRAINER	5EA	2019.10	Taiwan
Spirax Sarco		EURO-5 VERTICAL BUCKET	STRAINER	30EA	2019.12	Taiwan
Cryogenmash	Uzbekistan Gas	UZGTL	STRAINER	27EA	2021.01	Uzbekistan
Hongkong Bothwin Eng	BP	N999	STRAINER	14EA	2021.07	China
MCDERMOTT	QP	North Field Expansion(NFPS)	STRAINER	31EA	2021.06	Qatar
SEAL CONTROL	WOOD	CRISP	STRAINER	78EA	2020.12	Singapore



4. CERTIFICATES

4.1 Company Certificates

4.2 Registration Status(END USER)

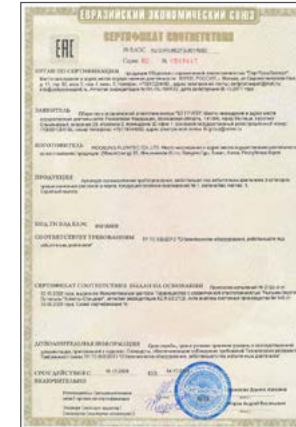


4.1 Company Certificate

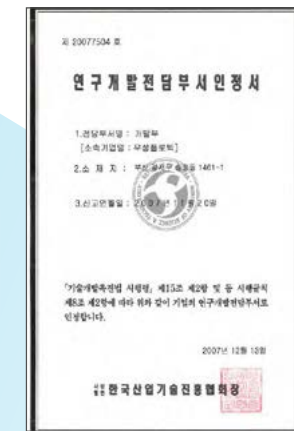
Certificate Name	Date	Remarks
I S O 9001 : 2015	Apr. 23. 2007 ~ Mar. 13. 2024	83Q19231
I S O 14001	Apr. 12. 2013 ~ Apr. 12. 2022	SKE-10401
OHSAS 18001	Mar. 26. 2013 ~ Mar. 25. 2022	SKO-10007
EAC(TRCU 010/032)	Oct. 16. 2020 ~ Oct. 15. 2025	B.96888/20 & B.95483/20
CE PED Module H	Nov. 8. 2012 ~	WFC-001-18-KOR
ASME U STAMP	Jun. 5. 2019 ~ Jun. 5. 2022	57419
UL ONLINE CERTIFICATIONS DIRECTORY	Dec. 15. 2017 ~	HLCV.EX27622
UL Certificate Of Compliance	Dec. 15. 2017 ~	20171215-EX27622
Achilles JQS	Mar. 29. 2019 ~	27727
CRN (Canadian Registration Number)	Dec. 20. 2011 ~	0E11963.2
NSF (National Sanitation Foundation)	Mar. 8. 2019 ~	C0293340 - 01
Certificate for Design of Filter	May. 22. 2010 ~	30-0561785
Certificate for Design of Strainer	Sep. 22. 2011 ~	30-0614342
Certificate for Design of VW Filter	Sep. 22. 2011 ~	30-0614342
Patent for Strainer	Mar. 22. 2012 ~	10-1131700
Brand Registration	May. 08. 2008 ~	40-0746159
R & D Registration	Nov. 20. 2007 ~	20077504



4.1 Company Certificates



4.1 Company Certificates



4.2 Registration Status(END USER)

Name	Type of company	Item	Country	Status	Registration No.
KNPC	END USER	Strainer	Kuwait	Registered	1003674
PDO	END USER	Strainer	Oman	Registered	NR01000844-2018
OXY	END USER	Strainer	Oman	Registered	-
ADNOC	END USER	Strainer	UAE	Registered	200003892
ADNOC JAPAN	END USER	Strainer	Japan	Registered	-
ARAMCO ASIA	END USER	Strainer	Japan	Registered	10052938
PERTONAS	END USER	Strainer	Malaysia	Registered	525055-A
PEMEX	END USER	Strainer	Mexico	Registered	217945
Thai Oil	END USER	Strainer	Thailand	Registered	-
IRPC	END USER	Strainer	Thailand	Registered	-
PTT TANK	END USER	Strainer	Thailand	Registered	-
PTTGC	END USER	Strainer	Thailand	Registered	-
TAKREER	END USER	Strainer	UAE	Registered	907972
PTT LNG	END USER	Strainer	Thailand	Registered	-
PETRON	END USER	Strainer	Philippines	Registered	707711
MIPCO	END USER	Strainer	UAE(Mirfa)	Registered	-
SONETRACH	END USER	Strainer	Algeria	Registered	-
Qatar Gas	END USER	Strainer	Qatar	Registered	-
Qatar Petroleum	END USER	Strainer	Qatar	Registered	-

4.2 Registration Status(In process)

Name	Type of company	Item	Country	Status	Registration No.
ARAMCO	Oil Major Company	Strainer	KSA	In Process	-
PERTAMINAR	Oil Major Company	Strainer	Indonesia	In Process	-
Petro Vietnam	Oil Major Company	Strainer	Vietnam	In Process	-
SABIC	Oil Major Company	Strainer	KSA	In Process	-
NNPC	Oil Major Company	Strainer	Nigeria	In Process	-
NLNG	Oil Major Company	Strainer	Nigeria	In Process	-
RINDE	EPC	Strainer	Germany	In Process	-
WISON	EPC	Strainer	China	In Process	-
PTSC	EPC	Strainer	Vietnam	In Process	-
CB & I	EPC	Strainer	USA	In Process	-
CCC	EPC	Strainer	Greece	In Process	-
DEWA	EPC	Strainer	Dubai	In Process	-
Maire Tecnimont	EPC	Strainer	Italy	In Process	-
WOOD Group	EPC	Strainer	England	In Process	-

4.2 Registration Status(EPCs)

Name	Type of company	Item	Country	Status	Registration No.
CNPC	EPC	Strainer	China	Registered	-
CPECC	EPC	Strainer	China	Registered	-
TECHNIP	EPC	Strainer	France	Registered	114073
SAIPEM	EPC	Strainer	Italy	Registered	-
TOYO	EPC	Strainer	Japan	Registered	-
KOBE STEEL	EPC	Strainer	Japan	Registered	-
MHI	EPC	Strainer	Japan	Registered	-
MHPS	EPC	Strainer	Japan	Registered	-
JGC	EPC	Strainer	Japan	Registered	125960
CHIYODA	EPC	Strainer	Japan	Registered	-
SAPUA ENERGY	EPC	Strainer	Malaysia	Registered	-
MMHE	EPC	Strainer	Malaysia	Registered	-
Tecnicas Reunidas	EPC	Strainer	Spain	Registered	-
TTCL	EPC	Strainer	Thailand	Registered	-
BUNDUQ	EPC	Strainer	UAE	Registered	-
ADSSC	EPC	Strainer	UAE	Registered	-
PETROFAC	EPC	Strainer	UAE	Registered	-
NPCC	EPC	Strainer	UAE	Registered	-
Enter Engineering	EPC	Strainer	Uzbekistan	Registered	-
Sinopec	EPC	Strainer	China	Registered	-
McDermott	EPC	Strainer	USA	Registered	-
HAYA	EPC	Strainer	Oman	Registered	-
TERMOCHILCA	EPC	Strainer	Peru	Registered	-

4.2 Registration Certificates

[KNPC]



[PDO]



[QP]

QP Engineering Projects Preferred Manufacturers List (PPML) Q3 2020. The table lists preferred manufacturers for various equipment types. The columns include Product Name, Company, Former Company, Country of Manufacturer, and Remarks.

Product Name	Company	Former Company	Country of Manufacturer	Remarks
Strainer	WOODSUNG PLASTIC CO. LTD.		Korea	

[Thai Oil]

Thai Oil Approved Vendor List for Mechanical. The table lists approved vendors for various equipment types. The columns include Description, Vendor, Country of Origin, and Type/Model.

Description	Vendor	Country of Origin	Type/Model
Pipe Strainers	WOODSUNG PLASTIC CO.	Korea	

[ADNOC]

ADNOC Approved Vendor List for Mechanical. The table lists approved vendors for various equipment types. The columns include Description, Vendor, Country of Origin, and Type/Model.

Description	Vendor	Country of Origin	Type/Model
Pipe Strainers	WOODSUNG PLASTIC CO.	Korea	

[PETRONAS]

PETRONAS Approved Vendor List for Mechanical. The table lists approved vendors for various equipment types. The columns include Description, Vendor, Country of Origin, and Type/Model.

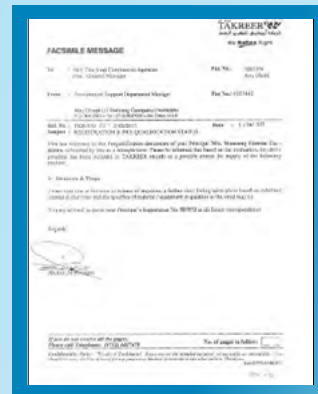
Description	Vendor	Country of Origin	Type/Model
Pipe Strainers	WOODSUNG PLASTIC CO.	Korea	

[OXY]

OXY Section 12 Approved Manufacturers of Strainers. The table lists approved manufacturers for various equipment types. The columns include Y-Type / Basket Type Strainers, Manufacturer Name, and Remarks.

Y-Type / Basket Type Strainers	Manufacturer Name	Remarks
1		
2		
3		
4		
5		
6	Woodsung Plastic Co. Ltd. Korea	
7		
8		

[TAKREER]



[PTT GC]

PTT GC Strainer Approved Vendor List. The table lists approved vendors for various equipment types. The columns include Material Group, Equipment, Manufacturer & Brand, and Origin.


Material Group	Equipment	Manufacturer & Brand	Origin
Mechanical	Strainer	WOODSUNG	Korea

[LONG SON Petrochemical]

LONG SON Petrochemical Approved Vendor List. The table lists approved vendors for various equipment types. The columns include Description, Vendor, Country of Origin, and Type/Model.

Description	Vendor	Country of Origin	Type/Model
Pipe Strainers	WOODSUNG PLASTIC CO.	Korea	

5. FINANCIAL STATUS



DNA

COMPANY NAME WOOSUNG FLOWTEC CO.,LTD.

BUSINESS REG. NO. 606-86-48896

PRESIDENT & CEO Jo, Young Je

RATING DATE Apr. 07.2020

Notice

- ▶ It is provided only as a reference for work as an evaluation based on the data submitted by the company, and we are not responsible for the judgment or decision based on its use.
- ▶ It is written under the Act on the Use and Protection of Credit Information, which is prohibited from copying, citation (or re-quotation), distribution and forgery without our consent.
- ▶ Valid only within the validity period.
- ▶ It cannot be submitted to public institution bidding examinations such as Public Procurement Service.
- ▶ Please contact Ecraible Co., Ltd. (Tel: 02-2101-9100) for issuing a report for public institution submission or to confirm and inquire about this report.

CREDIT RATING ECC20200409080 | WOOSUNG FLOWTEC CO.,LTD. | Jo, Young Je | 606-86-49896

Company Information

Company Name	WOOSUNG FLOWTEC CO.,LTD.
President	Jo, Young Je
Head Office	1461441 77, Maummandan-ro, Gangseo-gu, Busan-si
TEL	051-881-1533
Business Reg. Number	606-06-40906
Line of Business	Manufacturing of Taps, Valves and Similar Products
Date of Registration	Oct 14, 2018
Fiscal Year	Dec. 31, 2019
Credit Rating Effective Date	Apr. 07.2020~Apr. 06.2021

Credit Rating History

Reporting Date	Fiscal Year	Credit Rating	Cash Flow Rating
Apr. 07.2020	Dec. 31.2019	B+	C
Apr. 18.2019	Dec. 31.2018	B-	C
Apr. 27.2018	Dec. 31.2017	B	B

Company Overview

Main Items	Business Profile	Customer(%)	Major Shareholders
Strainer	No. of Employees: 80	Samsung Heavy Industries Co., Ltd. 15%	Jo, Young Je 90.00%
Filter	Company Size: Medium	Tocheross Co., Ltd. 11%	Jo, Sung Hwan 10.00%
	Legal Status: Audited Company	Hyundai Engineering Co., Ltd. 11%	
	Paid-in Capital (KRW million): 2,000	Samsung Engineering Co., Ltd. 5%	

Credit Rating

B+

Credit Rating Date
Apr. 07.2020

(Unit: KRW million)

Fiscal Year	Total Asset	Total Liabilities	Total Stockholders' Equity	Sales	Operating Income	Net Income
Dec. 31.2019	17,939	11,964	5,999	16,910	1,073	831
Dec. 31.2018	15,956	10,798	5,157	10,593	-965	-795
Dec. 31.2017	13,010	9,522	3,488	13,616	292	90
Dec. 31.2016	12,724	9,326	3,398	15,042	229	26

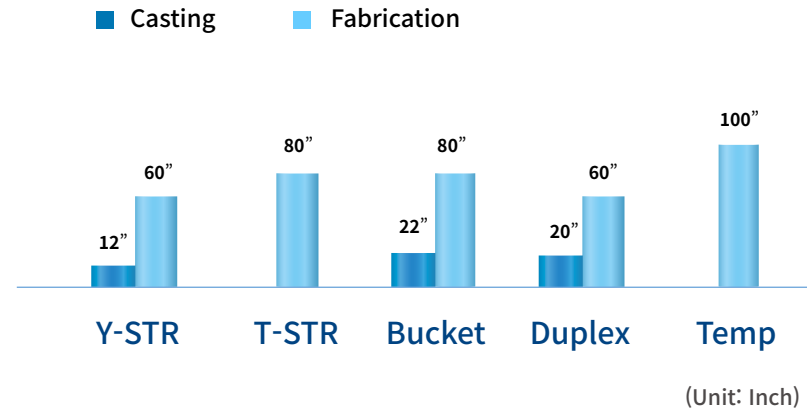
6. PRODUCTS

6.1 Manufacturing Capabilities

6.2 Figuration



6.1 Manufacturing Capabilities



** We can manufacture bigger and customizing strainer

Approximate Monthly Production Units Of Tons			
Commodity	Casting STR	Fabrication STR	Total (Ton/Month)
Capabilities	80 ton/m	100 ton/m	180 ton/m

6.2 Figuration

■ DUPLEX STRAINER (Fabrication) ■



■ DUPLEX STRAINER (Fabrication) ■



6.2 Figuration

■ BUCKET STRAINER (Fabrication) ■



■ BUCKET STRAINER (Fabrication) ■



■ BUCKET STRAINER (Fabrication) ■



■ BUCKET STRAINER (Casting) ■



6.2 Figuration

■ MULTI TYPE STRAINER (Casting) ■



■ TEE STRAINER (Fabrication) ■



■ TEE STRAINER (Fabrication) ■



■ TEE STRAINER (Fabrication) ■



6.2 Figuration

■ TEE STRAINER (Fabrication) ■



■ Y STRAINER (Fabrication) ■



■ Y STRAINER (Casting) ■



■ MESH AND FILTER ■



6.2 Figuration

■ MESH AND FILTER ■



■ CUSTOMIZING FILTER ■



■ CUSTOMIZING FILTER ■



7. INSPECTION & TEST

7.1 Test Equipment

7.2 Inspection & Test Plan



7.1 Test Equipment



Hydro Testing M/C



Dial Thickness Gauge



PMI Analyzer



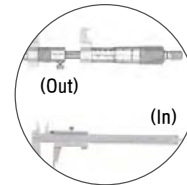
Multi Test



Graduator



Paint Thickness Gauge



Vernier Callipers



Feritscope



Leeb Hardness Tester



Cross Hatch Cutter



Brinell Hardness Tester



Bresle Salt Kit



Pull-off adhesion Tester



DC Holiday Detector



Dust tape Kit



Ultrasonic Thickness Gauge



Caliper Gauge



Pyrometer




Roughness Tester



Surface Thermometer

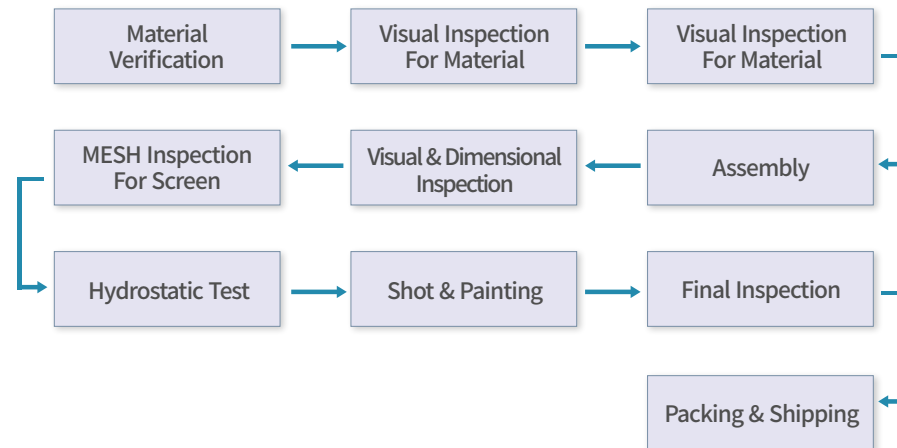
7.2 Inspection & Test Plan


 WOOSUNG FLOWTEC	Inspection And Test Plan	Doc No.	****
		Page	2 Of 3

1. Revision State

REV NO.	CONTENTS
○	First Issued (2011.○○.○○)

2. Sequence Of Manufacture



 WOOSUNG FLOWTEC	Inspection And Test Plan	Doc No.	****
		Page	3 Of 3

No.	Item Name	Inspection Process	Applicable Code	Inspection Result						Inspection Expected Date	Remarks
				Manufacturer Point		Company "A"		Company "B"			
				Point	Verified	Point	Verified	Point	Verified		
1	Strainer	1) Material verification (Asme B16.11)	Mill Sheet	R		R		R			
		2) Visual Inspection	As Per Dwg	W		W		W			
		3) Dimensional Inspection	As Per Dwg	W		W		W			
		4) Mesh Inspection For Screen	As Per Dwg	W		W		W			
		5) Hydro Static Test (Ks B 2304)	Document No. (Ws-qp-803)	W		W		W			
		6) Painting Inspection	*	W		W		W			
		7) Packing Inspection	*	W		W		W			

S: Manufacturer's inspection R: Report review SW: Spot witness W: Witness point H: Hold point

Test Facility



Pressure drop test

8. WELDING/NDE/ PAINTING PROCEDURE

8.1 Welding Procedure

8.2 Non-Destructive Examination Procedure

8.3 Painting Procedure & Facilities








8.1 Welding Procedure

(Code & Process : ASME Code Sec. IX)

.Process No	Description	Inspection & Test
1	Tack Welding	Fit-up Inspection
2	Welding	Dimension / Visual Inspection
3	Post Weld Heat Treatment(if required)	Hardness Test
4	Non-Destructive Examination	P.T / M.T / U.T / R.T
5	Positive Material Identification(if required)	-

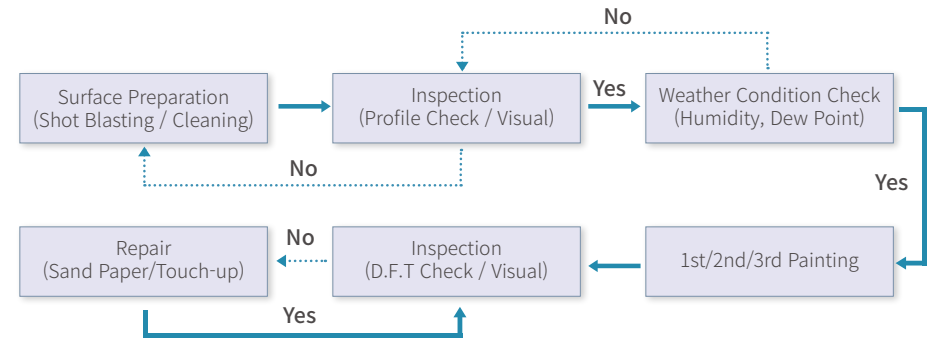
8.2 Non-Destructive Examination Procedure

Product	Test Item	Application Code	Examiner (Sub-Vendor)
Steel Plate (Weld's) / Casting	Magnetic Particle Test (M.T) 	ASME B16.34 Appendix II	KNDE Co.,Ltd. (Korea Non Destructive Examination)
	Ultrasonic Test (U.T) 	ASME B16.34 Appendix IV	
	Liquid Penetration Test (P.T) 	ASME B16.34 Appendix III	
	Radiographic Test (R.T) 	ASME B16.34 Appendix I	
	Positive Material Identification (P.M.I) 	ASTM CODE	

8.3 Painting Procedure & Facilities

QUALIFICATION OF PAINTING.

Apply the paints in accordance with the paint manufacturer's recommendation as to the application, humidity, weather, temperature conditions and coating thickness.



Facilities	Quantity	Testers	Quantity
Painting Booth	2	Dry Film Thickness Gauge	1
Air less	6	Surface Thermometer	1
Dryer	1	Hygrometer	1
Hoist	1	Thermometer	1

9. PRODUCTION PROCESS

9.1 “T” Strainer(Straight Flow)

9.2 “T” Strainer(Angle Flow)

9.3 “Bucket” (Fabrication type)

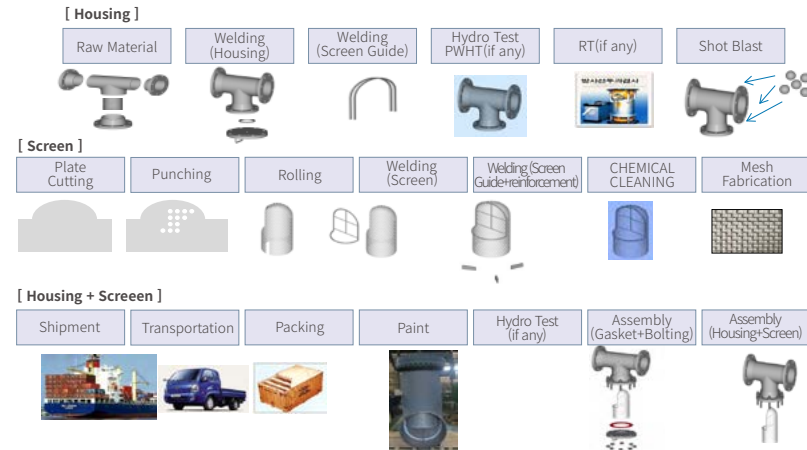
9.4 “Duplex” (Casting type)

9.5 “Y” Strainer (Fabrication type)

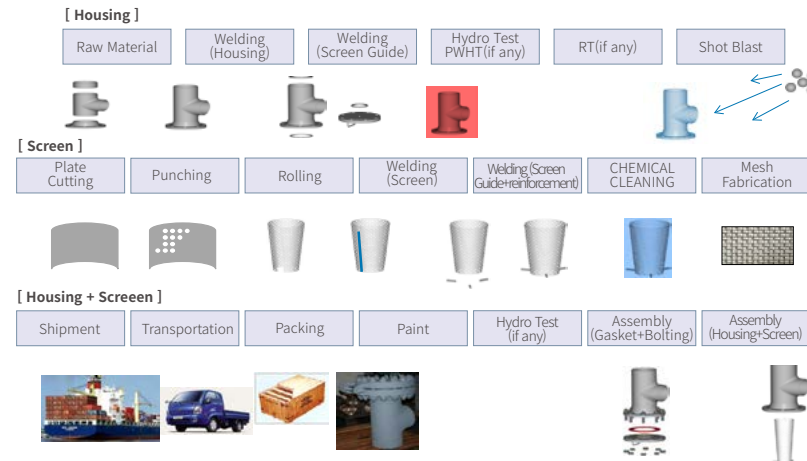
9.6 “Y” Strainer (Casting type)

9.7 “Conical” type

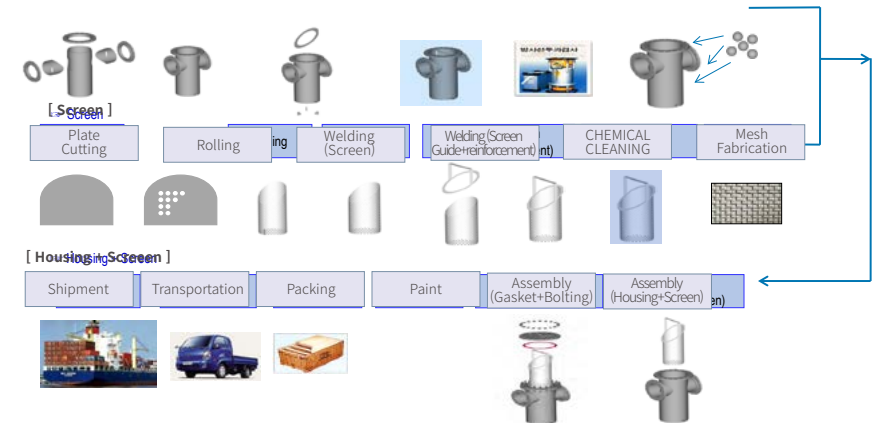
9.1 "T" Strainer(Straight Flow)



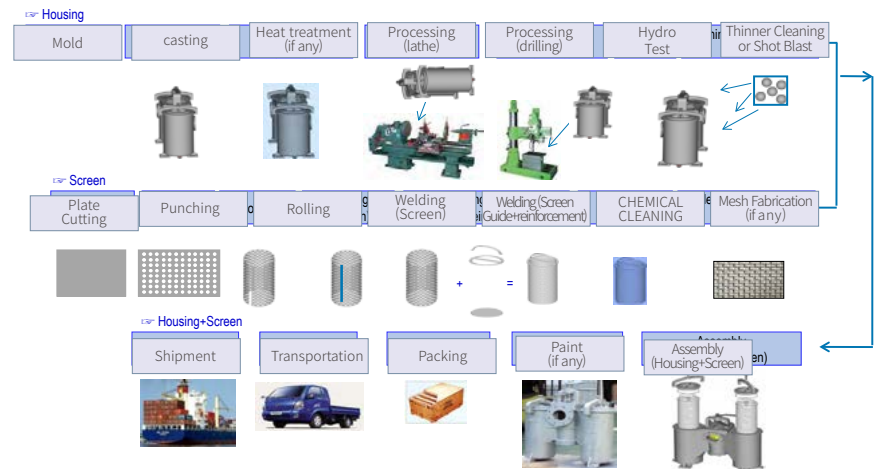
9.2 "T" Strainer(Angle Flow)



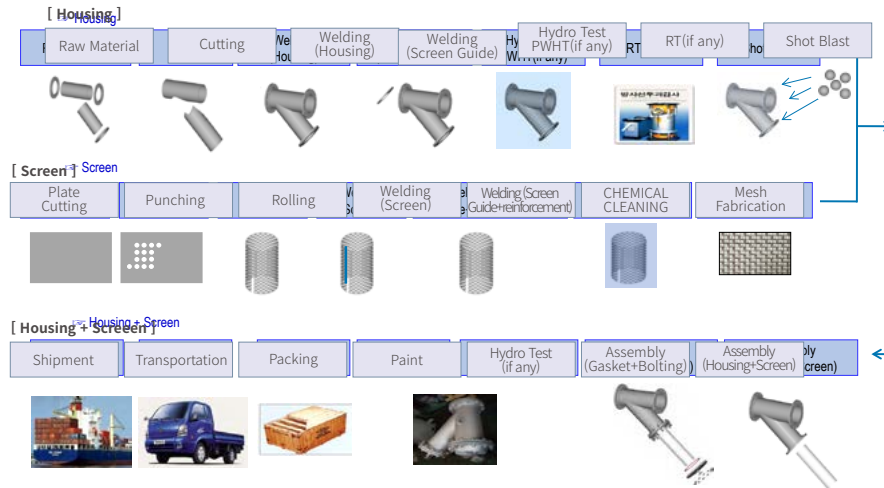
9.3 "Bucket" (Fabrication type)



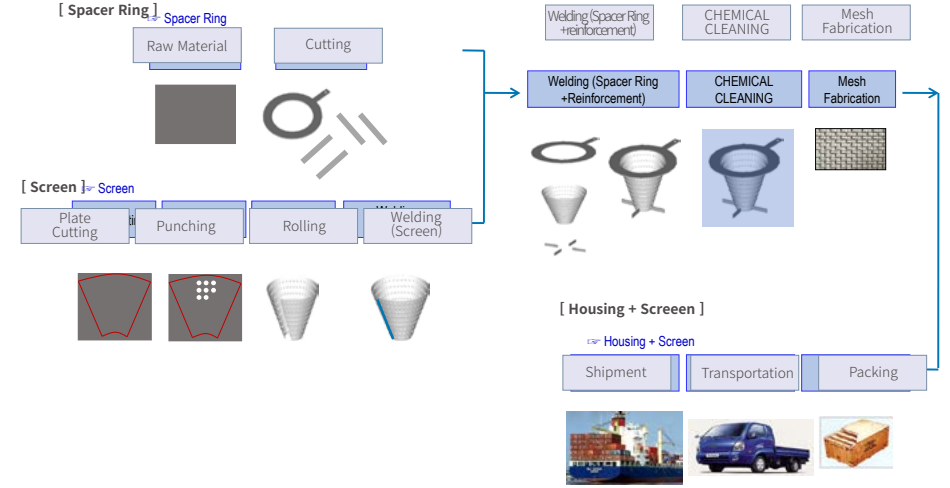
9.4 "Duplex" (Casting type)



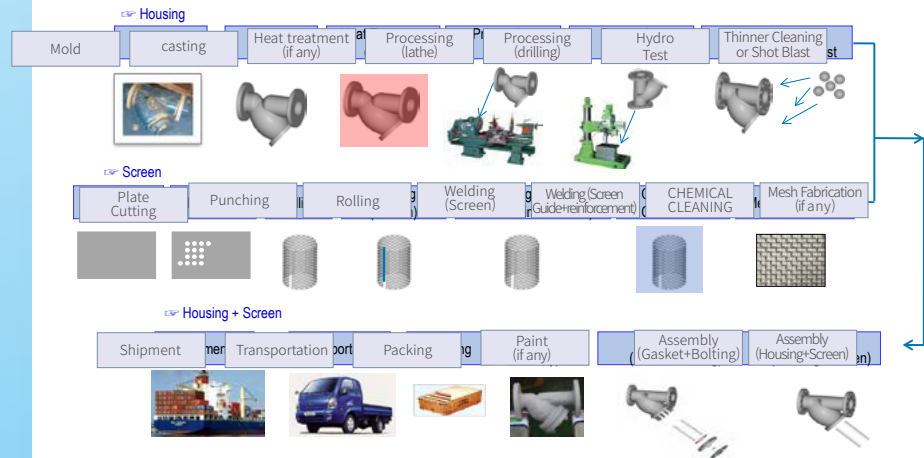
9.5 “Y” Strainer (Fabrication type)



9.7 “Conical” type



9.6 “Y” Strainer (Casting type)



THANK YOU!

WOOSUNG FLOWTEC is growing into a global company with advanced technology and our own know-how.

www.woosungflowtec.com





WOOSUNG FLOWTEC

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27, Mieumsandan 3-ro, Gangseo-gu, Busan, Korea
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E-mail : biz@woosungflowtec.com

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WOOSUNG FLOWTEC Co., Ltd.