



Chemical Process Equipment



www.hyosungpni.com

EASE TO CONTACT

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Global Top Energy, Machinery & Plant Solution Provider

 **HYOSUNG CORPORATION**
Power & Industrial Systems Performance Group

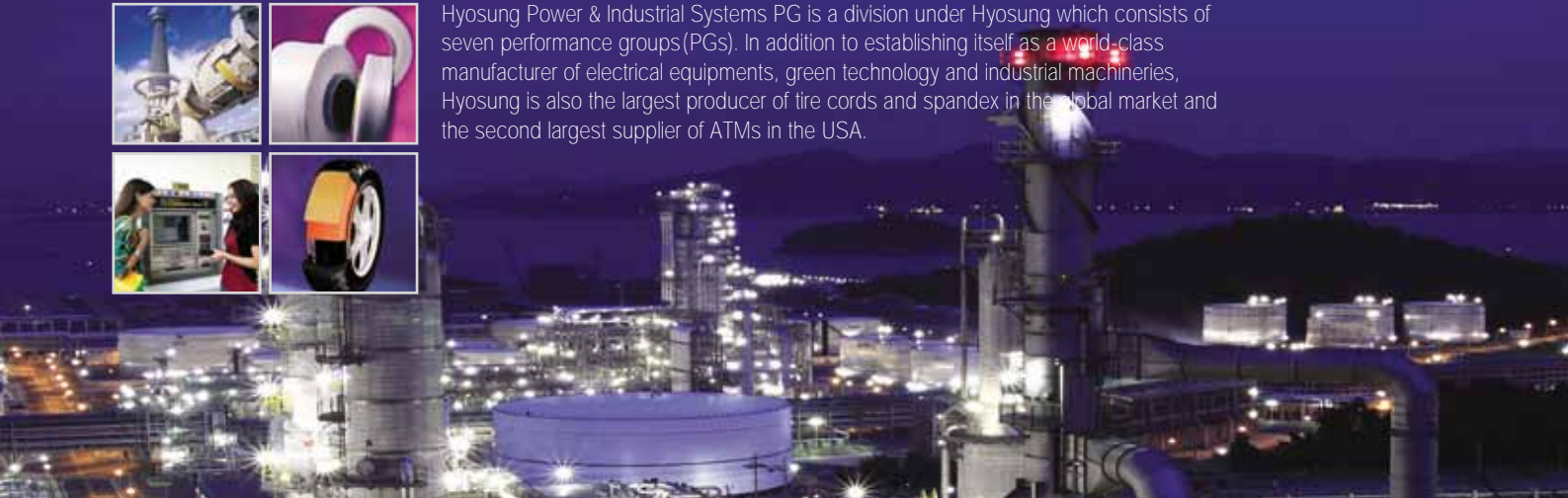
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About HYOSUNG



Hyosung Power & Industrial Systems PG is a division under Hyosung which consists of seven performance groups (PGs). In addition to establishing itself as a world-class manufacturer of electrical equipments, green technology and industrial machineries, Hyosung is also the largest producer of tire cords and spandex in the global market and the second largest supplier of ATMs in the USA.



01 Our Business

Brief introduction of Hyosung Power & Industrial Systems

Hyosung Power & Industrial Systems Performance Group

Hyosung Power & Industrial Systems Performance Group, a comprehensive energy solution provider, boasts world-leading technology in the global power industry and has secured a competitive capability on par with that of top competitors in transformers, switchgears, motors, decelerators, industrial pumps, and wind energy business.

With globalization as one of our top priorities, we have achieved outstanding increase in sales over the past few years thanks to the enhancement in Hyosung's quality, technology, and brand recognition among overseas clients, which include North America, Europe, the Middle East, and Asia. We expect such robust performance, marked by an increasing number of orders from the overseas market, to continue in the future.

At the heart of our capability to grow as a comprehensive energy solution provider is our global organization structure. Hyosung Power & Industrial Systems Performance Group is divided into four business areas or performance units, depending on the types of flagship products: Power Systems Performance Unit, Industrial Machinery Performance Unit, Hyosung GoodSprings Performance Unit, and the Wind Energy Business Division.

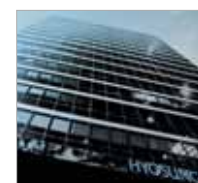
Industrial Machinery Performance Unit

The Industrial Machinery Performance Unit Plays an important role in the infrastructure industry around the globe and is specialized in manufacturing all types of motors, gear reducers, generators, green energy, and industrial machines.

With the ability to produce motors with up to 20,000kW, we possess an automated production line capable of manufacturing more than 40,000 motors every month.

Our accumulated technologies and various experiences have made it possible to develop turnkey-based engineering projects including industrial plant, ropeways, energy solutions, and alternative refueling systems.

In addition, we anticipate that our efforts in innovation among rotary machinery will make significant contributions towards creating energy profitability as well as greater efficiency. With the goal to serve as a world-leading provider of industrial machinery and plant engineering, we will continue to focus on innovative energy conservation technology, enhanced reliability of new products, and development of new technologies.



Chemical Process Equipment

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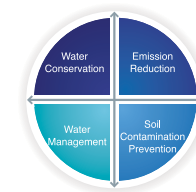
02 Sustainability

Our sustainability principles are the backbone of the way we design and manufacture products



Quality Assurance

Hyosung strives for excellence. We believe excellence can only be achieved through absolute quality and value for customers. In order to create quality products, we believe that all of the actions of every single employee must be focused in the highest level of quality. In order to achieve such levels, we have implemented a quality assurance policy and programs that make our philosophy into a reality. Our Quality Assurance Policy was founded based on the management policy of the president and meets the demands of ISO 9001. As a globally active company, we are committed to comprehensive and quality management through three quality strategies: quality management system, customer-focused management system, and concentration on core competencies. The comprehensive quality management system ensures that we completely comply with all compliances and applicable legislation, codes, and standards in addition to implementing efficient operation of our management resources to eliminate unnecessary waste. Our customer-focused management system clarifies and simplifies our first priority which is customer satisfaction. All of our work is aimed to exceed customer needs and provide exceptional value through quality standards, flexibility, and innovation. Finally, we concentrate on our core competencies for strict quality control and continual improvement which provides quality products and cost-saving to our clients via advancement in technical capacity and technological innovation. We implement our policy via a Quality Management Team manages research laboratories, including the Measurement Standard Laboratory, the Chemical Analysis Laboratory and the Material Analysis Laboratory to maintain a strict control over quality.



Environment Protection Policy

Hyosung understands the impact of Hyosung's activities in the environment and works to protect the environment from pollution, manages the environmental impacts of Hyosung's products and technologies, and prevents future pollution and harmful effects in the environment by investing in environmentally-friendly products and solutions. Based on this eco-philosophy of shared responsibility, Hyosung has implemented a comprehensive environmental protection program that aims to minimize our impact on the environment and conserve resources. Our environmental policy fulfills all requirements of the ISO 14001.

03 R&D

Inspiring innovation, creation and expertise

Hyosung R&D Center identifies innovation, creation, and expertise as core value, and concentrates on world class R&D activities in the 21st century with a philosophy aspiring after customer satisfaction, quality priority, and performance orientation. Hyosung pursues to be the world's best company in the field of heavy electrical machinery, industrial & electrical electronics engineering, and energy system. Ever since establishment in 1978, R&D Center had led the development of domestic technology. Along with the Anyang and Changwon labs, the group has endeavored to produce core technology and world-class products in the areas of heavy electrical machinery, energy system, electrical electronics engineering, and industrial automation system.

Research Areas

Hyosung R&D Center engages in the activities in the field of energy system, solution & service, applied electrical and electronic technology, basic core technology, technology of improved reliability, core components, and new materials.

Energy System

- Renewable energy (wind system, wind turbine, wind PCS, solar system, PV PCS, fuel cell, co-generation)
- Electric Vehicle (EV charger, EV motor)

Solution & Service

- Power facility diagnosis algorithm and system
- Power facility lifecycle evaluation system
- Service solution for remote diagnosis for prevention

Applied Electrical & Electronic Technology

- Power conversion system
- Flexible AC transmission system and high voltage direct current
- Power quality solution

Basic Core Technology

- Fortified technology in structural dynamics, electromagnetics, heat transfer analysis, etc.
- Skills for system simulation, analysis and evaluation
- Business support technology

Technology with Improved Reliability

- Test data analysis and testing facility
- Analysis of lifecycle and cause of error
- Reliability assessment (environment-friendliness, durability, long-term degradation, and more)

Core Components and New Materials

- Organic and inorganic insulation materials
- Silicon forming technology
- Intelligent sensor (facility diagnosis, CT, PT, VT, LA, and more)

Company Profile

Corporate Outline

- **Name of Company** : Hyosung Corporation
- **Revenue** : USD \$ 7.8 Billion
- **Employees** : 8,085
- **Factories** : 14 Locations in Korea

Business Directory / Domestic : 14 Plants, 21 Offices and Business Offices



Business Directory / Overseas :

20 Manufacturing Companies, 8 Trading Companies (including 5 local branches) and 19 Trading Offices



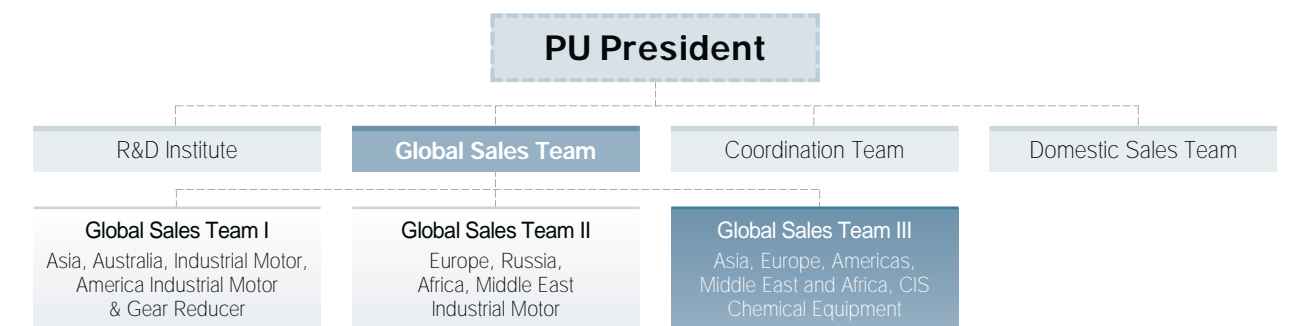
Corporate Business Structure - Total 7 Performance Groups (PG)



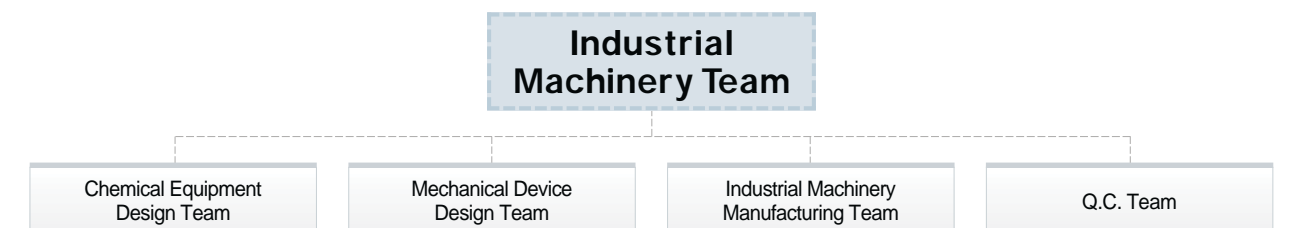
Organization Chart



Head Office



Changwon Plant



Personnel for Chemical Equipment

Design & Engineering (27)	Manufacturing (150)	Manufacturing Management (12)	Q.C. & Service (21)
Safety (3)	Welding & Metallurgy (38)		
▶ Engineer: 27 ▶ Technician: 36 ▶ Worker: 188 ▶ Total: 251			

Facts about Manufacturing Facilities

Product Line for Chemical Process Equipment

TOWER & COLUMN



- 18,000 Ton / Year
- Up to 250mm in Thickness
- Up to 8300mm in Diameter
- Up to 80m in Length
- Up to 600 Ton in Weight

VESSEL & TANK



REACTOR



HEAT EXCHANGER

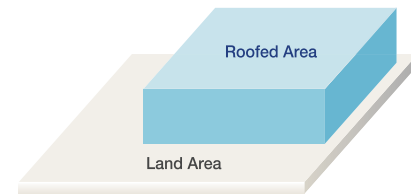


Handling Material

- Carbon Steel, Stainless Steel, Duplex Stainless Steel
- Low Alloy Steel (Cr-Mo & Carbon-Mo)
- Copper & Copper Alloy (Brass, Bronze & Cu-Ni)
- Nickel & Nickel Alloy (Monel, Inconel, Incoloy & Hastelloy)
- Titanium & Ti Clad

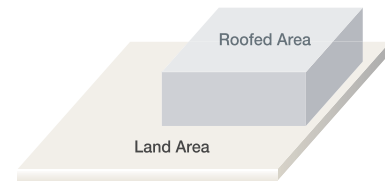
Changwon Plant (Total)

- Land Area : 741,340m²
- Roofed Area : 174,774m²



Plant for Chemical Equipment

- Land Area : 80,640m²
- Roofed Area : 19,893m²



Certificate



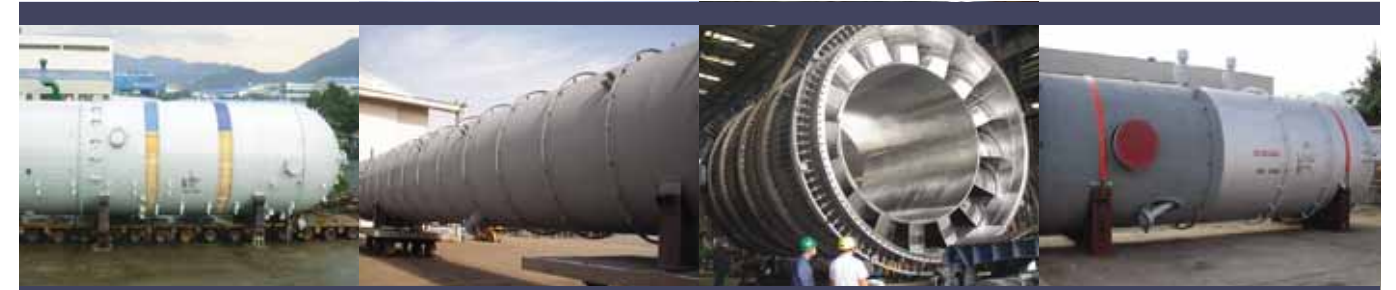
ASME



ISO 9001

ISO 14001

OHSAS 18001



Major Experience Records

- 2011 MATIX - 3850 MTPD Matix Fertilizer Complex Project - Urea Plant
- 2010 TRKREER - Ruwais Refinery Expansion Project
- 2010 NIOC - South Pars Gas Field Development 12
- 2009 LORC - Lavan Refinery Project
- 2009 Essar - Essar Oil Refinery Project
- 2007~2008 NIOEC - Shazand Arak Refinery
- 2007 KPPC - KPPC Aromatics Complex
- 2006 ATC - Oman Sohar Aromatics Project
- 2005 Aramco/Sumitomo Chemicals - Rabigh Development Project
- 2004 Sunoco - Canada Low Sulfur Project
- 2003 PDMCO - Ammonia/Urea Project
- 2002 Valero - Texas City Regen
- 2001 QP - Qatar Petroleum Project

Absorber Column (2010)

- **Project**
South Pars Gas Development
- **Client / End User**
OIEC
- **Specification**
94t × Ø 4,200 × 29,730L
- **Main Material**
BS 1501-225, 490B LT50



Sour Water Stripper (2010)

- **Project**
Essar Refinery Expansion Project, Vanidar
- **Client / End User**
ESSAR
- **Specification**
22t × Ø 6,000 × 31,756L
- **Main Material**
SA 516 Gr. 70 N + SS 316 L
- **Licensors**
TECHNIP India, Chennai



Amine Regenerator (2010)

- **Project**
Essar Refinery Expansion Project, Vanidar
- **Client / End User**
ESSAR
- **Specification**
32t × Ø 5,100/8,000 × 33,290L
- **Main Material**
SA 516 Gr. 70 N + SS 304 L
- **Licensors**
TECHNIP India, Chennai



D-201 Reactor (2010)

- **Project**
N/A
- **Client / End User**
SHI Mechanical & Equipment Inc.
- **Specification**
69.7t × Ø 2,800 × 7,080L
- **Main Material**
SA 516 Gr. 70 + SA 240-304L Clad
- **Design Code**
HPGS (High Pressure Gas Safety Law, Japan)



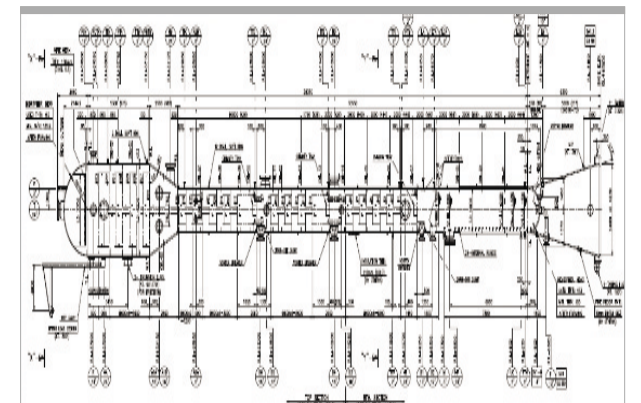
LP Steam Generator (2010)

- **Project**
Essar Refinery Expansion Project, Vanidar
- **Client / End User**
ESSAR
- **Specification**
35t × Ø 1,760 × 9019.5L
25.4OD × 6,000L, 1752 EA
- **Main Material**
SA 516-70/A268-410
- **Licensors**
TECHNIP India, Chennai



Demethanizer (2009)

- **Project**
South Pars Gas Development
- **Client / End User**
OIEC
- **Specification**
36/73t × Ø 4,200 × 38,350L
- **Main Material**
SA 240-304L



3rd Reforming Reactor (2009)

- **Project**
Lavan Refinery Revamp Project, Iran
- **Client / End User**
IGC / LOCR
- **Specification**
48t × Ø2,918 × 4,444L
- **Main Material**
SA 387 Gr. 22 Cl. 2



Thermal Reactor Stream Drum (2009)

- **Project**
SHAZAND ARAK REFINERY EXPANSION & UPGRADING PJT.
- **Client / End User**
Consortium of SAZEH, ODCC & SEI / NIOEC
- **Specification**
49t × Ø1,900 × 8,449L
- **Main Material**
SA 516 Gr. 60 N



Hydro Treating Reactor (2009)

- **Project**
Lavan Refinery Revamp Project, Iran
- **Client / End User**
IGC/LOCR
- **Specification**
(70+3)t × Ø2,600 × 24,100L
- **Main Material**
SA 387 Gr. 11 Cl. 2 + SS 321 Clad



Cold Separator (2007)

- **Project**
Shazand Arak PJT.
- **Client / End User**
SAZEH / NIOEC
- **Specification**
96/172t × Ø3,700 × 18,800L
- **Main Material**
A 516 Gr. 60 N + HIC



Thermal Reactor + Waste Heat Boiler Package (2009)

- **Project**
SHAZAND ARAK REFINERY EXPANSION & UPGRADING PJT.
- **Client / End User**
Consortium of SAZEH, ODCC and SEI / NIOEC
- **Specification**
22/80t × Ø3,550/3,200 × 23,211L
- **Main Material**
SA 516 Gr. 60 N



Net Gas Chloride Treaters (2007)

- **Project**
KPPC Aromatics Complex PJT.
- **Client / End User**
SK E&C / KPPC
- **Specification**
96t × Ø6,400 × 20,775L
- **Main Material**
A 516 Gr. 60 N



Seperator (2007)

- **Project**
KPPC Aromatics Complex PJT.
- **Client / End User**
SK E&C / KPPC
- **Specification**
64t × Ø 4,100 × 14,300L
- **Main Material**
A 516 Gr. 60 N + B-127 400



Absorbant Chamber (2006)

- **Project**
ATC PJT.
- **Client / End User**
GS E&C / ATC Reformer and Aromatics Complex
- **Specification**
54/83t × Ø 7,100 × 26,440L
- **Main Material**
A 516 Gr. 70



Extract Column (2007)

- **Project**
Sohar Aromatics PJT.
- **Client / End User**
GS E&C / Aromatics Oman L.L.C
- **Specification**
25t × Ø 5,900 × 66,000L
- **Main Material**
A 516 Gr. 70
- **Licenser**
Axens



PC Reactor (2006)

- **Project**
JSC KAZANORGSINTEZ PROJECT, Russia
- **Client / End User**
AKEC / Sumitomo Heavy Industries / JSC
- **Specification**
(31.5 + 3)t × Ø 4,700 × 14,580L
- **Main Material**
SA 516 Gr. 70 + SA 240 - 316



Extract Column (2007)

- **Project**
Sohar Aromatics Project
- **Client / End User**
GS E&C / Aromatics Oman L.L.C
- **Specification**
27/32t × Ø 7,000 × 43,900L
- **Main Material**
SA 516 Gr. 70



4th Reactor (2005)

- **Project**
Petro Rabigh PJT.
- **Client / End User**
Sumitomo Mechanical & Equipment Inc. / Saudi Aramco - Sumitomo Chemical Corp.
- **Specification**
40/16t × Ø 4,800 × 28,715L
- **Main Material**
A 516 Gr. 70 + 316 L(CLAD)



2nd Reactor (2005)

- **Project**
Petro Rabigh PJT.
- **Client / End User**
Sumitomo Mechanical & Equipment Inc. / Saudi Aramco - S.C.C.
- **Specification**
71/79t × Ø 7,100 × 35,515L
- **Main Material**
A 516 Gr. 70 + 316 L



First Raffinate Column Reboiler (2002)

- **Project**
IRAN 4TH AROMATIC PLANT (AR4 PJT.)
- **Client / End User**
BORZOUYEH PETROCHEMICAL Co. IRAN
- **Specification**
15t × Ø 1,800 × 9,747L
Ø 25.4 × 6,000L, 2,470EA
- **Main Material**
A 516 Gr. 70/A 179



Reactor - 1401 (2005)

- **Project**
USA Evalka Project
- **Client / End User**
SHI Mechanical & Equipment Inc.
- **Specification**
131t × Ø 4,800 × 14,000L
- **Main Material**
SA 516 Gr. 70 + SS 304 L
- **Design Code**
ASME SEC VIII DIV. 2



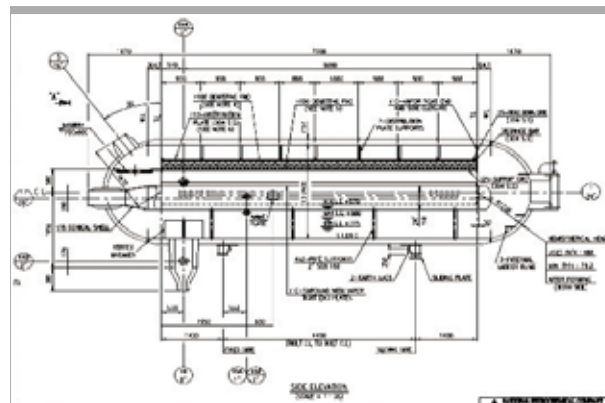
Crystallizer with Dismantling Jigs (2001)

- **Project**
BPA(II) PLANT PJT.
- **Client / End User**
TSUKISHIMA KIKAI Co., Ltd. / KUMHO P&B CHEMICALS, INC, KOREA
- **Specification**
13t × Ø 4,500 × 15,040L
- **Main Material**
ASTM A 240 TP 304



High/Low Temperature Shift Converter (2003)

- **Project**
IRAN AMMONIA/UREA PROJECT
- **Client / End User**
PIDEC, Iran / Chiyoda Japan
- **Specification**
112t × Ø 5,600 × 10,450L
- **Main Material**
SA 387 Gr. 11 CL. 2
- **Licenser**
KBR



San Reactor (1997)

- **Project**
ABS-2 PJT.
- **Client / End User**
BASF KOREA Co., Ltd.
- **Specification**
(51+3)t × Ø 5,200 × 3,400L
- **Main Material**
SA 516 Gr. 70 + SA 240-304



Major Experience Records

TOWERS / COLUMNS

YEAR	CLIENT / PROJECT	ITEM	SPEC.	MAIN MAT'L	QTY	REMARKS
2010	POGC / OIEC SOUTH PARS PJT 17&18	ABSORBER CHAMBER	94t x 4200 ID x 29730L	BS 1501-225, 490B LT50	4	
		REGENERATOR COLUMN	11-22t x 3100 ID x 28200L	SA 516 70N + A240 316L CLAD	4	
		OXYDIZER	12t x 1300ID x 17200L	SA516-70N	2	
		C3 EXTRACTOR	52-54t x 2250ID x 17950L	SA516-60N + S.S	2	
		C3 CAUSTIC SCRUBBER COLUMN	11-20t x 900/2500ID x 16500L	SA516-70N	2	
2009	POGC / OIEC SOUTH PARS PJT 17&18	C4 EXTRACTOR	22t x 1700ID x 17250L	SA516-70 + S.S	2	
		C4 CAUSTIC SCRUBBER COLUMN	11-18t x 800/2400ID x 20650L	SA516-70N	2	
		DEMETHANIZER	73t x 4200 I.D x 38350L	SA240-304L	4	
		DEETHANIZER	62t x 3400 I.D x 36900L	SA516-60N	4	
2008	FOSTER WHEELER / SINCLAIR	DEPROPANIZER	47t x 4200 I.D x 32900L	SA516-70N	2	
		DEBUTANIZER	14t x 2260 I.D x 31100L	SA516-70	2	
2008	FOSTER WHEELER / SINCLAIR	COKER FRACTIONATOR(36-F-101) & ETC	20t(20+2.8) x 4114.8 ID x 37642.8L	SA516-70N / SA516-70N +410S S.S CLAD	5	"U" STAMP
2008	NAMVARAN / LAVAN REFINERY CONSTRUCTION PROJECT	NAPHTHA SPLITTER TOWER	20t x 3500ID x 58680L	SA516-70	8	
2008	ODCC / SHAZAND ARAK REFINERY EXPANSION AND UPGRADING PROJECT	HYDRAULIC SEAL 10EA & SEAL LEG 5EA	12t x 457ID x 820L	SA106-B	15	
2008	SEI / SHAZAND ARAK REFINERY EXPANSION AND UPGRADING PROJECT	FEED SURGE DRUM	41+3t x 2600ID x 18000L	SA516-60N + 316L CLAD	1	
		SEPARATOR DRUM	42t x 3250ID x 4000L	SA516-60N	1	
2007	GS E&C / SOHAR PROJECT	EXTRACT COLUMN	25t x 5900ID x 66000L	A516GR70	10	
2007	GS E&C / SOHAR PJT	AROMATIC COLUMN	18t x 5000ID x 58550L	SA516-70	11	"U" STAMP
2007	SK E&C / KPPC PROJECT	STRIPPER	26t x 1400ID x 36200L	A516GR60N	2	

REACTORS

YEAR	CLIENT	ITEM	SPEC.	MAIN MAT'L	QTY	REMARKS
2010	SME	D-201 Reactor	69.7t x 2800 ID x 7080 L	SA516-70 + SA240-316	1	HPGCL (JAPAN)
2009	IGC / LORC / Lavan Refinery Construction Project	RA1304 Third Reforming Reactor	48t x 2918 I.D x 4444L	SA387-22	1	
2009	IGC / LORC / Lavan Refinery Construction Project	RA1601 Hydrotreating Reactor	70+3t x 2600ID x 31404L	SA387-11 Cl.2 + SS321 CLAD	8	
2008	SME / AKEC_SAUDI SABIC	R-550 SECOND MAIN REACTOR & ETC	34.5t x 4700ID x 9800L	SA516-70 + SA240TP316 CLAD	7x4=28	"U" STAMP
2007	SME / NIPPON ZEON	RE-2CR A/B	88(85+3)t x 3500ID x 6400L	SPV355 + SUS316L / SUS317L CLAD	2	HPGCL (JAPAN)
2007	SME / MITSUI CHEMICALS ENG.	D-201	61.5(58+3.5)t x 6000ID x 5000L	SPV355+SUS304L CLAD	1	HPGCL (JAPAN)
2007	SUMITOMO HEAVY INDUSTRIES INC.	REACTORS	(15+3)t x 4600ID x 8610H	SA516-70 + SA240-316	6	KEMCO /KOREA
2005	SME / SCC	4TH REACTOR	40t x 4800ID x 29000L	A516GR70 + 316L	3	Processing
		2ND REACTOR	71.1t x 7100ID x 36000L	A516GR70 + 316L		
		3RD REACTOR	47t x 4600ID x 30500L	A516GR70 + 316L		
2005	SME	1401 REACTOR	131t x 4800ID x 14000L	A516GR70 + 304L	1	"U2" STAMP
2005	USA)CITGO / JACOBS	REACTOR	(35+3.2)t x 2743ID x 29413H W / INSULATION	SA387GR11 / 321	1	"U" STAMP
			(50.8)t x 3200ID x 15875H W / INSULATION	SA387GR11	1	"U" STAMP
			(75)t x 3200ID x 10000H W / REFRACTORY	SA387GR22	1	

PRESSURE VESSELS, SCRUBBERS & OTHERS

YEAR	CLIENT	ITEM	SPEC.	MAIN MAT'L	QTY	REMARKS
2010	Global Supplies / Essar Oil Limited	SOUR WATER STRIPPER	22t x 6000 ID x 31756 L	SA516-70N + 316L S.S		TECHNIP India Licensor
2009	Global Supplies / Essar Oil Limited	COKER FRACTIONATOR OVERHEAD RECEIVER(121-V-102)	35t x 7420 ID x 17239.3L	SA516-60N	1	Aker Powergas Pvt. Ltd. Licensor
2008	FOSTER WHEELER / SINCLAIR	COKER BLOWDOWN DRUM(36-V-106)	23t x 4876.8 ID x 16154.4L	SA516-70N	1	"U" STAMP
2008	NAMVARAN / LAVAN REFINERY CONSTRUCTION PROJECT	ATMOSPHERIC TOWER REFLUX DRUM	(10+3)t x 2400ID x 11740L	SA516-70 + SA127	2	
2008	ODCC / SHAZAND ARAK REFINERY EXPANSION AND UPGRADING PROJECT	CLOSED DARIN VESSEL			1	
2007	LEXMAR ENGINEERING	SATURATION CHAMBER	30t x 2300ID x 4500L	SA516-70N	4	DNV INSPECTION
2007	SAZEH / SHAZAND ARAK REFINERY EXPANSION AND UPGRADING PROJECT	SEPARATOR DRUM	38t x 3500ID x 11920L	SA516-60N	17	
2007	PIDEC / ABADAN REFINERY EXPANSION PROJECT	ORIFICE CHAMBER	20t x 3200ID x 16390L + RERACTORY INSTALL	SA516-70	2	
2007	SK E&C / KPPC	SEPARATOR	64t x 4100ID x 14535L	SA516-60N	1	
		NET GAS CHLORIDE TREATERS	52t x 2500ID x 10830L	SA516-60N	2	
		NET GAS CHLORIDE TREATERS	96t x 6400ID x 20775L	SA516-60N	2	

HEAT EXCHANGERS (SHELL & TUBE TYPE)

YEAR	CLIENT	ITEM	SPEC.	MAIN MAT'L	QTY	REMARKS
2010	Global Supplies / Essar Oil Limited	LP STEAM GENERATOR	2.77t x 1760 Ø x 9019.5L 25.40D x 6000L, 1752EA	SA516-70	2	TECHNIP India Licensor
2002	VALERO REFINERY CO. / FOSTER WHEELER USA CORPORATION (TEXAS CITY REFINERY RECONFIGURATION PROJECT)	BLOWDOWN DRUM HEATER	19.050D x 4115L, 486U EA	SA214, Killed	1	"U" STAMP
2002	BORZOUYEH PETROCHEMICAL CO. / CONSORTIUM OF TEC / LGEC / SAZEH (IRAN 4 TH AROMATIC PROJECT)	1ST STRIPPER FEED	14t x 1550 Ø x 8410L 190D x 7000L, 2374EA	A516-60 A179	2	
		REACTOR EFFLUENT TRIM COOLER	13t x 1600 Ø x 7500L 19.050D x 6000L, 1785EA	A516-60 A179	2	
		STABILIZER TRIM COOLER	14t x 1350 Ø x 8600L 19.050D x 7000L, 1956EA	A516-60 A179	2	
		EXTRACTIVE DISTILLATION COLUMN SOLVENT REBOILER	13t x 1600 Ø x 5987L 25.40D x 6000L, 2143EA	A516-70 A179	2	
		FIRST RAFFINATE COLUMN REBOILERS	15t x 1800 Ø x 9747L 25.40D x 6000L, 2470EA	A516-70 A179	5	
		REFROMATE FINAL COOLER	15t x 1300 Ø x 8585L 19.050D x 7000L, 1714EA	A516-60 A179	1	
		REFROMATE SUB-COOLER	13t x 850 Ø x 6055L 19.050D x 5000L, 780EA	A516-60 + UG84 A334-1	1	
		MIXED XYLENE TRIMER COOLER	15-18t x 1250-1350 Ø x 8500L 19.050D x 7000L, 1686EA	A516-70 A179	1	
		RECONTACTING DRUM FEED CHILLER	21-24t x 1350-2050 Ø x 7310L 25.40D x 5000L, 678U EA	A516-70 A334-1	1	
		REACTOR EFFLUENT TRIM COOLER	15-20t x 1300 Ø x 7605L 19.050D x 6000L, 1748EA	A516-70 A179	1	
2001	QATAR PETROLEUM	TUBE BUNDLE FOR HEAT EXCHANGER	1198 Ø x 6000L 19.050D x 13780L	SA179, SA214, SA105	18	

Product Development History

Global Network

Year	Milestones
2008	Acquired the Certificate of OHSAS 18001 from BVQI
2008	Renewal of ASME Certificates of Authorization 'U', 'U2', 'S', 'PP'
2002	Acquired Safety quality License for Boiler and Pressure Vessel from China
2000	Acquired the Certificate of ISO 14000 from BVQI
1999	Acquired the Certificate of ISO 9001 from BVQI for Crane
1996	Completed new Factory for the Industrial Machinery
1995	Acquired the Certificate of ISO 9001 from BVQI for Pressure Vessel
1990	Acquired the Special Equipment Fabrication Certificate from KGSC
1988	Acquired the Heat Equipment Fabrication Certificate from E.M.C.
1987	Acquired the ASME Certificate of Authorization 'U', 'U2', 'S', 'PP'
1977	Completed CHANGWON Main Factory
1957	Established HYOSUNG



Throughout its history laced with challenges and achievements, Hyosung has been at the forefront of delivering top value to customers in areas widely ranging from textile, industrial materials, chemicals, power & industrial systems, construction, trading and information & communication. Lately, Hyosung has fervently pushed itself to the global arena with the aim to supply top-quality products and services to customers around the world via its 50 overseas local subsidiaries and branch offices across Asia, Americas and Europe. At the same time, it has never ceased in its efforts to make strategic investments into promising future businesses and technological innovation to rise as the global company.

