



HANTECH

Your Strong and Better Partner

Dream Together, Challenge to the Future



HANTECH LTD.
ISO 9001, 14001 OHSAS 18001



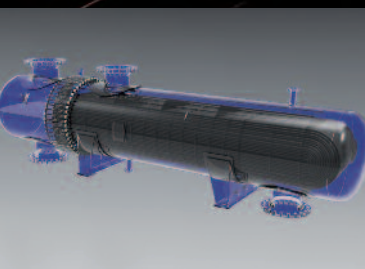
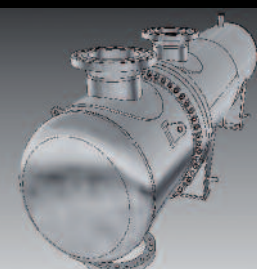
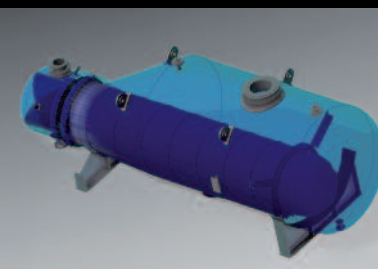
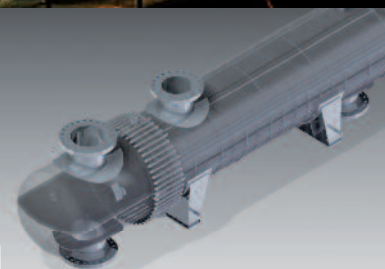
HANTECH LTD.
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kotra

GLOBAL
BRAND 2012

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Top Company providing the Best Values to You!

Hantech is committed to delivering our customers' most critical equipment meeting expectations for quality, schedule and satisfaction.
Let's Dream Together and Challenge to the Future with Hantech.



Strategy for Core Value

01	Growth Engine Approach	Boost in Core Competency for Critical Equipment Reduce Direct Cost for Increasing Cost Competitiveness
02	Reliable Partner	Enhanced Training for Optimizing Design Supply-Chain Quality System Management
03	Consistent Management Innovation	Continue to Develop Critical Component Production Skills Explore New Business in Spent Fuel Storage Cask

Since being established in 1973,

Hantech has provided high-quality chemical & petrochemical process equipment, cryogenic vessels and storage tanks to almost of major oil and gas companies. Our qualified engineering and manufacturing capabilities will meet your exact needs and assure your success.

Company Information

- Shop Layout
- Company Profile
- Organization
- Company History
- Company Philosophy & Vision
 - Philosophy
 - Vision





Total Shop Area 110,000 m²
Under Roof Area 35,000 m²
Distance to Port 1 km

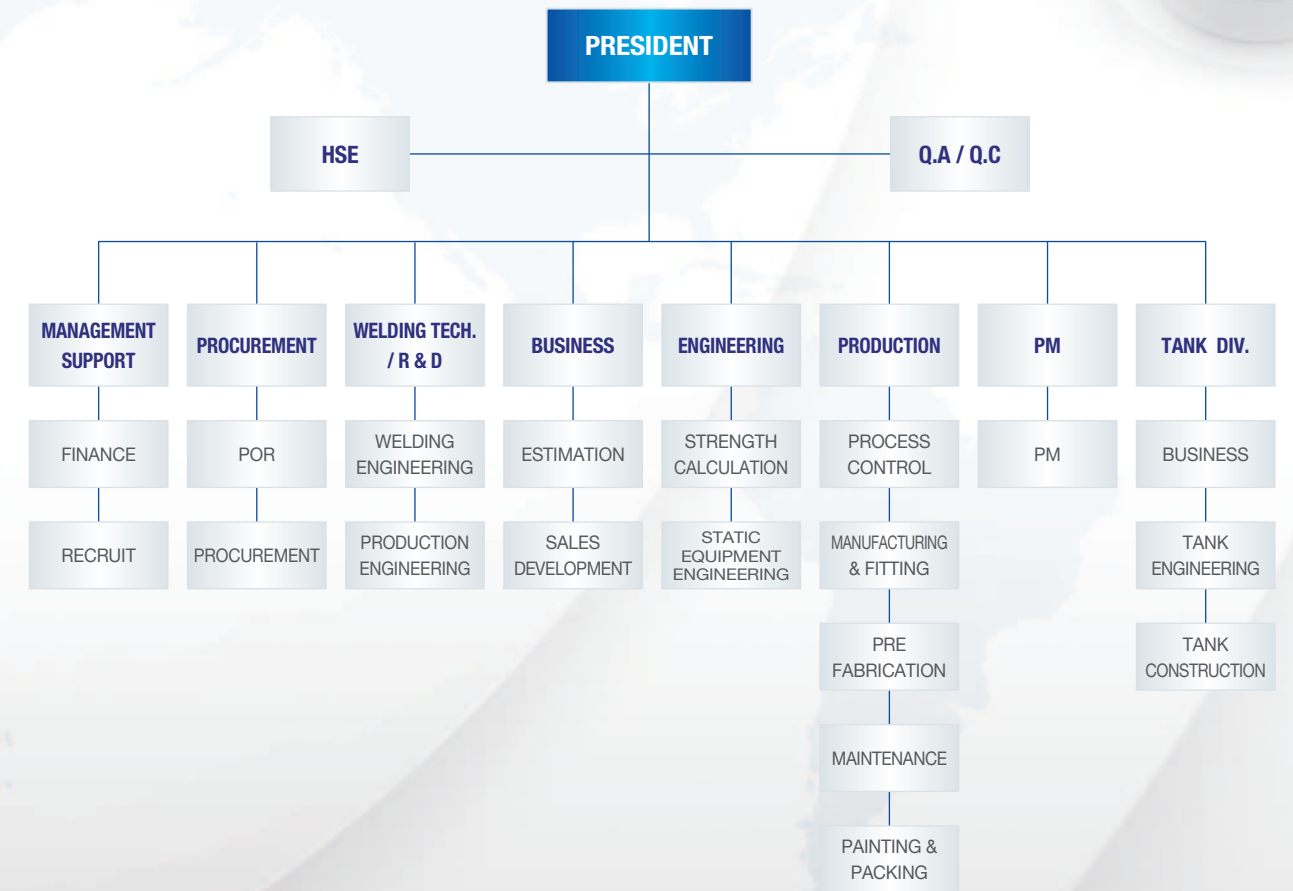
Shop No	Shop Size (Unit : m)
Shop 1	Heavy Duty Shop : 33.8 W x 176 L x 25 H (5,949 m ²)
Shop 2	Pre-Fabrication Shop : 24.4 W x 176 L x 21 H (4,294 m ²)
Shop 3	Stainless Steel Shop : 27.9 W x 176 L x 21 H (4,910 m ²)
Shop 4	Multi-Purpose Shop : 24.4 W x 176 L x 21 H (4,294 m ²)
Shop 5	Small Equipment Fabrication : 22.4 W x 117 L x 18 H (2,621 m ²)
Shop 6	Blasting and Painting Shop : 22 W x 69 L x 15.4 H (1,518 m ²)

Shop No	Shop Size (Unit : m)
Shop 7	Packing & Hydrotest : 22.5 W x 136 L x 21 H (3,060 m ²)
Shop 8 & 9	Bundle / Accessory / Machining : 24.5 W x 180 L x 14 H (4,410 m ²)
Shop 10 & 11	Clean Room / Ware House : 24.5 W x 45 L x 19 H (1,103 m ²)
Shop 12 & 13	RT Room : 12 W x 20 L x 11 H (240 m ²) / 9 W x 21 L x 5.5 H (189 m ²)
Shop 14	Acid Cleaning Room : 8 W x 21 L x 9 H (168 m ²)
Shop 15 & 16	Heat Treatment Furnace : 7 W x 17 L x 7 H (119 m ²) / 13 W x 21 L x 14 H (273 m ²)

Profile

- Established
 - November 1973
- Principal Business
 - Design and Fabrication of Chemical and Petrochemical process equipment
 - Heat Exchanger - Reactor
 - Pressure Vessel - Tower & Column
 - Cryogenic Equipment
 - Cryogenic Vessel
 - Cryogenic Storage Tank
 - Cryogenic Transport Tank
 - Chemical Storage Tank
- Material Experience
 - Carbon Steel for High & Low Temp. Service
 - Low-Alloy Steel
 - Stainless Steel (Duplex, etc) with Clad
 - Copper & Copper Alloy Steel
 - Nickel & Nickel Alloy Steel (3.5%, 9%, etc.)
 - Hastelloy, Inconel
 - Titanium & Titanium Alloy Steel with Clad
 - Zirconium & Zirconium Alloy Steel with Clad
- Fabrication Strengths
 - Zirconium and Zirconium Clad
 - Titanium and Titanium Clad
 - Hastelloy
 - Inconel and Incoloy
 - Other : Non-ferrous

Company Profile



*Dream Together,
Challenge to the Future*

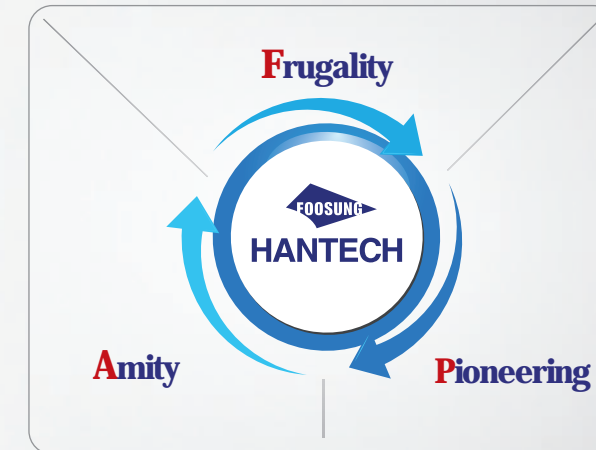


Company History



- 1973 Original Company established as the Machinery & Equipment Division of Korea Fertilizer Co., Ltd.
- 1984 Developed Semi-Auto welding technique for Tube to Tubesheet on Zirconium and Titanium H/EX. (Korea Patent)
- 1994 Corporate name changed to Samsung Fine Chemicals Company.
- 1997 Developed forming and flaring technique for lining and sleeve on Zirconium and Titanium clad equipment. (Korea Patent)
- 1998 Hantech spun off from Samsung Fine Chemicals Company.
- 1999 Renewal of ASME "U", "U2" and "S" stamps.
Acquired ISO 9001 certificate.
Developed technique of electrical hot cycle test on explosive clad vessel. (Korea Patent)
- 2002 Acquired "ML" certificate.
- 2003 Acquired "PED" certificate.
- 2004 Developed erection technique for liquefied gas field fabricated tank. (Korea Patent)
- 2005 Developed flexible insert pipe steel (Korea Patent)
- 2010 Acquired ASME "N", "NA" & "NPT" stamps.
Acquired ISO 14001 and OHSAS 18001 certificate.
- 2011 Hantech Incorporated into Foosung Group.
- 2012 Operations relocated to new fabrication shop in Onsan.
- 2018 Acquired quality certificate complying KEPIC (Korea Electric Power Industry Code) MN Code
- 2019 Acquired registration certificate from KHNP (Korea Hydro & Nuclear Power Co.)

Company Philosophy



- **Amicable HANTECH**
 - Work together as one for the common goals.
 - Respect, trust and love each other
- **Frugal HANTECH**
 - Focus on the substantial management based on diligence and sincerity
 - Have a sense of ownership for where you work.
- **Pioneering HANTECH**
 - Lead changes, rather than just following changes.
 - Have an open mind to new ideas
 - Have a challenging spirit for the future.

Vision

Top Manufacturing Company providing the Best Values to Customers

Your Strong and Better Partner

FOOSUNG HANTECH

Back to the Basic

- High Quality Products
- Most Reliable Service
- On Time Delivery

Continuous Development

- Modernization of Facilities
- Technology Innovation
- Research and Development of High-edge Products

Maximize Company Value

- Exceed Customer Expectations
- High Employee Satisfaction
- Safe and Clean Work Environment

VISION

For almost 47 years,

Hantech has been a true pioneer in the role of engineering and fabricating chemical plant equipment and plant facilities. Our company has continuously grown over the years to serve both local and overseas customers. Today and in the future, we promise our customers to meet their demands for high quality and high performance.

Major Products

- Heat Exchangers
- Reactors & Pressure Vessels
- Towers & Columns
- Cryogenic & Chemical Storage Tanks
 - Cryogenic Tanks
 - Chemical Storage Tanks
 - Vaporizer
 - Module & Skid



Heat Exchangers

With a fully equipped machine shop, Hantech is an excellent choice as a heat exchanger fabricator. We have special BTA drills that make accurate, smooth tubesheet holes and automatic tube welding equipment to provide uniform, defect-free tube welds.



Heat Exchanger with Three Tube Bundles (3-CAR)
(SA240-304H, SA516-70) for SM Process
• Client : Samsung Total Petrochemical / Korea (2007)
• Size(mm) : (23,82,25/20)T X ID 4,318 X L 41, 300 / 541 Ton



Carbamate Condenser (Advanced High-Alloy Duplex Material) for Urea Process
• Client : P.T. Petrokimia Gresik/ Indonesia (2017) • Size(mm): (14/127)T x ID 1,300 / 1,360 x L 14,300 / 56 Ton



Titanium Heat Exchanger (SA516-70N / SB338-2)
• Client : China Prosperity Petrochemical Co., Ltd./ China (2015)
• Size(mm) : (55/48)T X ID 4,850 X L 14,803 / 113.5 Ton



Chain Type C3 Chiller (SA240-304/304L / SA213-304/304L)
• Client : BP Tangguh LNG/ Indonesia (2018)
• Size(mm) : (29/67)T X ID 5,100 / 2,070 X L 21,630 / 422.6 Ton



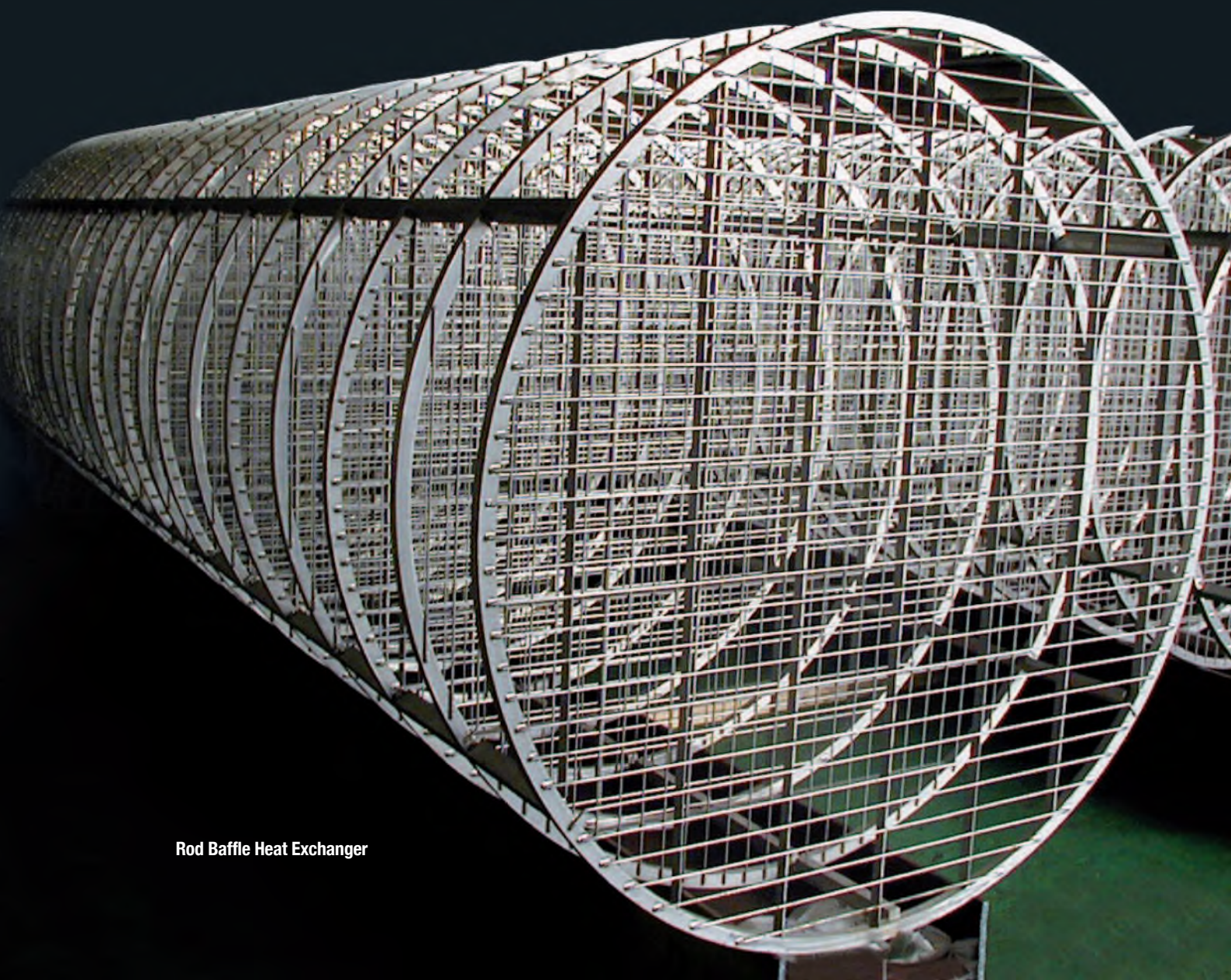
3-CAR Heat Exchanger (SA240-304H,SA516-70N,SA516-70 / SA213-304H,SA213-T11 / SA179)
• Client : Zhejiang Petroleum & Chemical Co., Ltd./ China (2018)
• Size(mm) : (23,95,25/40,20)T X ID 4,444 X L 40,730 / 605 Ton



Modified 'D' Type Heat Exchanger (SA387-22CL2+316L Clad / SA336-F22CL3 + 347 SS Depo. / SA213-TP321)
• Client : Bangchak Corporation/ Thailand (2018)
• Size(mm) : 142(Th'k on channel)T X ID 1,050 X L 8,408 / 34 Ton

Special Heat Exchangers

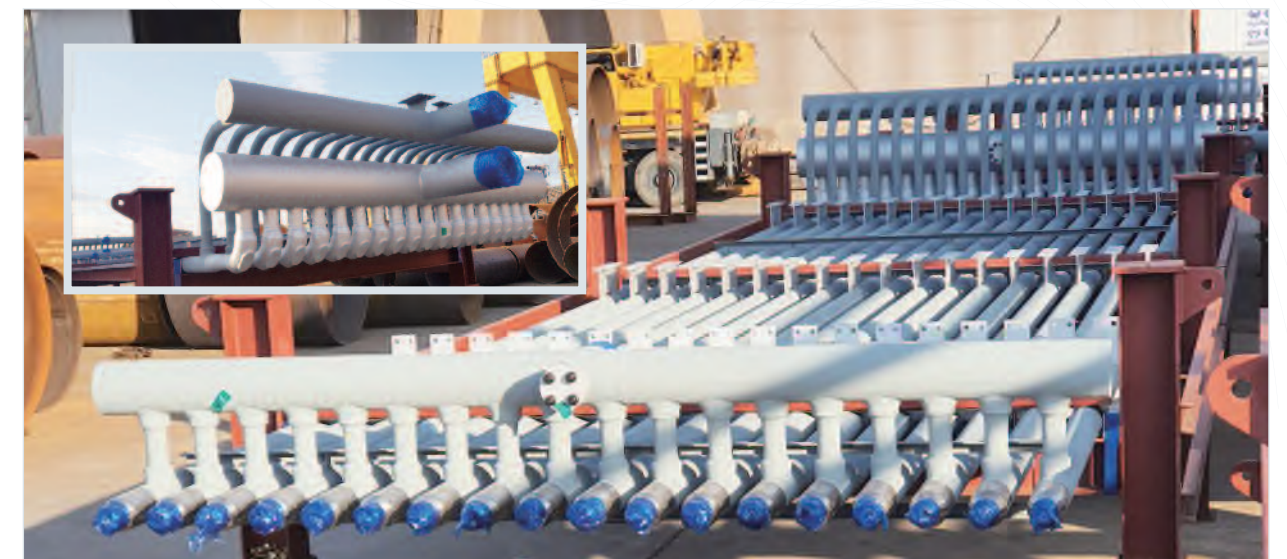
In addition to carbon steel and stainless steel heat exchangers, Hantech has continually developed our own technologies for non-ferrous and reactive metals over the years. We also have proven technologies for special type heat exchangers such as Helixchanger and Breech-Lock closure.



Rod Baffle Heat Exchanger



Helical Baffle Type Heat Exchanger



Primary Quench Exchanger (PQE)



Tantalum Material



Inner Bore Welding

Reactors & Pressure Vessels

Hantech provides a wide range of specialized reactors and pressure vessels such as separators, drums and accumulators in all weldable materials.



Titanium Clad Reactor (A516-70+B265-1 Clad)

- Client : Yangzi Petrochemical / China (2005)
- Size(mm) : (40+2)T X ID 4,500 X L 9,740 / 62 Ton



Titanium Clad Reactor made by Korean manufacturer (A516-70+265-1) For PTA Process

- Client : Samsung Petrochemical Co., Ltd / Korea (2004)
- Size(mm) : (46+2.5)T X ID 5,700 X L 16,400 / 160 Ton



Zirconium Tri Clad Reactor (A516-60+Ti-1+ZR-702 Clad)

- Client : Samsung Fine Chemical / Korea (2009)
- Size(mm) : T(22+3+2) x ID 2,000 x L 3,130 STL / 10 Ton



Oxychlorination Reactor (SA516-70N/B163-N02200)

- Client : Qingdao Haiwan Chemical Ltd./ China (2019)
- Size(mm) : (36/22+3.5)T X ID 3,500 X L 8,236 / 104 Ton



HTC Reactor (SA240-410S)

- Client : Tianjin Bohua Chemical Development Co., Ltd/ China (2019)
- Size(mm) : 37 T X ID 5,600 X L 15,350 / 140 Ton



Ammonia Plant Discharge Separator (SA516-70N)

- Client : Petrochemical Industries Design & Eng. (2010)
- Size(mm) : 53T x ID1,800 x L6,310 / 17 Ton

Towers & Columns

Hantech has reliable experience for the fabrication of towers and columns. We guarantee our services from fabrication to pre-commissioning for client's satisfaction.



MPC Reaction Tower (A516-70+304 Clad)
 • Client : Cheil Industries Inc. / Korea (2007)
 • Size(mm) : (23+3)T X ID 5,000 X L 47,330 / 180 Ton



Zirconium Column for Acetic Acid Plant (B551-R60702)
 • Client : Lotte BP Chemicals/ Korea (2019) • Size(mm) : 10T X ID 1,115/1,600 X L 39,900 / 17 Ton



Vacuum Column (SA204-AN+SA240+316 Clad)
 • Client : Oman Oil Refineries and Petroleum Industries Company/ Oman (2015) • Size(mm) : (31+3)T X ID 10,000 X L 43,750 / 439 Ton



Propylene Rectifier (Full Dressed, SA516-70N)
 • Client : Korea Petrochemical Ind. Co., Ltd./ Korea (2016)
 • Size(mm) : 39T X ID 4,800 X L 87,510 / 715.9 Ton



Propylene Fractionator (Big Tower, SA516-70N)
 • Client : Samsung Total Petrochemicals Co., Ltd/ Korea (2013)
 • Size(mm) : (60+1.5)T X ID 4,100 X L 98,600 / 776.7 Ton

Cryogenic & Chemical Storage Tanks

We design / fabricate / construct storage tanks in accordance with API 620 & 650, ASME, BS, AWWA, and other internationally-recognized standards.

Through to our long experience, we have accumulated knowledge of engineering, fabrication, and construction of CRT, DRT, FRT and Spherical Tank. Hantech is also well known for its expertise in cryogenic equipment & storage tank fabrication. The cryogenic tank for storing LN2, LO2, LAr, LPG, LNG, etc., requires specialized design to keep liquefied gas cold and materials that resist low temperature brittleness and fracture.

Business Field

- Refinery Tank Farm
(Chemical Storage Tanks)
Cone Roof Tank(CRT), Dome Roof Tank(DRT), Floating Roof Tank(FRT)
- Cryogenic Storage Tank
Liquid Nitrogen / Oxygen / Argon (-196 °C)
- Low Temperature Storage Tank
Liquefied Natural Gas (-170°C) /
Ethylene (-104°C) /
Propane & Propylene (-48°C) /
Ammonia (-38°C) / Butane & Etc.
- Spherical Storage Tank
- Vaporizer / Module & Skid



Refinery Tank Farm(Chemical Storage Tank)

• Cryogenic Storage Tank



High Pressure Cryogenic Storage Tank with Vacuum Insulated Type

- Client : SK Air Gas (Korea, 2017)
- Volume : 1,000 m³
- Material : A240-304 / A283-C
- Design Temperature / Pressure
: -196~40°C / 9.9+1.033 kg/cm².G
- Contents : LN2 (Liquid Nitrogen)



Cryogenic Storage Tank (Flat Bottom)

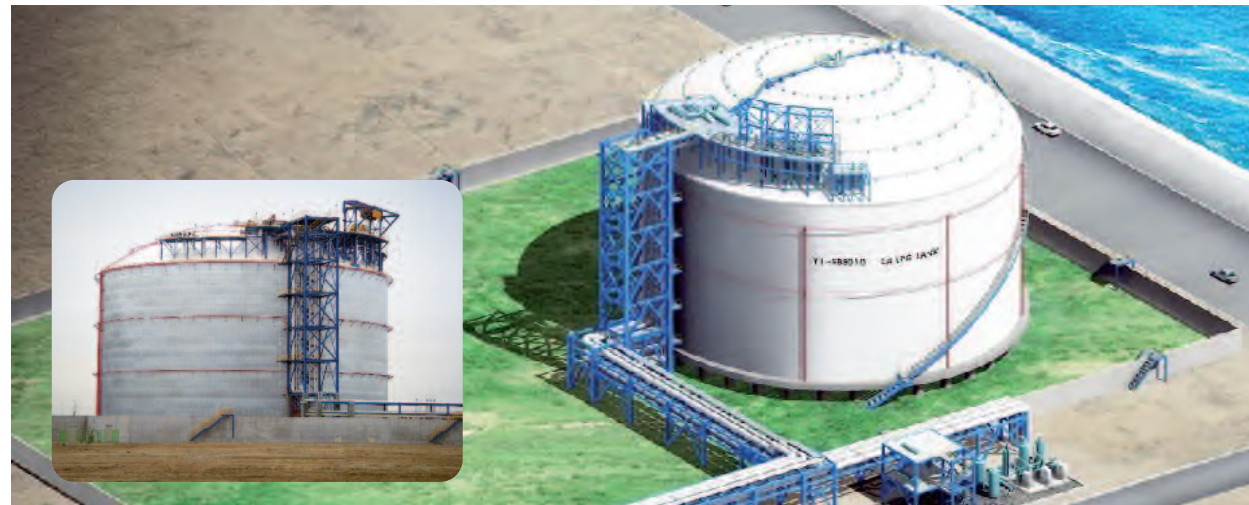
- Client : Air Products Korea (Korea, 2018)
- Material : A240-304 / A283-C
- Design Pressure : 0.4 kg/cm².G
- Volume : 7,800 m³
- Design Temperature : -196~65°C
- Contents : LN2 (Liquid Nitrogen)



The World Biggest Cryogenic Storage Tank (Flat Bottom)

- Client : Praxair Korea (Korea, 2019)
- Material : A240-304 / A283-C
- Design Pressure : 0.352 kg/cm².G
- Volume : 20,000 m³
- Design Temperature : -196~38°C
- Contents : LN2 (Liquid Nitrogen)

● Low Temperature Storage Tank



Dome Roof Storage Tank

- Client : Samsung Total Petrochemical / Korea (2010)
- Size : 58,000 ID (2,324 Ton), Volume : 92,553 m³
- Design Temperature/Pressure : -15°C, 0.152 kg/cm²G, Contents : Butane



Low Temperature Storage Tank (Double Wall)

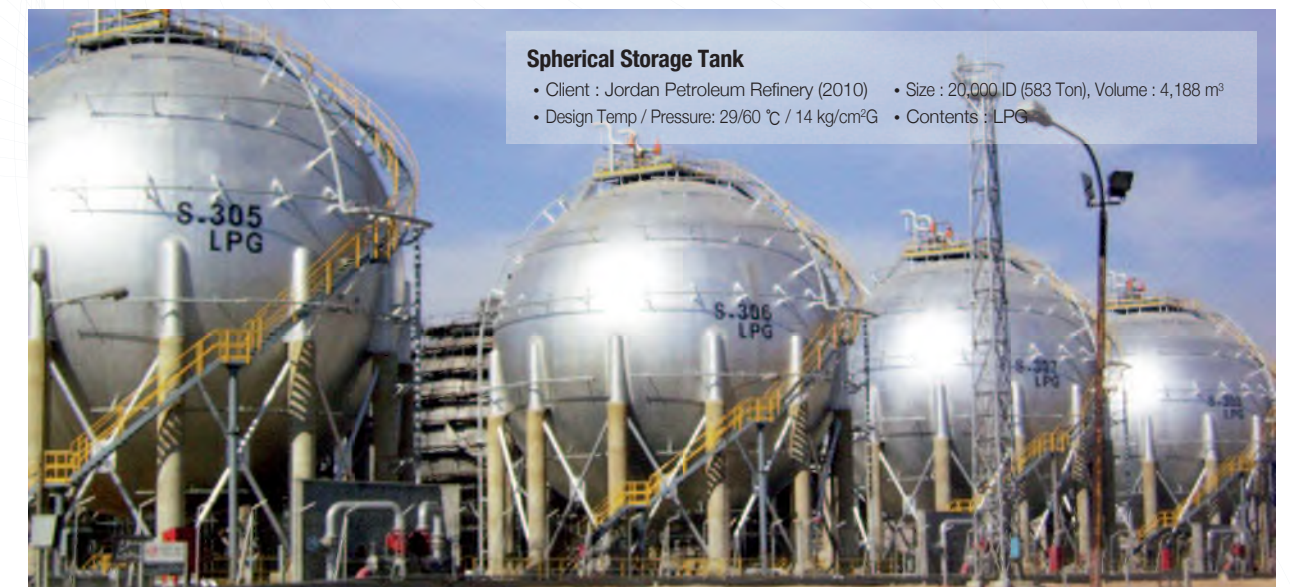
- Client : POSCO (Korea, 2016)
- Size (mm) : 58,500 ID (4,308 Ton), Volume : 92,730m³
- Design Temperature / Pressure : -45°C / 0.153 kg/cm².G
- Contents : LPG



Low Temperature Storage Tank (Double Wall)

- Client : Lotte Chemical (Korea, 2017)
- Size (mm) : 24,500 ID (782 Ton)
- Volume : 11,786m³
- Design Temperature / Pressure : -104°C / 0.1 kg/cm².G
- Contents : Ethylene

● Spherical Storage Tank



Spherical Storage Tank

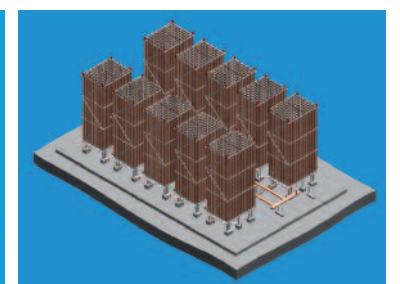
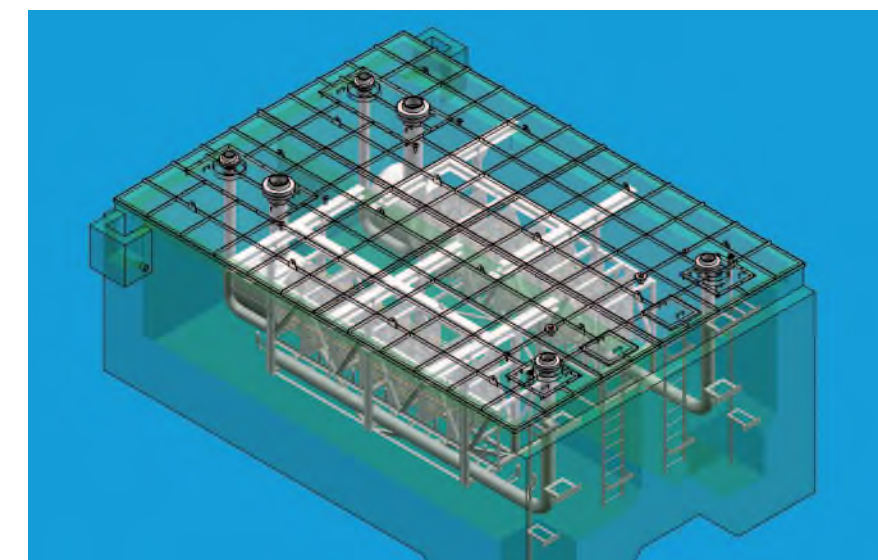
- Client : Jordan Petroleum Refinery (2010)
- Size : 20,000 ID (583 Ton), Volume : 4,188 m³
- Design Temp / Pressure : 29/60 °C / 14 kg/cm²G
- Contents : LPG



Spherical Storage Tank

- Client : Hanwha Total Petrochemical (Korea, 2019)
- Size (mm) : 21,300 ID (677.5 Ton)
- Volume : 5,060 m³
- Design Temperature : -48 ~ 60°C
- Design Pressure : 19 kg/cm².G
- Contents : Propylene

● Vaporizer



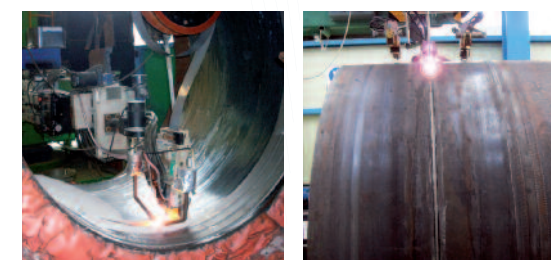
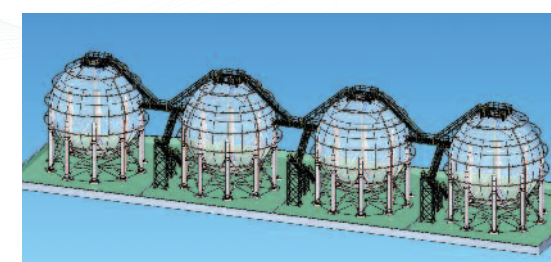
Water Bath Vaporizer (Steam Heated Type, A240-304/ A213-TP304)

- Client : POSCO (Korea, 2006)
- Size(mm) : 1,180 ID x 14 T
- Capacity : 60,000NM³/Hr.2Sets
- Contents : LO2 (Liquid Oxygen)

Our fabrication shops are equipped with modern equipment and machinery to handle all kinds of materials. Also, our design engineers are skilled in the application of various codes and standards to produce high quality, reliable designs. We are ready to serve you by providing critical and durable equipment that meet exact your requirements.

Manufacturing Capabilities

- Product Capacity
- Design Ability
- 3D Modeling
- PDM System
- Equipment & Machinery
 - Pre-Fabrication
 - Machining
 - Welding
 - Heat Treatment Furnace & RT Room



Product Capacity

We have produced heat exchangers, pressure vessels, reactors, towers & columns and cryogenic equipment at an ever increasing rate as our excellent reputation for high technology and competitive price spreads throughout the world. Our market is expanding continuously from a predominantly domestic to a mixed domestic & overseas to a predominantly overseas market.

• Production Capacity for Static Equipment

Description	Max. Inside Diameter	Max. Length	Max. Thickness	Max. Weight
Shell & Tube Heat Exchangers	8,000 mm	30,000 mm	250 mm	1,250 ton
Pressure Vessels / Reactors	10,000 mm	50,000 mm	250 mm	1,250 ton
Towers / Columns	10,000 mm	100,000 mm	250 mm	1,250 ton

• Production Capacity for Cryogenic and Storage Tanks

Description		Max. Capacity		Remark
Cryogenic Tank	Flat Bottom Type	25,000 m³		Design Temperature : down to -196 °C
	Vacuum Type	1,700 m³ (at Field)	500 m³ (in Shop)	Design Temperature : down to -196 °C
Storage Tank		100,000 m³		Field Fabrication
Spherical Tank		8,500 m³		

• Experienced Materials

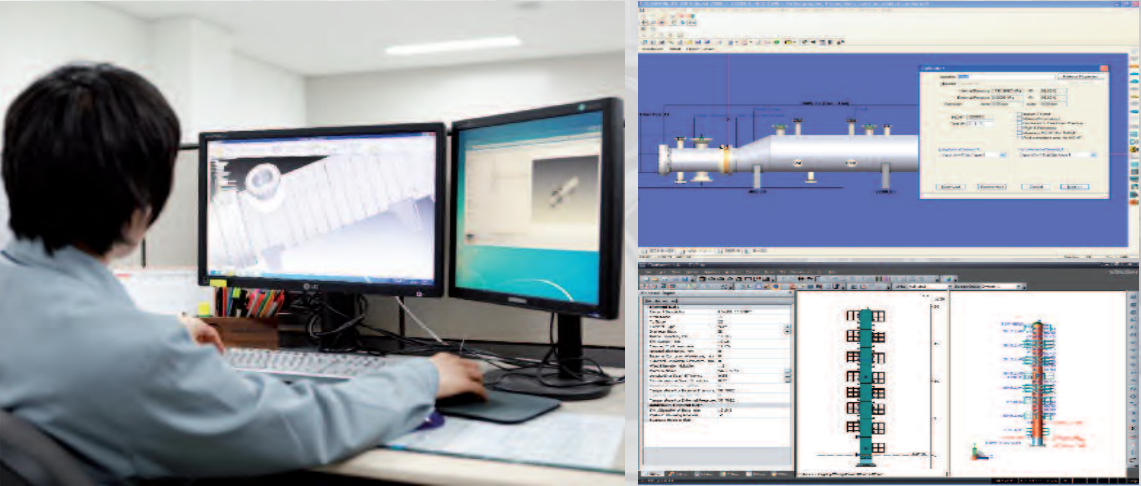
Ferrous	Cabon Steel	Killed Carbon Steel, HIC (Hydrogen Induced Cracking)
	Low-Alloy	Cr-Mo (1.25Cr-0.5Mo, 2.25Cr-1Mo, 5Cr-1Mo, 9Cr-1Mo), Nickel (3.5%, 9%)
	Stainless Steel & Duplex	Austenite, Martensite, Femite, Duplex, Super Duplex
Non-Ferrous	Nickel Alloy	Nickel, Hastelloy, Monel, Inconel, Incoloy, 904L
	Copper Alloy	Cu-Ni (70:30, 90:10), Aluminum Bronze, Aluminum Brass
	Special Alloy	Titanium, Zirconium, Tantalum
Clad- Material		SS-Clad, Ti-Clad, Zr-Clad, Tri (Ti+Zr) Clad

Design Ability

Hantech's experienced engineers are capable of designing chemical and petrochemical equipment that meet customer's various requirements. Advanced analysis for earthquake, vibration, transient, steady state, thermal stresses, etc is implemented using qualified techniques per the codes and standards. We have also developed our own software for special equipment such as spherical tank and various types of cryogenic tank.

• Design Software

No	Software Name	Developed by	Use
1	COMPRESS	Codeware, USA (Latest Ver.)	Design of pressure vessels per ASME Sec.VIII Div. 1&2
2	PV Elite	Intergraph, USA (Latest Ver.)	Design of pressure vessels by ASME Sec.VIII Div. 1&2 and PD 5500
3	Code Calc.	Intergraph, USA (Latest Ver.)	Design of pressure vessels per ASME Sec.VIII Div. 1
4	ETank 2000	Eware, USA (Latest Ver.)	API 650 & 620 : Design of storage tanks
5	HTRI	HTRI, USA(Latest Ver.)	Thermal design of heat exchangers
6	Nozzle PRO	PAULIN Research Croup, USA (Latest Ver.)	Stress analysis of nozzle loads.
7	ROD Baffle	Phillips Petroleum Company, USA (Latest Ver.)	Design of rod baffle heat exchangers
8	Solid Edge	Siemens, Germany	3D Modeling



• Design Standard

- 1) ASME Section VIII Div.1.2
2) ASME Section I
3) API Standard 620, 650
4) TEMA
- 5) JIS 8243, 8249 & 8270
6) PD 5500
7) PED 97/23/EC
8) Indian Boiler Regulation (IBR)
- 9) Australian Standard (AS)
10) Chinese Standard (GB)
11) Russian Standard (GOST)

3D Modeling

We also provide 3D modeling for equipment using 3D CAD Parametric feature solid modeling software. It reduces design mistakes and minimizes the need for re-work after equipment fabrication is completed. Also, it provides customers with the ability to provide feedback and to address potential problems early in the design stage.

• Example of 3D modeling by Hantech



• 3D Modeling Software “Solid Edge”



are very familiar with the software through continuous training and actual design experiences. Better and Faster, this can be possible with Hantech.

We use “Solid Edge” designed by SIEMENS for 3D modeling of equipment. Solid Edge is the most complete hybrid 2D/3D CAD system that uses synchronous technology for accelerated design, faster change, and improved imported reuse. With superior part and assembly modeling, drafting, transparent data management, and built-in finite element analysis, Solid Edge eases the growing complexity of product data.

Hantech's design engineers

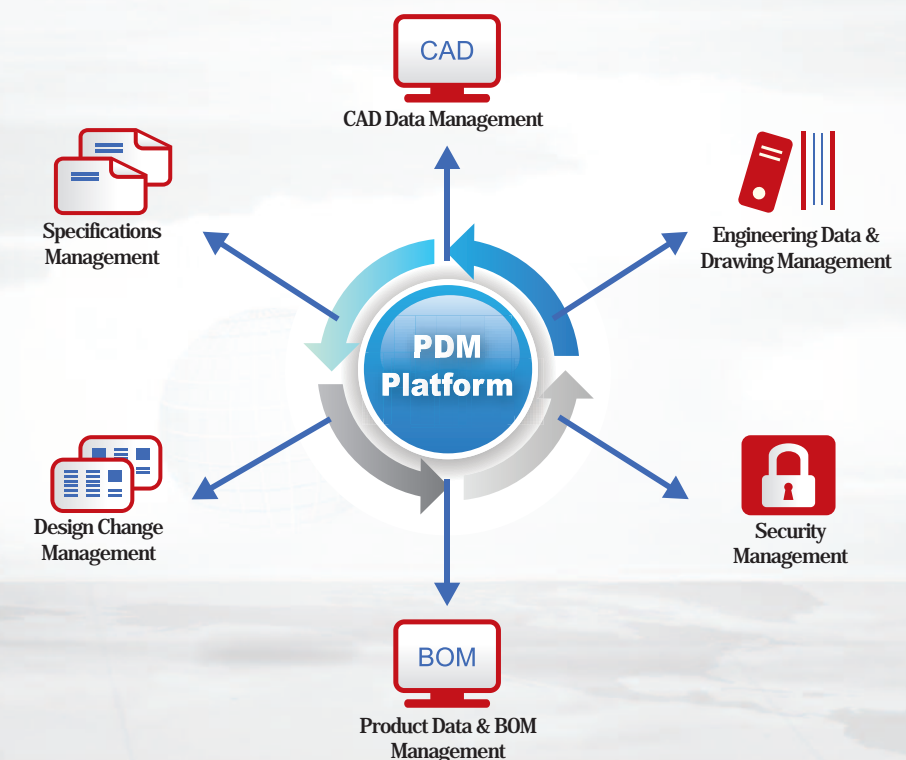
PDM System

Hantech has adopted PDM (Product Data Management) system to track and control data related to project management. The PDM system improves work efficiency and shortens designing time as it makes possible 1) to share information among all relative divisions, 2) to utilize design resources used in past projects. The use of PDM system will result in improved quality, flow and use of information related to the engineering process. Based on PDM system, Hantech is able to meet the growing demands of ever more competitive business environment, always raising the bar.

• Purpose of PDM



• Main Functions of PDM



Equipment & Machinery

Hantech has modern pre-fabrication and machining shops to carry out critical operations within the company. Tubesheets and baffles are precision-drilled on BTA and NC machines. high alloy, non-ferrous, Titanium and Zirconium parts are accurately prepared by water jet cutting.

• Pre-Fabrication Machine



Water Jet Cutting Machine • Max. Cutting Thickness : 100 mm



CNC Plasma Jet Cutting Machine • Max. Cutting Thickness : 80 mm



Bending Roller • Max. thickness : 90 mm

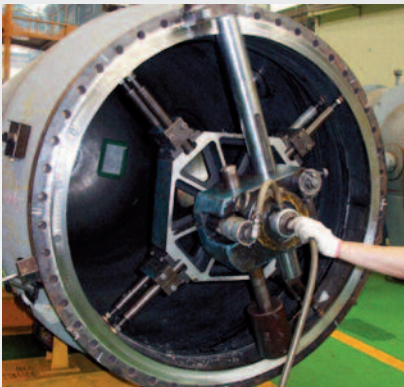


Hydraulic Press
• Pressing capacity : 1,500 Ton

• Machining Shop



Vertical Lathe & Turning Machine
• Max. working dia. : 4,500 mm



Portable Lathe
• Max. working dia : 2,500mm



B.T.A & deep hole drilling machine
• Max. working dia : 6,000 mm, Max. drilling thickness : 1,000 mm



CNC Drill Master
• Max. working dia : 5,000 mm • Max. drilling thickness : 100 mm



CNC Drill Machine (Drill Master)
• Max. working dia : 3,000 mm,
• Max. drilling thickness : 400 mm

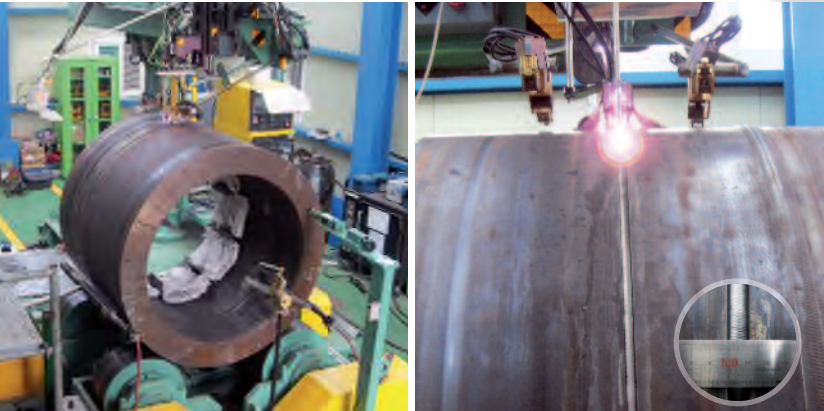
Equipment & Machinery

• Welding & Welding Equipment

Hantech’s qualified welders are able to handle all types of materials ranging from carbon steel to non-ferrous metals and alloy steels. Our modern welding equipment including Submerged Arc Welding machines, CO² gas welding machines, Plasma Arc welding machines, etc., enhance our welding capabilities.



Electroslag Welding (ESW)



Gas Tungsten Arc Welding (GTAW)



Titanium Welding



Submerged Arc Welding (SAW)



Tantalum Welding

• Heat Treatment Furnaces and RT Room

Hantech has Heat Treatment Furnaces and RT Room. These facilities are directly connected from the fabrication shops by moving rails, so products can be moved faster and safer. As a result, it allows more efficient work flow.



Annealing furnace (Max. Temperature : 1,150 °C)

- Inner size (W x H x L) : 13 x 14 x 21 m
Max. Temperature : 720 °C (Batch Type)
- Inner size (W x H x L) : 7 x 7 x 17 m
Max. Temperature : 1,200 °C (Car Type)
- Annealing furnace
(Max. Temperature : 1,150°C)



RT Room with moving bed



- Nominal dimension (W x H x L)
: 12 x 11x 20 m
- Max. Thickness : 203 mm
(Tester : Linatron-M3)
- Shooting Time
: Less than 4 mins (t150)
- 3 MeV Use

Hantech's Quality Policy



The quality policy of Hantech Ltd. is to provide highly reliable and quality products and services throughout design, production, and inspection, to final delivery.

We established a Quality Management System in compliance with ISO 9001: 2015, and PED 97/23/EC, and ML requirements as a means of accomplishing our company's quality policy.



Main Policy

- I . Implement, review effectiveness and suitability, and improve continuously the quality management system of our company.
- II . Establish measurable and attainable quality objectives which shall be consistent with the quality policy, and try our best to achieve the objectives.
- III . Understand our quality policy; involve our suppliers in our quality policy, and work together to enhance customer's satisfaction.
- IV . The quality management representative shall report the performance of activity affecting quality to me periodically, after reviewing the implementation of the quality management system and its results, for necessary action.

Test Equipment

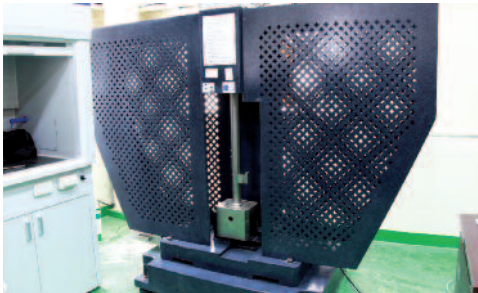
Measuring & Test Equipment

Equipment	Description
Universal testing machine	50 ton
Charpy impact testing machine	500J automatic system
Alloy analyzer	spectrotest, niton xli818
Tele brineller	
Hardness tester	equotip
Vickers hardness tester	50kg.f
Helium leak detector	1 x 10 ⁻⁹ mbar·ℓ/s
Roughness tester	±40μm
Adhesion tester	0~70 MPA
Dry film thickness gauge	0~1000μm
Bore scope	
Dead weight tester	10~1000 kg/cm ²
Micro scope metallurgical	MSL-TI
Dew point meter	-80 °C
Handy vibrometer	ACV
Densitometer	
AC/DC clamp meter	
Hydraulic testing pump	Max.800 kg/cm ² Max.200 kg/cm ²
Thermometer	-196 °C ~ 1300 °C
Black light	SA-125, BS-200
Metallurgical polishing appratus	
Tachometer	SHIM-2U
Cylinder gauge	6~60mm
Ultrasonic thickness gauge	0.63'500mm
Vacuum pump for leak test	5 x 10-3 torr
Gas flow meter	
Teledyne gauge for Vacuum	
Precision Level	200x0.02(1 DIV)
Residual Chloride Meter	0~2 ppm

NDE Facility

• Nondestructive Testing Equipment (In house)

Method	Equipment Description
X-Ray	Linatron M-3
	RIGAKV 250kv
	Toshiba EX-260GH
Gamma Ray	Hojin 880D
Magnetic Particle	Amersham
	Nawoo MMP-B
Ultrasonic	Kraut Kramer USK8S
	Olympus Epoch XT
	Sonatest SS-140L



Certificates Held

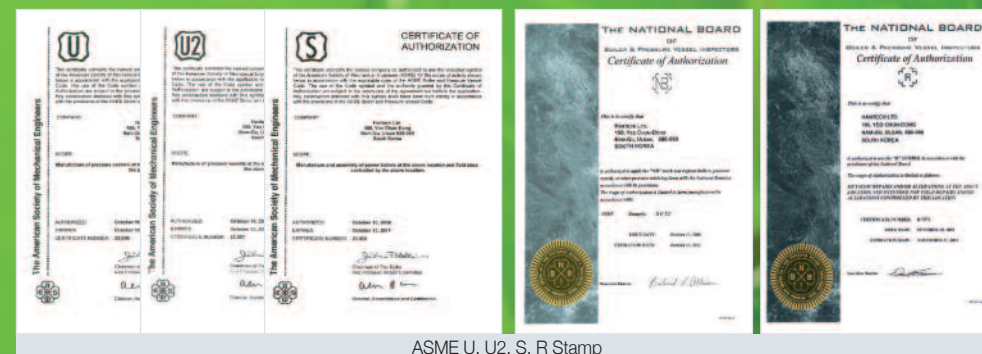
With its ISO 9001 certification and our dedication to excellence in quality control and assurance, Hantech strives every day to satisfy our clients with the quality of our products.

Even beyond this high level, we are constantly improving the performance of our equipment through exclusive, patentable design upgrades. These developments put us in the position of a leading fabricator worldwide.

Based on our extensive experience and accumulated technology, Hantech will continue to develop an outstanding quality system that can become the world's best.

Hantech follows company policies regarding environmental protection and health and safety.

These certifications to the ISO 14001 Environmental Management Standard and to the OHSAS18001 Occupational Health and Safety comply with Korean regulations and adopt internationally recognized standards.



ASME U, U2, S, R Stamp



ML for Pressure Vessel (China)

KEPIC

HSE.

Health, Safety & Environment

Hantech's commitment to environmental, health, and safety excellence complements our commitment to global sustainability with our own HSE Department.



Hantech is dedicated to operate in an environmentally, ethically and socially responsible manner. This commitment includes maintaining safe facilities and operations and providing goods that are safe and minimize environmental burdens throughout their life cycle.