JUNGSAN

BOLT & NUT

SPECIAL
BOLT
NUT
FITTINGS

JUNGSAN
BOLT & NUT GROUP

GLOBAL NO 1 : TOP 2030

Growing into a global creative business with innovation and customer impression!

Technology &Quality

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Jungsan Enterprises, which has continued to develop with great passion, will grow beyond Korea and into the world, contributing to society and becoming a recognized company.

JUNGSAN
BOLT & NUT GROUP

Management Philosophy

Sei so, Sei ketsu, Sei ri, Sei don keep the company
It becomes a driving force for development.

Management Ideology

value Creation

Customer Value
Corporate Value
Employee Value

Customers Satisfaction

Quality Satisfaction
Price Satisfaction
Delivery Satisfaction

Local Public Development

Social Responsibility

As a parts venture company in the heavy industry field,
we produce and supply a wide variety of machine element parts based on ours trengthened quality and know-how in producing machine element parts focusing on industrial bolts and nuts.

Partnership Clients

현대 | Hanwha | SAMSUNG 삼성중공업 | DSME | DOOSAN
한화에어로스페이스 | stx | MAN Diesel & Turbo | IHI | MITSUBISHI HEAVY INDUSTRIES
Kawasaki | SIEMENS | KEPCO | KHNP | KNPC
MODEC | GENERAL DYNAMICS NASSCO | 제룡산업주식회사 CHERYONG INDUSTRIAL | WÄRTSILÄ

BRIEF HISTORY OF COMPANY

With constant challenges and innovative technology,
We are creating a new history.

1983

- Founded

1998

- Incorporated
- Registered as HHI partner (UZ077)
- Registered as HSD partner (No.2001-079)
- Registered as DHI partner (290715)

1999

- Research Institute establish (No.931206)
- Venture business certification (No.99122421-189)
- KITA registration (12087828)
- Selected as an export support company (No.99-35)

2000 - 2002

- ISO 9001 certified (EQA)
- HHI Excellent Quality Partner (No.2001026)
- Promising export small and medium-sized enterprise (No.2002-089)

2009 - 2010

- Establishment of 2nd factory
- HSD Best Partner Award
- Selected as a zero-accident company
- Received National Tax Service Commissioner Award
- Single PPM quality certification (2 items certified) (No.1-16-2-1796)

2011

- Received Single PPM Presidential Award (No.179550)
- Patent registration: 2 items (No.10-1027478)
- Selected as a company specializing in parts and materials (No.8213)
- Selected as Ulsan Global IT Company (No.2011-7)
- Similar design registration (1 item)
- Design registration (1 item) (No.30-30-0620566)

2015

- KEPIC Certification (KEPIC : DN-662)

2016

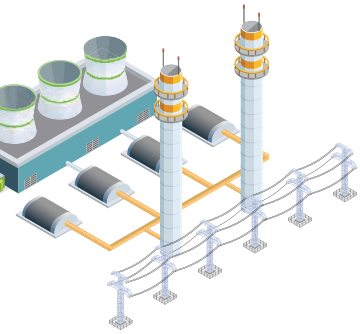
- Received MOTIE Minister Award (Future management)
- Quality, environment, safety and health system certification (KR)
- Registration of 5 major power plants

2017

- Heat treatment plant approval (DNV.GL & ABS)
- ISO/TS 29001 certified (DNV.GL)
- SHI vendor registration
- KC LNG TECH certified (KR) (No.KC1-M-2017-0101)
- JSRS certified (OMAN)

2018

- ORPIC vendor registration
- SAOC vendor registration
- PED(CE) certified (DNV.GL)
- GOST-R certified



Growing into a global creative business with innovation and customer impression!

2004 - 2006

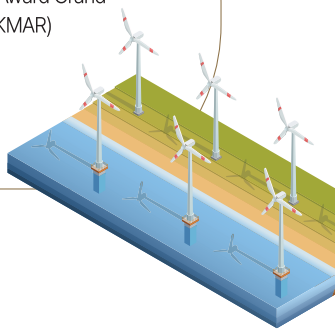
- Selected as a clean business (kosha No.7479)
- ISO9001:2000 Quality system certification (ORI)

2007

- Single PPM quality certification (Mss : No.1-16-2-1464)
- Model Taxpayer Award (No.0144)
- HSD Excellent Quality Partner Award (QS-0702-18)
- DHI Excellent Quality Partner Award (SRM07-024)

2008

- Acquired INNO-BIZ certification (No.8021-0803)
- Single PPM Group Award Prime Minister's Award (No.145877)
- Global Standard Management Award Grand Prize in Quality Management (KMAR)



2012

- Patent registration: 2 items
- OHSAS 18001:2007 certified (MSA)
- ISO 14001 18001:2007 certified (MSA)
- Origin Certification Exporter Certification (No.120-200094)

2013

- Awarded 1 Million Dollar Export Tower
- INNOBIZ Certification (No.20085772)

2014

- Single PPM quality certification (2 items certified) - TIE ROD / HYD. NUT (mss : No.1-16-2-2265)
- Selected as a promising company (Ulsan Technopark)
- MAIN-BIZ Certification
- PMS LEVEL.4 Certification

2020

- GOST-R certified
- NASCO vendor registration
- KNPC vendor registration
- SAM vendor registration

2021

- UFSO vendor registration
- Registered as KEPCO safety equipment supplier

2023

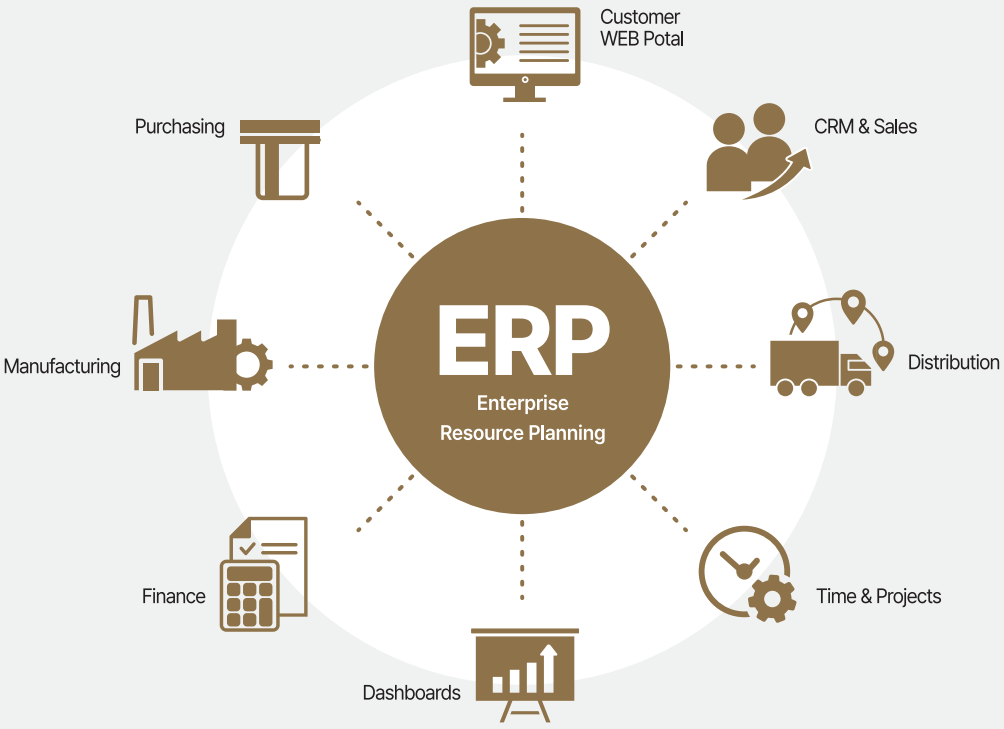
- Awarded 2 Million Dollar Export Tower
- Selected as an excellent company for shipbuilding and marine equipment (KOMEA)
- SeAH Besteel (Nuclear Power) vendor registration
- Establishment of ASME SYSTEM (Material/Fasteners)

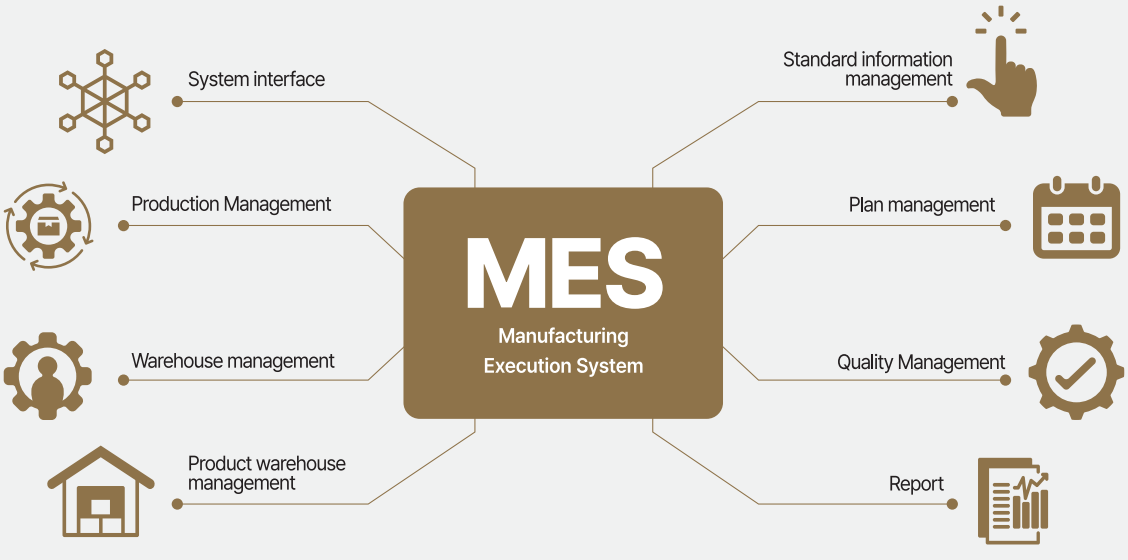
PRODUCTION PROCESS

All of Jungsan's products, which combine high productivity and precision,
are the result of thorough quality control from materials
to production/shipment.

SMART FACTORY REALIZATION

By integrating all production processes from product planning to sales with ICT technology, we have implemented a smart factory (ERP/MESSYSTEM) that can produce customized products at minimal cost.





OUR BUSINESS

MARINE ENGINE PARTS

MAJOR FUNCTION

- Installed for joining marine engines, requiring high tensions at the engine driving part

PRODUCT FEATURE

- Products for joining engine driving parts, requiring mechanical properties such as impact strength and tensile strength and requiring trust in quality absolutely
- Finished confirmation inspections from LR, ABS, NK, DNV/GL, KR, etc., classification institutions
- Manufactured using alloy steels (SNCM / SCM)

SULZER 12RTA96C CYLINDER COVER PARTS

STUD/HY'D NUT FOR CYLINDER COVER
FITTED BOLT. CHEESE HEAD
USED MATERIALS : SNCM439, SCM440

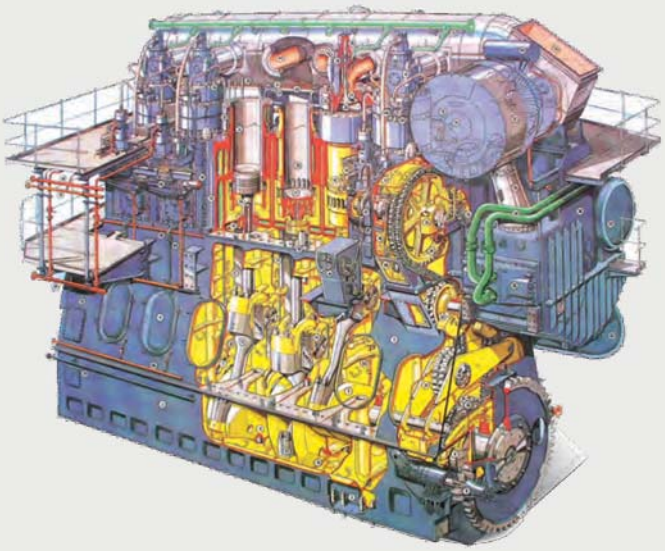
MARINE ENGINE

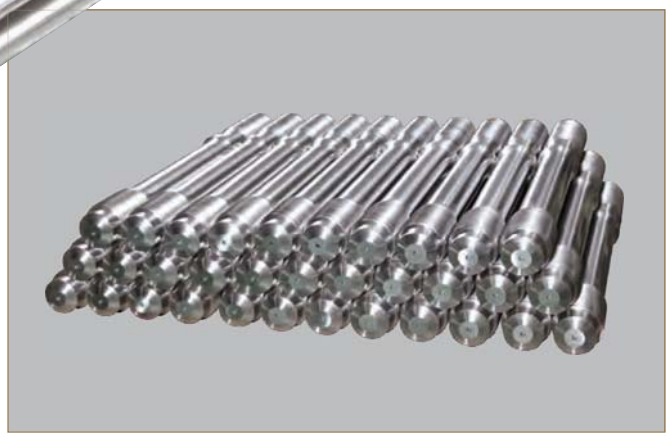
MAN B&W 6L60MC(15600 BHP)
MAN B&W
SULZER (9RTA84C TYPE)
TURBOCHARGER
HIMSEN

MARINE ENGINE PARTS

MAN B&W 6L60MC
(15600 bhp)

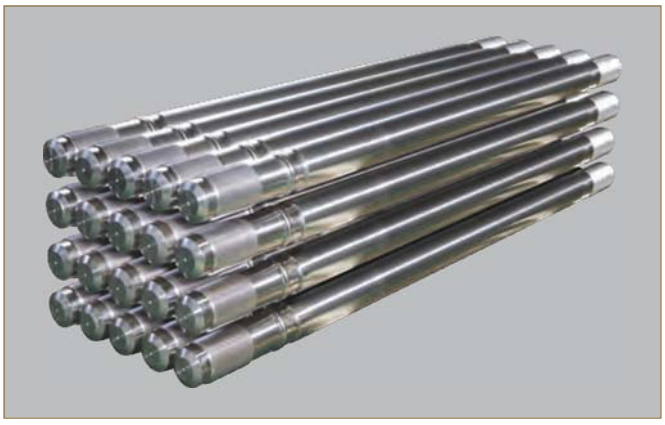
Connecting-Rod Parts
Main Bearing Parts
Cylinder Cover Parts
Sulzer 12RTA96c Cylinder Cover Parts





Connecting-Rod Parts
Stud/Hy'd nut for connecting rod to bearing cap(crankpin.crosshead)
Used Materials : SNCM439, SCM440

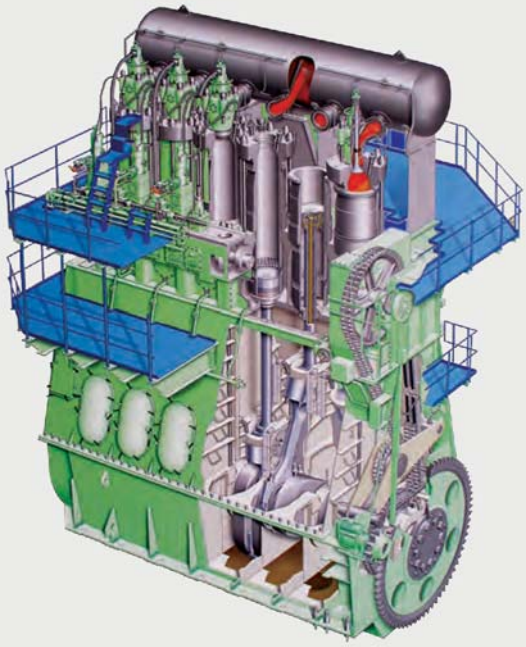
Main Bearing Parts
Stud/Hy'd nut for crank shaft to main bearing cap
Used Materials : SNCM439, SCM440



Cylinder Cover Parts
Stud/Hy'd nut for cylinder cover
Used Materials : SNCM439, SCM440

MARINE ENGINE PARTS

MAN B&W



Exhaust Valve Parts
Piston Rod part
Special Plug Parts

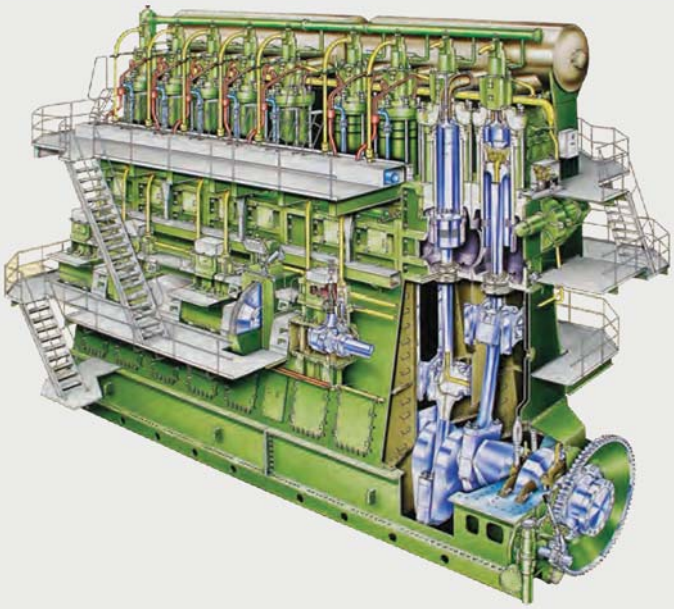
Piston Rod part
Used Materials : SNCM439, SCM435, SCM440

Special Plate, Pin, U-Bolt, washer Parts
Used Materials : S45C, SS400, SUS304,SUS316

Exhaust Valve Parts
Stud/Hy'd nut for exhaust valve
Used Materials :
SNCM439, SCM440

MARINE ENGINE PARTS

SULZER
(9RTA84C TYPE)



Special Bolt part
Special Fitted Stud part
Special Nut Parts

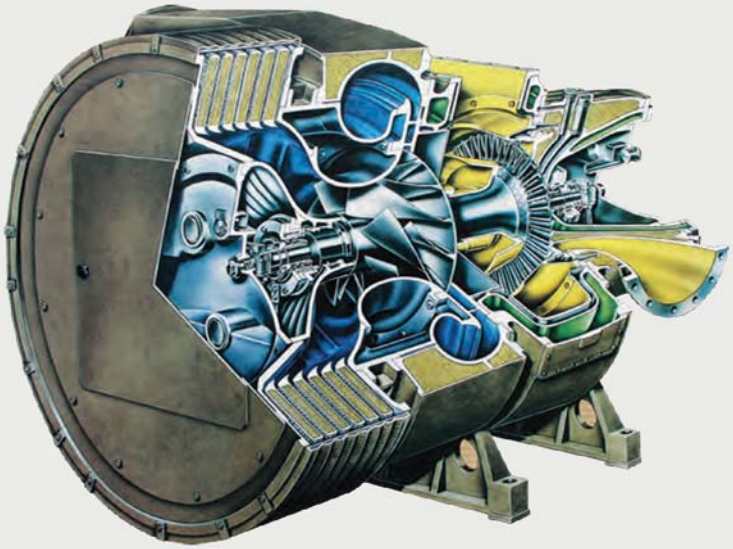
Special Bolt part
Used Materials : SNCM439, SCM435, SCM440

Special Nut Parts
Used Materials : SCM435, S45C, SS400

Special Fitted Stud part
Used Materials :
SNCM439, SCM435,
SCM440

MARINE ENGINE PARTS

TURBO CHARGER



Turbocharger Parts Used
Receiver Parts
Special Plate, Pin, U-Bolt, washer Parts

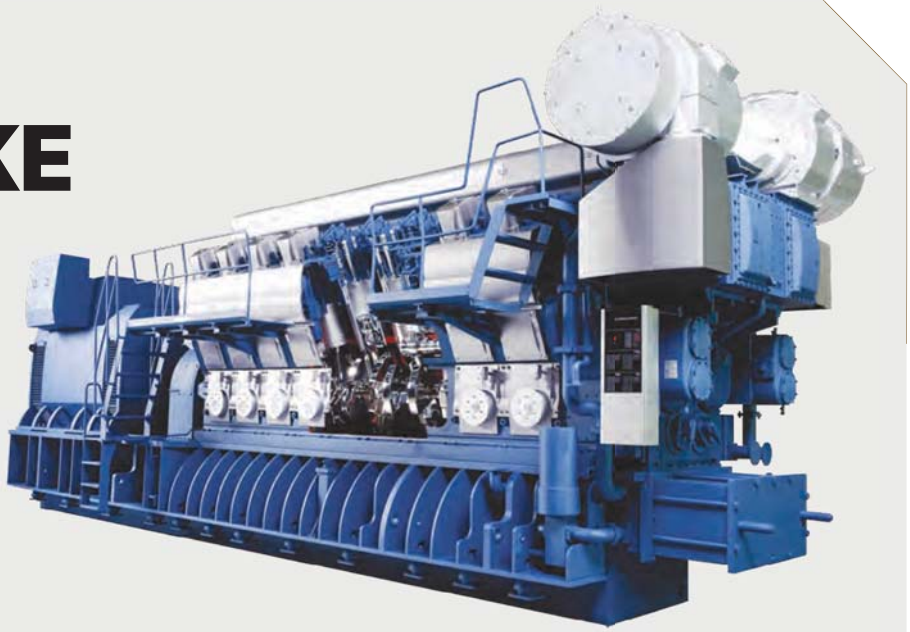
Turbocharger Parts Used
Materials : Ni80A, SUH660, SNB16, SUS316, SUS304, Nitrated Bolt

Receiver Parts
Used Materials : SCM435, SS400

Special Plate, Pin, U-Bolt, washer Parts
Used Materials :
S45C, SS400, SUS304, SUS316

MARINE ENGINE PARTS

4-STROKE ENGINE



Main Bearing Parts
Connecting-Rod Parts
Cylinder Cover Parts

Main Bearing Parts
Stud/Hy'd nut for crank shaft to main bearing cap
Used Materials : SNCM439, SCM435, SCM440

Connecting-Rod Parts
Stud/Hy'd nut for connecting rod to bearing cap (crankpin.crosshead)
Used Materials : SNCM439, SCM435, SCM440

Cylinder Cover Parts
Stud/Hy'd nut for
ylinder cover Used Materials :
SNCM439, SCM435, SCM440

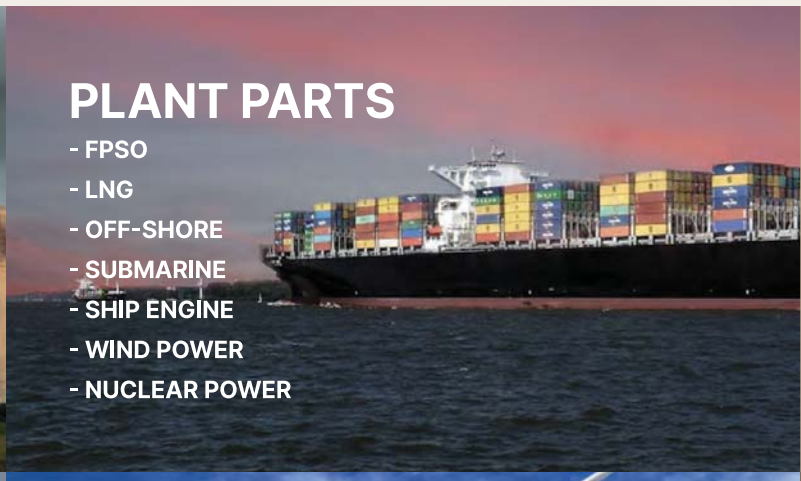
PLANT PARTS

MAJOR FUNCTION

- Used for joining various plant elements, and made of special materials
- Bolts and nuts installed for nuclear power turbines

PRODUCT FEATURE

- High functional product with high durability even at ultra high/low temperatures and ultra high pressures
- Satisfying the quality assurance plan requirements of KEPIC MN/SN, ASME NQA-1
- Made of special alloy steels
  - SUPER DUPLEX
  - ALLOY STEEL
  - NICKEL ALLOY
  - INCONEL
  - BRASS
  - BRONZE
  - COPPER
  - TITANIUM
  - HASTELLOY etc.



STUD BOLT

HEXAGON HEAD
BOLT & NUT

STUD BOLT & NUT

U-BOLT/HEX NUT
INSOLATION PAD

WELD STUD & FERRULE

HEAVY HEX BOLT
(HEXAGON BOLT)
/ HEX NUT

HEXAGON SOCKET
HEAD BOLT

COUPLING BOLT

HAEDER PLUG

12PT BOLT & NUT

H/T BOLT

H/T BOLT

- HIGH TEMP BOLT
- SPECIAL PLUG
- OTHER FASTENERS

PRODUCTION FACILITY

We will do our best to create infinite value through cutting-edge facilities
and innovation in next-generation technology

MAIN FACILITIES

EQUIPMENT	CAPACITY	Q'TY	EQUIPMENT	CAPACITY	Q'TY
Band Saw CNC Band Saw	400a/350/330/300a	4	Lathe	Ø 19 ~ Ø 32	7
CIRCULAR Saw	P-150B/P-65B/ CK3-125	2	Marking Machine	Ø 10 ~ Ø 100	4
Chamfering M/C	Ø 10 ~ Ø 100	2	Friction Press	150 Tons	1
CNC Lathe	Lynx 200	27	Hydraulic Bending M/C	50/150 Tons	2
Thread Rolling M/C	100/60/50/40/30/20 Tons	15	Bench Lathe	-	4
Press	200Ton/50Ton	4	Pit Furnace	200~1,100°C	5
Sand Blast M/C	-	2	Milling M/C	-	5

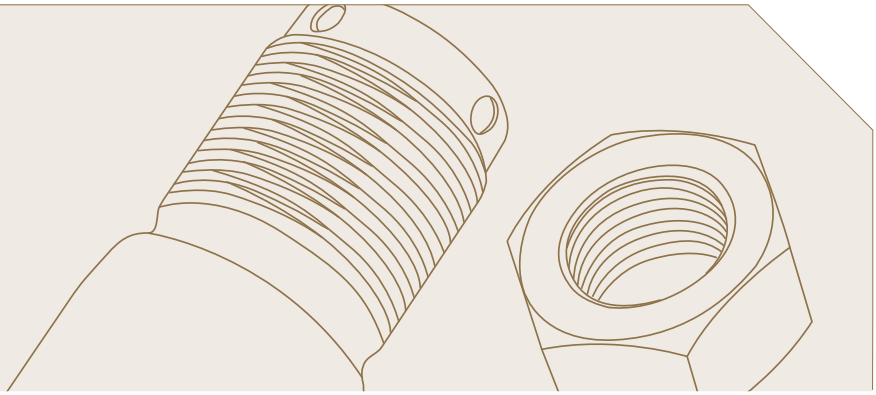
OTHER FACILITIES

EQUIPMENT	CAPACITY	Q'TY	EQUIPMENT	CAPACITY	Q'TY
Up-Right Drilling M/C	W400, 2200h	2	Hoist	25m, 2.8ton 10m, 2.8ton	6
M/R Hoist	2.8 Tons	6	Air Balancer	350kg	3
Air Compressor	20kw(15hp)	5	Arc Welder	-	4
Automatic Assembling M/C	-	8	Buffing M/C	C110 X 3000L 60 X 1000L	2

THREAD ROLLING (R30A)

MACHINE SCREW(TK5C-72GL)

C.N.C LATHE(PUMA 600LM)



Testing Equipment

EQUIPMENT	CAPACITY	Q'TY	EQUIPMENT	CAPACITY	Q'TY
CHEMICAL SPECTROMETER ANALYZER		1	IMPACT TEST MACHINE(JIS)	30 Kgf.m	1
UNIVERSAL TEST MACHINE	50 Ton	1	IMPACT TEST MACHINE(ASTM)	30 Kgf.m	1
UNIVERSAL TEST MACHINE	150 Kg	2	METALLURGICAL MICROSCOPE	PME 3	1
MT TESTER YOKE TYPE	20kw(15hp)	1	BRINELL HARDNESS TESTER	-	1
PROOF LOAD TESTER	-	1	SURFACE ROUGHNESS TESTER	0~200.0μm	1
PORTABLE HARDNESS TESTER	-	1			

UNIVERSAL TEST MACHINE

IMPACT TEST MACHINE

CHEMICAL SPECTROMETER ANALYZER

BUFFING MACHINES

FRICTION PRESS (400t)

THREAD ROLLING (120t)

CERTIFICATE AND REGISTRATION

With innovative creativity and an unstoppable spirit of challenge,
We will leap forward to become the World's Best Company
that pioneers the future.

Certificate and Registration

Laboratory Certificate

INNO-BIZ Certificate

Single PPM Certificate

Heat Treatment Plant Approval (DNV/GL)

Power Plant Registration Certificate

KNPC Qualified Supplier

KC LNG Supplier

Heat Treatment Plant Approval (ABS)

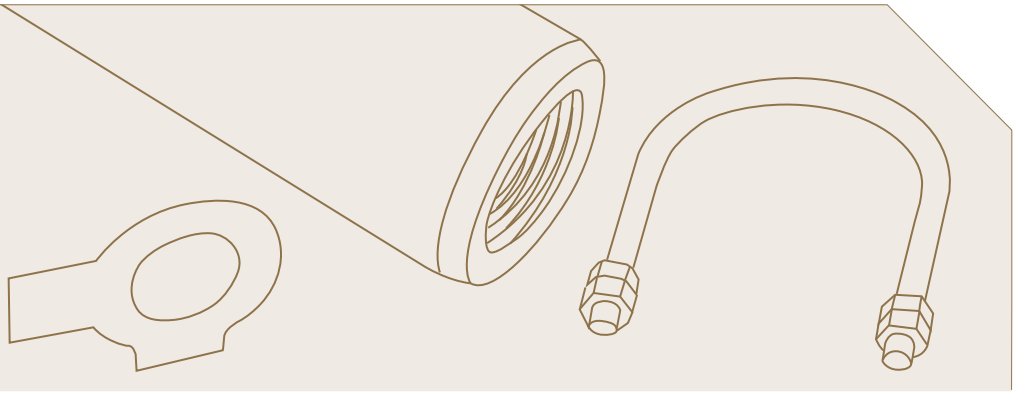
GOST-R

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

ISO /TS 29001 : 2010



Award

Single PPM Prime Minister Award

Single PPM Presidential Award

JUNGSAN
BOLT & NUT GROUP

Single PPM Presidential Award

2 Million Dollar Export Tower Award

Social Contribution

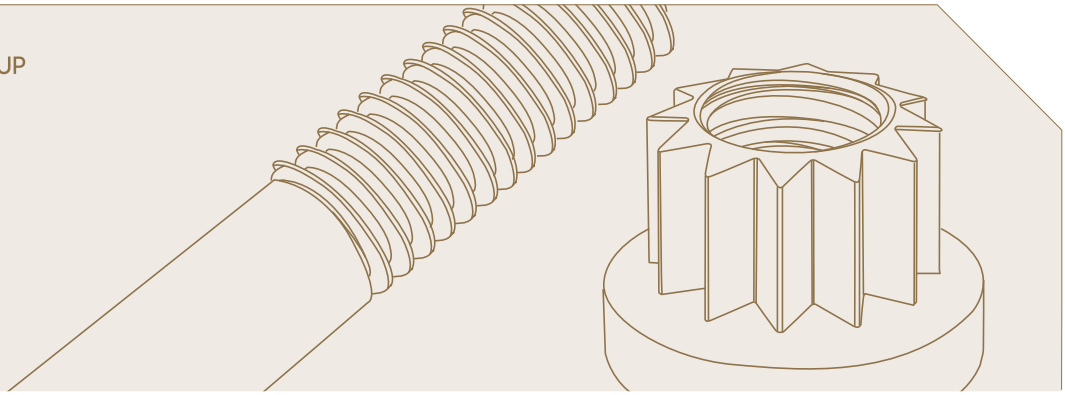
Donate to KOREA RED CROSS

Scholarship Donation to Ulsan Science High School

SPECIFICATION OF PRODUCTS

BOLT / STUD / NUT / Etc.

	DESCRIPTION	MATERIAL	DIMENSION	RANGE	
				Inch	Metric
BOLT	STUD BOLT	A193,A320,A437,A449,A453,ISO 898-1	A193,A307,A540,A564	1/4" ~ 6"	M6 ~ M160
	HEX BOLT	A193,A320,A437,A449,A453,ISO 898-1	ASME B18.2.1 / ANSI B18.2.3.5M	1/4" ~ 6"	M5 ~ M160
	HEAVY HEX BOLT	A193,A320,A437,A449,A453,ISO 898-1	ASME B18.2.1 / ANSI B18.2.3.6M	3/8" ~ 3"	M10 ~ M48
	SQUARE HEAD BOLT	A193,A307,S45C,S20C,SS400	ASME B18.2.1	1/4" ~ 1-1/2"	
	FITTED BOLT	JIS G 4053(SCM435,SCM440,S45C)	CUSTOMER SPECIFICATION		M24 ~ M60
	HEX SOCKET BOLT	A193,A320,A437,A449,A453,ISO 898-1	ASME B18.3/ANSI B18.3.1M	NO.0 ~ 4"	M6 ~ M48
	U-BOLT	A193,A325A,SS400	JIS F3022	3/8" ~ 32"	M12 ~M30
	ANCHOR BOLT	A36,A307,A540,SF440,S45C,20C,SS400	JIS B1178	1/2" ~ 5"	M12 ~ M125
	T-HEAD BOLT	A36,SF440,S45C,S20C,SS400	DIN7992	1/2" ~ 4"	
	EYE BOLT	A489,S45C,S20C,SS400	ANSI B18.15	1/4" ~ 2-1/2"	M6 ~ M120
	FLANGE BOLT	A193,A320,A437,A449,A453,ISO 898-1	ASME B18.2.1/IFI536	1/4" ~ 3/4"	M6 ~ M30
	TENSION BOLT	JIS G 4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M10 ~ M30
	HOLD'G DOWN BOLT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M24 ~ M30
	END CHOCK BOLT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M40 ~ M80
	COUPLING BOLT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M50 ~ M180
	PISTON CROWN BOLT	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M12 ~ M30
STUD	CYLINDER COVER STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M48 ~ M120
	MAIN BEARING STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M48 ~ M120
	CONNECTING ROD STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M48 ~ M120
	FUEL VALVE STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M20 ~ M48
	AXIAL VIBR DAMPER STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M20 ~ M48
	STARTING AIR VALVE STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M20 ~ M48
	REDUCED SHANK STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M20 ~ M48
	PISTON ROD STUD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M12 ~ M30
	TIE-ROD	JIS G4053(SCM435,SCM440,SNCM439)	CUSTOMER SPECIFICATION		M24 ~ M80
NUT	HEX NUT	A194,A453,A563,ISO 898-2	ASME B18.2.2/ANSI B18.2.4.1M	1/4" ~ 4"	M10 ~ M160
	HEAVY HEX NUT	A194,A453,A563,ISO 898-2	ASME B18.2.2/ANSI B18.2.4.6M	1/4" ~ 6"	M10 ~ M160
	HEX JAM NUT	A194,A453,A563,ISO 898-2	ASME B18.2.2/ANSI B18.2.4.1M	1/4" ~ 4"	M10 ~ M36
	FITTED NUT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M20 ~ M120
	COUPLING NUT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M50 ~ M180
	ROUND NUT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M30 ~ M120
	HYDRAULIC NUT	JIS G4053(SCM435,SCM440)	CUSTOMER SPECIFICATION		M30 ~ M120
Etc	PLUG	A105,A182,A350,S45C	ANI B16.11	1/8" ~ 4"	
	WASHER	A510,A580ASWRH,F436,S45C	ASME B18.21.1/IFI532/JIS B1251	1/2" ~ 3"	



COATING

DESCRIPTION	SPECIFICATION	MATERIAL
HOT-DIP GALVANIZED	ASTM 123 , ASTM A153 , ISO 10684	IRON AND STEEL PRODUCT IRON AND STEEL HARDWARE FASTENERS
ELECTRO- DEPSITER	ASTM B633 , ASTM B766 ISO 2081 , ASTM B841	ZINK , CADMIUM , ZN+NI
NON-ELECTRONICALLY ZINK	ISO 10683	ZINK
ZINK PHOSPHATE	ASTM F1137 , ISO 11408	ZN / MN
PTFE (Poly Tetra Fluoro Ethyene)	XYLAN 1070 , 1052 , 1014 , 1424 XYLAR 2 , SERMAGARD 1105/1280	XYLAN

STAINLESS STEEL

DESCRIPTION	MATERIAL
Martensitic	403 , 410 , 410S , 410JI , 416 , 420JI , 420J2 , 420F , 431 , 440A , 440B , 440C
Ferritic	405 , 429 , 430 , 430F , 434
Austenitic	201 , 202 , 301 , 302 , 303 , 303Se , 304 , 304L , 304N1 , 304N2 , 305 , 305J1 , 309S , 310S , 316 , 316N , 316L , 316JI , 16JIL , 317 , 317L , 321 , 347 , 384 , XM7 , XM15JI , 329JI

DUPLEX ALLOY

MATERIAL	UNS	ASTM
ALLOY 2205 - DUPLEX 2205	S31803 , S32205	A182 , A76 , A479
ALLOY 2507-25Cr	S32750 , S32760	A182 , A76 , A479

TITAIUM

MATERIAL	UNS	ASTM
TITAIUM Gr. 2 / 5 / 7	R50400 , R56400 , R52400	B348 , B265

6%-MOLY

MATERIAL	UNS	ASTM
6-MOLY	N08925 , N08926 , N08367	B649 , A182 , A276 , A479 , B688
254SMO	S31254	A182 , A276 , A479

NICKEL ALLOYS

MATERIAL	UNS	ASTM
ASTM A453 Gr 660 Class A / B / C / D	S66286	
HASTELLOY C276	N10276	B574 , B622
INCOLOY A286 / 800 / 800H / 825 / 925	S66286 , N08800 , N08810 , N08825, N09925	A453 , B407 , B408 , B564 B423 , B425 , B805
MONEL 400 / K500	N04400 , N05500	B164 , B865
INCONEL 625 / 718 / 750	N006625 , N07718 , N07750	B446 , B564 A1014 , B637

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