



HWASHIN BOLT IND. CO., LTD

Always Your Partner HWASHIN BOLT

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TOWARDS A PROSPEROUS FUTURE

Hwashin Bolt Ind. Co., Ltd established in 1964, has been a cornerstone of Korea's special fastener industry for over half a century. Our products are utilized in thermal power plants worldwide, and we have emerged as a leader during South Korea's rapid economic growth. With extensive expertise in the special and engineered fastener sector, both domestically and globally, we are recognized for delivering high-quality products on time and at competitive prices.

Renowned for our world-class technical expertise and innovation, Hwashin Bolt Ind. Co., Ltd proudly serves clients in 48 countries across 6 continents.





TOWARDS A BRIGHTER FUTURE

Hwashin Bolt Ind. Co., Ltd plays a vital role in the national power generation industry by supplying essential components to manufacturers and constructors of energy production equipment and facilities. Our products are constantly innovated within a disciplined manufacturing environment to satisfy the expectations of our customers.

Through operational efficiency, we consistently deliver critical bolting solutions for steam and gas turbines, hydroelectric power plants, and nuclear power plants, ensuring reliable support for the energy sector.



CEO MESSAGE

Since our founding in 1964, Hwashin Bolt Ind. Co., Ltd has grown into a leader in Korea's special fastener industry, driven by our motto, "Always your partner." Focused on the special fastener sector from the beginning, we have expanded our presence beyond Korea, offering high-quality products at competitive prices in the global market.

Recognized for world-class technology and excellence, we have enhanced the value of the Korean fastener industry by participating in large-scale global energy projects across 48 countries on 6 continents, including combined cycle power plants, nuclear power plants, and offshore facilities.

Currently, we supply fasteners to major domestic and international power plants (GE Vernova, Siemens, MHI & Doosan), heavy industries (Hanwha, Samsung & Hyundai), and leading oil and gas field service companies (SLB, NOV, TFMC, Oil States, and more). Our products meet various global standards such as ANSI, ASTM, ASME, API, GE, SIEMENS, DIN, KS, BS, ISO, and AS, ensuring exceptional quality for our clients.

In addition, Hwashin Bolt Ind. Co., Ltd specializes in developing new fastener materials and products. We have earned global recognition by achieving the highest level of certification in the critical bolting sector from the American Petroleum Institute (API).

We are committed to being a trusted partner for all our customers through continuous research and development and rigorous quality control. Our efforts extend beyond business, as we strive to contribute to social well-being and carbon neutrality, fulfilling our social responsibility.

Thank you.

President

Soonwon Jung & Taehyung Jung



Always Your Partner For Half Century

May. 1964

Established

Hwashin Bolt Ind. Co., Ltd

- 1986 **Jul.** Selection of the hopefulness small and medium industry for K.I.M.M (Korea Institute of Machinery and Metals)
- 1991 **Jul.** Qualified as Vender of Material Manufacture ASME Section III Bolt / Nut From K.H.I.C (Korea Heavy Industry and Construction)
- 1993 **Nov.** Incorporation of going business
Qualified as Vender of Material Manufacture of Bolt / Nut from Hyundai Engineering & Construction (Quality Class: Q)
- 1994 **Oct.** Qualified as Vender of Material Manufacture of Bolt / Nut from Daewoo Corporation Quality Class: QCP3(CSA Z 299.3)
- 1996 **Aug.** Qualified as Vender of Material Manufacture of Bolt / Nut from KEPCO(Korea Electric Power Corporation) [Quality Class: Q]
- 1998 **Apr.** Obtained ISO 9002 Certificate (A,B,S QE)
- 2002 **Dec.** Transition to ISO 9001:2008



Sep. 2006

Qualified as supplier of
GE Supply Co., & GE Europe

- 2009 **Jul.** Established R&D Center
- 2010 **Jun.** Obtained PED Certificate (A.B.S)
(Pressure Equipment Directive)
- Jul.** Obtained Achilles JQS (Achilles)
- 2011 **Jun.** Obtained ISO 14001:2004 Certificate
(A.B.S) (Environment Management System)
- Obtained OHSAS 18001:2007 Certificate
(A.B.S) (Health and Safety Management System)
- 2012 **Sep.** Awarded the 5 Million dollar Export
Tower by KITA(Korea International Trade
Association)
- 2013 **Jul.** Achievement of KEPIC-MN, SN.
(Korea Electric Power Industry Code)
- 2016 **Mar.** Obtained NORSOK M-650 [TSS
NORWAY]
- Sep.** Awarded Gold Prize at National
Competition for Small and Medium-sized
Business Learning Organization

Oct. 2016

Selected as a Company with
Excellent Growth Potential

- 2017 **Feb.** Selected as an excellent partner for 10
consecutive years by Doosan Heavy Industries
& Construction
- May.** Designated Korean Root technology
company
- Aug.** Initiated Compressor Rotor Bolt R&D
Project with KOTRA
- 2018 **May.** Awarded Time-honored Business
- 2019 **Apr.** Small Giant Company by Busan
- May.** API BSL3 20E, 20F achieved
- 2020 **May.** Awarded Business Leader Award in Busan
- Dec.** Received 10 Million Dollars Export Tower
Award on the Trade Day
- 2021 **Jul.** Achieved AEO(Authorized Economic
Operator)
- 2023 **Nov.** Received the Busan Industrial Award in
the technology category
- Dec.** Received 20 Million Dollars Export Tower
Award on the Trade Day
- Received Busan Export Company Grand Award
on the Trade Day
- Awarded as a Trader of The Year(2023)

QMS & PROCESS

Ensuring Consistent Compliance with Customer Quality Standards and Quality Management System



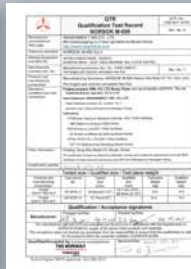
API 20E-0030



API 20F-0014



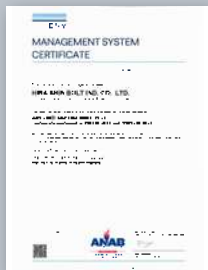
NORSOK M-650 IN718 QTR - N20(Listed on TR2000)



NORSOK M-650 SDSS QTR - D60/D60L (Listed on TR2000)



Achilles



ISO 9001:2015 and AS9100D



ISO 14001:2015 (Environment)



ISO 45001:2018 (Health & Safety)



ISO 37001:2016 (Anti-bribery management systems)



PED (Pressure Equipment Directive)



KEPIC

VENDOR REGISTRATION & AWARDS

Enhancing Our Customers' Global Competitiveness Through Excellence in Quality, Reliability, and R&D



SAMSUNG



KHNP



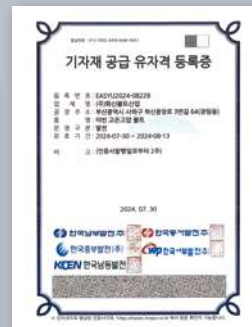
KOSPO



GE GAS POWER



DOOSAN ENERBILITY



KEPCO



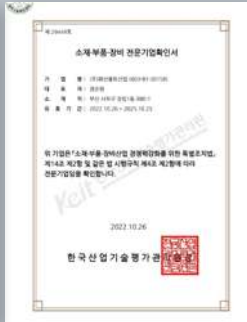
HANWHA OCEAN

GOVERNMENT AUTHORIZATION

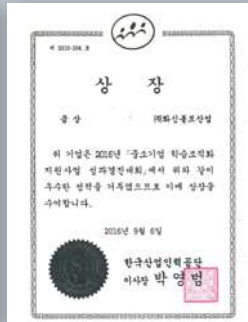
Contributing to National Development Through Government Projects and Collaborative Partnerships



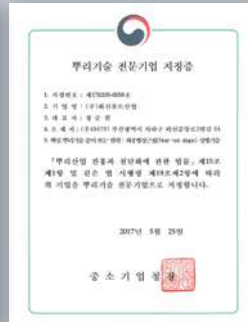
Global Small Giant



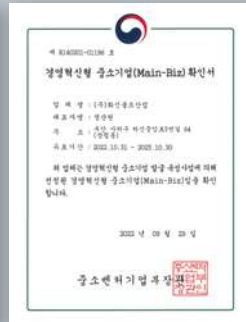
Material parts company confirmation



Learning Organization Support Project



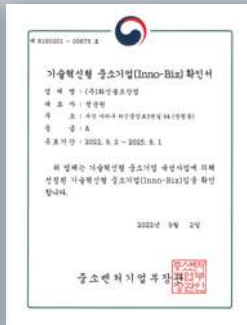
Korea National Root Technology



Main-Biz



Award Medal resident of South Korea



INNO-BIZ



Certificate Of Time-honored Business



TRADE OF THE YEAR



ATC

INDUSTRY-UNIVERSITY COLLABORATION



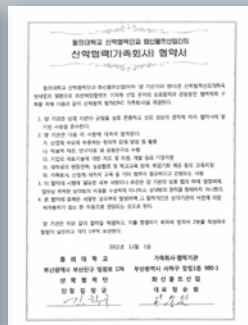
Meister High School



Busan Institute of Science and Technology



Busan Technical High School



Dong-Eui University



Korea Maritime & Ocean University

POWER GENERATION



Hwashin Bolt Ind. Co., Ltd delivers top-quality products and services through rigorous quality control and precise delivery management, ensuring we meet the demands of industries where strict operational environment control is critical. We are also deeply committed to R&D, continuously developing innovative solutions to support the reliable operation of steam turbine, gas turbine, nuclear, and hydro power plants.

**MAIN
CUSTOMER**



PRODUCT



THRU STUD / COVERED NUT



COUPLING BOLT



SLOTTED NUT



12 PT BOLT/NUT



ECCENTRIC PIN



ROTOR BOLT

POWER PLANT PROJECT

- STEAMTURBINE(GE VERNOVA, DOOSAN) 1995~
- GASTURBINE(GE VERNOVA, MHI, KEPCO)

- GE VERNOVA - GREENVILLE, USA 2017~
- UL. STOCZNIOWA, POLAND 2020~
- BELFORT, FRANCE 2017~
- HANGZHOU, CHINA 2018~
- VERESEGYHAZ, HUNGARY 2017~

OIL & GAS PROJECT



Hwashin Bolt Ind. Co., Ltd specializes in providing high-quality, corrosion-resistant products tailored for the sour conditions of oil and gas projects. With advanced coating technologies, our products ensure exceptional durability and performance. We manufacture and supply a full range of fasteners, including stud bolts, nuts, washers, and U-bolts, to leading oil and gas companies globally.

MAIN CUSTOMER



PRODUCT



HEX BOLT/NUT (PTFE)



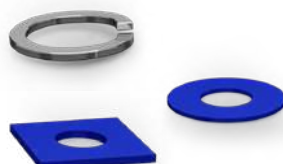
STUD BOLT/NUT (PTFE)



HEX SOCKET BOLT



TAP END STUD (PTFE)



WASHER



U-BOLT



BONNET BOLT



BONNET STUD

OIL & GAS PROJECT

- JANSZ-IO (CHEVRON)–AUSTRALIA, 2023~
- P78, P79 (PETROBRAS)–BRAZIL 2022~
- GALLAF (NORTH OIL COMPANY)–QATAR 2022~
- ANCHOR PROJECT (CHEVRON)–MEXICO 2021~
- JOHAN CASTBERG (EQUINOR)–NORWAY 2018~
- TCO (CHEVRON)–KAZAKHSTAN 2016~
- GINA KROG (EQUINOR)–NORWAY 2016~
- MAFUMEIRA SUL (CHEVRON)–ANGOLA
- FPSO PAZFLOR (TOTAL)–ANGOLA 2014~
- WHEATSTONE (CHEVRON)–ANGOLA 2014~
- ICHTHYS (INPEX)–AUSTRALIA 2013~
- JOHAN SVERDRUP (EQUINOR)–NORWAY 2018~
- UZ 750 EPC-2 (ZADCO)–UAE 2015~
- MARINER (EQUINOR)–NORWAY 2014~
- FPSO AGBAMI (CHEVRON)–NIGERIA 2014~
- SOUTH NEMBA (CHEVRON)–ANGOLA 2014~
- F-LNG (PETRONAS)–MALAYSIA 2013~
- F-LNG (SHELL)–AUSTRALIA 2012~

WIND POWER PROJECT



Hwashin Bolt Ind. Co., Ltd is actively contributing to the advancement of renewable energy by supporting the localization of components for Korea's domestic wind turbine development. As part of this effort, we supply hexagon bolts and blade bolts to Doosan and Ge Vernova.

**MAIN
CUSTOMER**



DOOSAN

PRODUCT



HEXAGON BOLT / NUT



BLADE BOLT

WIND POWER PROJECT

- TAEBAEK 1.65MW (HYUNDAI) 2010~2011
- KINGSTON 2.0MW (HYUNDAI) 2011~2012
- DAEJEONG 7MW X 12W/T (SAMSUNG) 2012~2014
- TAM NA (DOOSAN) 2016~2017
- BLADE LOCKING (GE VERNOVA) 2007~2012
- TAEBAEK 2.0MW (HYUNDAI) 2011~2012
- 2.5MW/TURBINE (SAMSUNG) 2015~2016
- YANGSAN 1.5MW X 2W/T (SAMSUNG) 2013~2015
- SEO NAMHAE (DOOSAN) 2017~
- JANG HEUNG (DOOSAN) 2018~
- JEJU HANLIM (DOOSAN) 2021~

TRANSPORTATION PROJECT



In the transportation industry, Hwashin Bolt Ind. Co., Ltd supplies high-performance fastener solutions for heavy equipment used in mining, locomotives, engines, and forklifts. Our fasteners, designed to withstand high vibration and heavy loads, are primarily made from durable alloy steel. With a strong commitment to quality, we have been delivering these essential products to global markets for many years.

**MAIN
CUSTOMER**



PRODUCT



12 PT BOLT/NUT



ANCHOR CHAIN



KNURLED STUD



ANCHOR CHAIN



VALVE BOLT



BANJO BOLT

AEROSPACE & DEFENSE



In the aerospace and defense sectors, fasteners play a crucial role in ensuring safety and performance. Hwashin Bolt has achieved AS9100D certification, demonstrating our commitment to excellence in this field, and we continue to develop advanced products. We supply high-quality fasteners for submarines, missiles, and aircraft, adhering to strict quality assurance standards. To expand our presence in these industries, we are continuously investing in research and development.

**MAIN
CUSTOMER**



PRODUCT



12 POINT SCREW



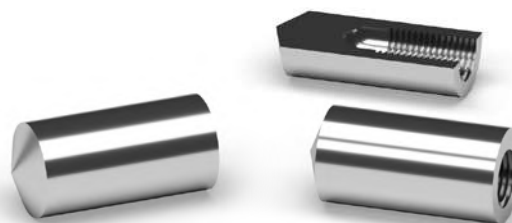
HEX SOCKET BOLT



LOCKING HEX HEAD BOLT



WELDING STUD (THREAD TYPE)



WELDING STUD (TAP TYPE)



SPLINE BOLT



SPLINE NUT

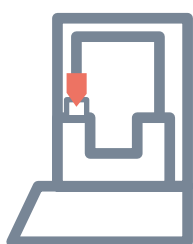


KEY WASHER

MANUFACTURING PROCESS

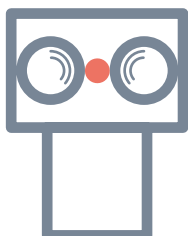


7



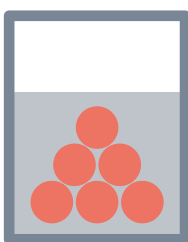
MACHINING

8

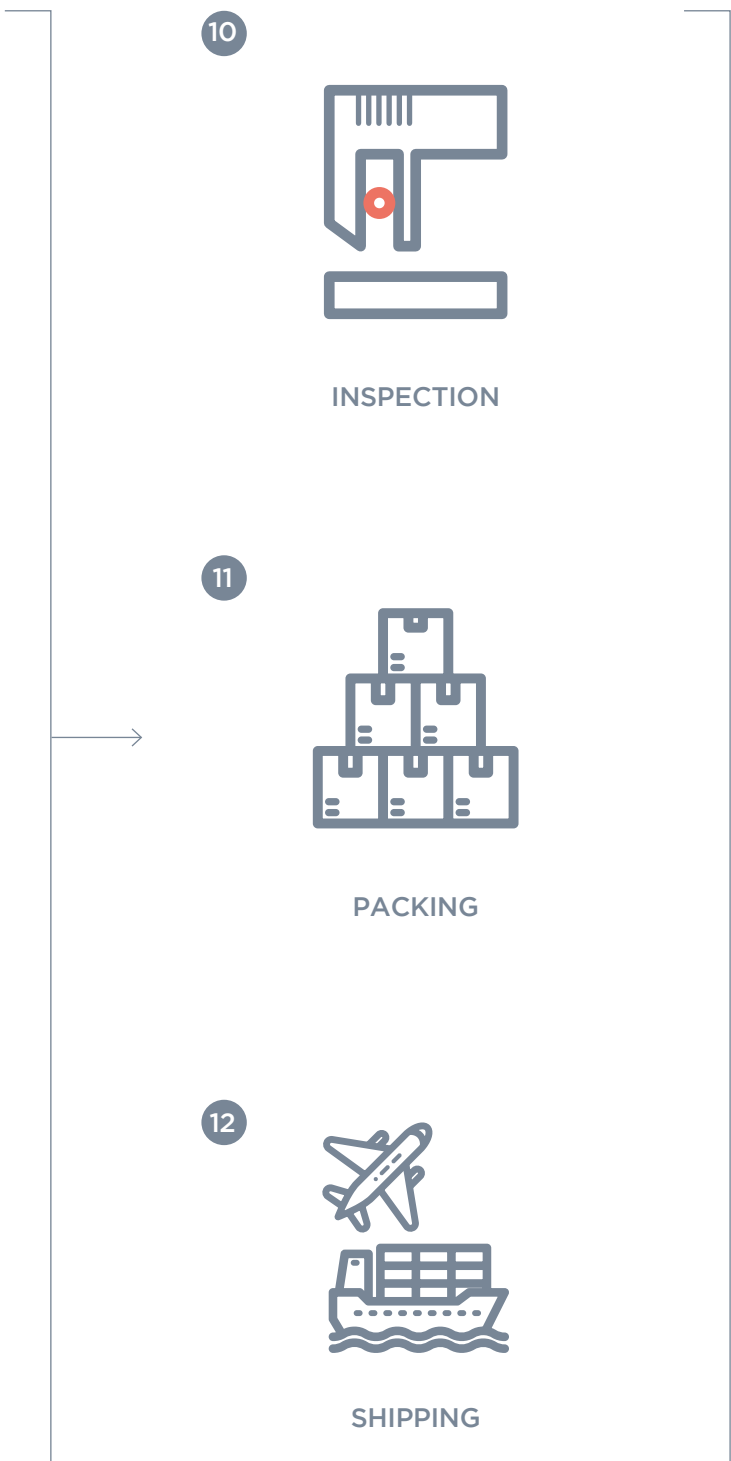


ROLLING

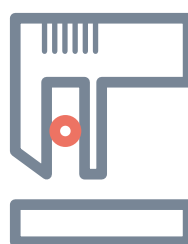
9



COATING



10



INSPECTION

11



PACKING

12



SHIPPING

PRODUCTION EQUIPMENT

PROCESS	MAIN EQUIPMENT	CAPACITY
Cutting	EVERISING HFA-400	Ø1~300
Forging	Hot Forging Press	600 ton
CNC	LL950X4000	4000mm
MCT	Mynx 6500/50 II	1270x670x625mm
ROBOT ARM	DOOSAN ROBOTICS MANIPULATOR	95~160mm
Rolling Machine	Rolling Machine DIR	300 ton
Marking	PMS-150V	150x100
Fillet Rolling	Dongil Rolling	M36



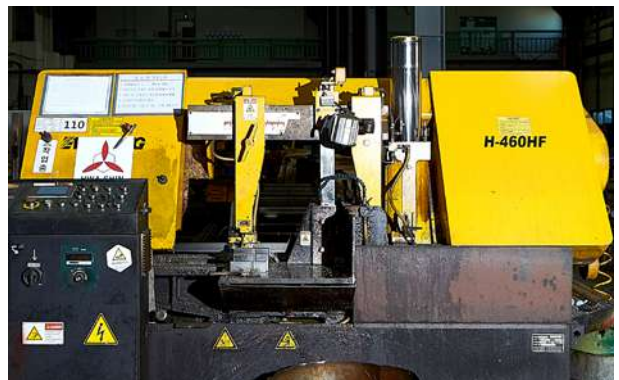
Hot Forging



Rolling



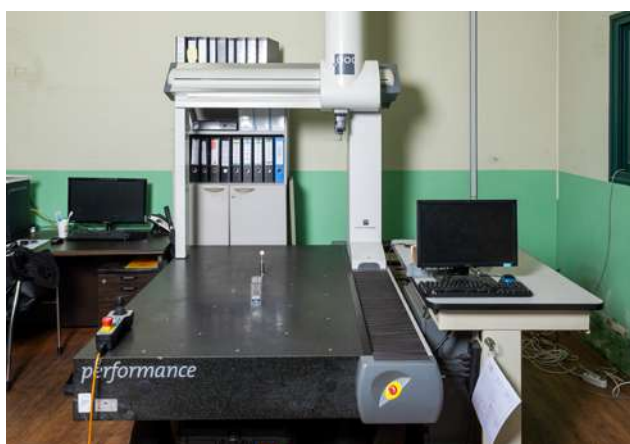
CNC



Cutting

INSPECTION

CHEMICAL	MECHANICAL	DIMENSIONAL	NDE (Non Destructive Evaluation)
<ul style="list-style-type: none"> • PMI • Optical Emission Spectrometer 	<ul style="list-style-type: none"> • Charpy Impact Tester • Tensile Strength Tester • Creep&rupture Tester • Hardness Tester(Rockwell, Micro Vickers, Brinell) • Torque Tester 	<ul style="list-style-type: none"> • Video Meter • Profile Projector • 3D-Measuring Equipment • Contour Measuring Tester • Plug Gauge • Ring Gauge • Optical Measuring Machine • 3D Vision Scanner 	<ul style="list-style-type: none"> • Magnetic Particle Tester (Yoke, Automatic) • Penetration Tester • Ultrasonic Tester
			<p style="text-align: center;">METALLURGICAL</p> <ul style="list-style-type: none"> • Metallographic Microscope





NO 2022-166

KOREA COMMISSION FOR CORPORATE PARTNERSHIP

Certificate of Excellent ESG

Company HWASHIN BOLT IND. CO.,LTD.

Representative Jung Soon Won

Expiration December, 25, 2024

We hereby certify that the company named above is a **SME(Small and Medium Enterprise)** that fulfills corporate social responsibility of the global standard, based on the 2022 ESG implementation of examination conducted by **KCCP(Korea Commission for Corporate Partnership)**.



Community Engagement & Social Contributions

Hwashin Bolt Ind. Co., Ltd is committed to giving back to local communities through donations and active participation in various initiatives. We believe our long-standing success is deeply rooted in the support we've received from these communities, and we are dedicated to returning that support. Our efforts include assisting local communities and contributing to local welfare programs.

Additionally, we prioritize the well-being of our employees by offering permanent job positions and investing in their career growth through comprehensive training programs. Our aim is to foster a supportive and fulfilling work environment for everyone.

Supporting Local Communities in Needs



Bids For Kids(USA, PA)



Rice Donation Program



Community Support Fund



Community Volunteer Program



Bread Donation Program



Bread Donation Program

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