

**INNO STEEL** - FORGING COMPANY INTRODUCTION

**INNO STEEL** – KOREA COMPANY



## CONTESTS

1. Company introduction
2. Brief History
3. Corporate value
4. Corporate goal
5. Raw material supplier
6. Manufacturing Process
7. Our Partners / Responsibilities for our partners
8. SMART+system
9. Quality Management System 5P+A
10. Main Products (Main Products List 1,2,3,4 )
11. Certificate
12. Product inspection process
13. Inspection Equipment
14. Company workplace

## Company introduction

From petrochemical plant parts to industrial machinery parts, large ship engine parts, and nuclear/thermal power generation parts, Innosteel co., ltd has been producing products with the best efforts to meet customer needs with the latest facilities, and we are creating a company that does its best with a firm and unwavering belief that puts customer quality first.

By thinking about the future environment (Eco) and complying with governance, Innosteel co., ltd will have corporate social responsibility (CSR) and meet the needs of customers more quickly and appropriately than any other company.



## Brief History

**•2024**

- Korea National Ppuri(Root) Company
- Certification of establishment of a department dedicated to R&D
- Korea National Hidden Champion

**•2023**

- Certification of companies specializing in materials, parts and equipment

**•2022**

- Installed of 3500 tons of press

**•2021**

- Bring in Smart Factory (MES)

**•2020**

- Certification of companies specializing in root technology

**•2013**

- Renamed Inno Steel Co., Ltd

**•2012**

- Forging Valve Supply - Domestic ( KVT (Key Valve Technologies Ltd) (HP VALVE), Samsin Co., Ltd. (supplied nuclear power & thermal forging valve)
- Overseas (VELAN), ICL (PK VALVE)

**•2010**

- Urim Machinery (Industrial Engine Parts Supply - GEAR, PINION)

**•2008**

- ISO14001 / 18001 certification obtained
- Hyundai WIA company registration and PRESS parts supply Registration/Supply

**•2007**

- Renamed Dasan Materials Co., Ltd
- Additional supply of Hyundai Heavy Industries (PROPELLER SHAFT, PISTON ROD)
- STX ENPACo (Piston Rod, Cylinder Cover) Registration/Supply
- hyundai-rotem(MAIN GEAR, ADJUST SCREW, PINION, MAIN SHAFT, ...)

**•2006**

- Installed of 2500 tons of press

**•2005**

- ISO9001/20000 certification obtained

**•2001**

- Installed a 1500-ton press

**•1996**

- Established as Gyeongseong Co., Ltd

## Corporate Value

### **Vision**

Let's do create a company where executives and employees are happy by achieving 100 million dollars in sales.

### **Mission**

As a company, let's become a company that contributes to society by making better products with corporate social responsibility (CSR).

### **Slogan**

Let's do Produce the best products with the best equipment, best materials, and best people.

## Corporate Value

### Building a foundation for mutual trust System



#### **4M Management**

Man, Material, Method, Machine



#### **Making and innovations**

Delivery date compliance



#### **Effective performance making**

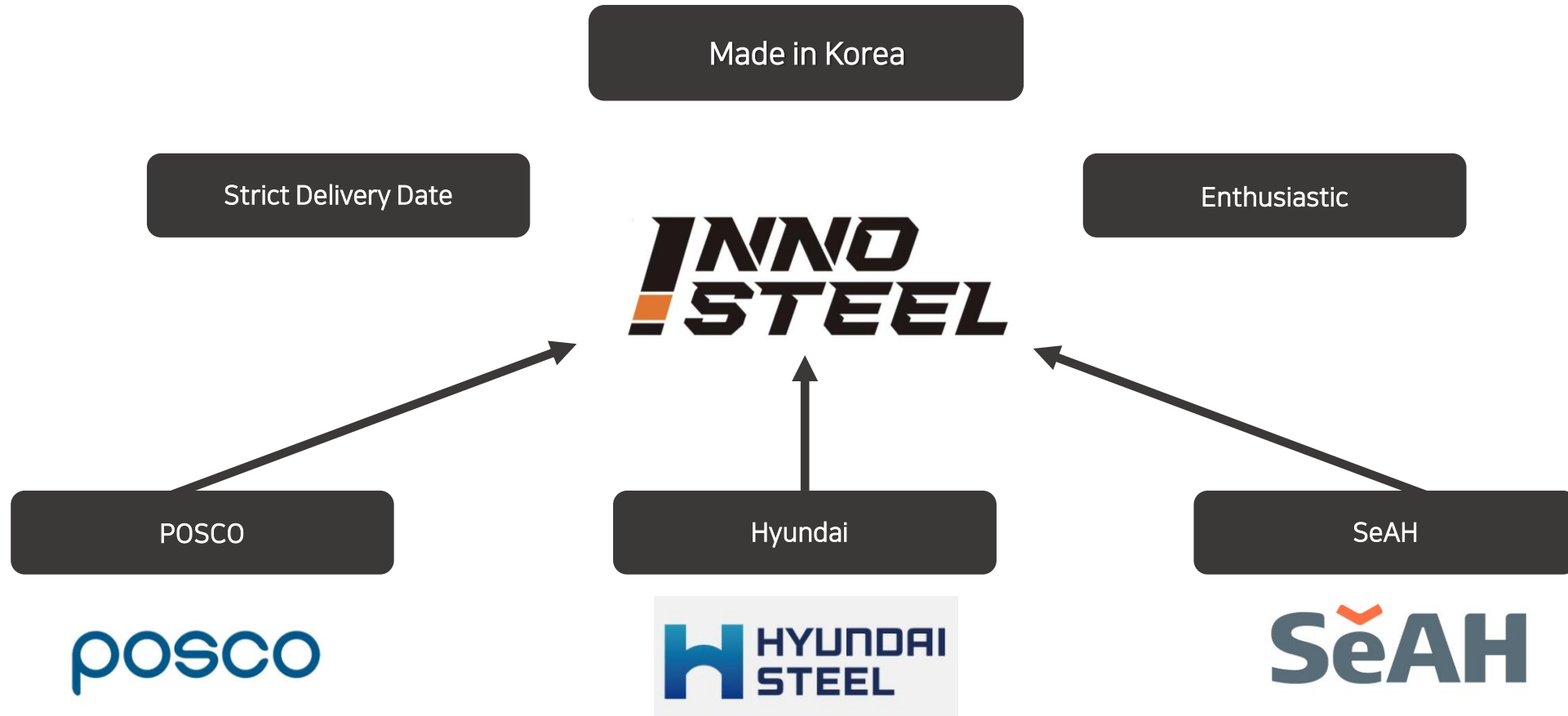
Expanding eco-friendliness



#### **Management base mind**

Governance Compliance

## Raw material supplier



Raw materials are supplied directly from domestic companies such as Hyundai Steel, POSCO, and SeAH Besteel.

# Our Patners

Made in Korea

Strict Delivery Date

Enthusiastic

**INNO STEEL**

Hanwha Engine

Hyundai

MRP



MRP ENGINEERING

HWA YOUNG

IHP



## Responsibilities for our partners

Made in Korea

Strict Delivery Date



Enthusiastic

**As a company rooted in Korean shipbuilding equipment and specialized in material parts, we are doing our best to become a leading company in the forging industry based on our high-quality production technology (MAN-engine parts certificate/ ISO9001/ ISO 14001/ ISO 45001 and many other classifications).**

**We guarantee perfect quality through the strict inspection process of quality control 5P+A system, SMART+system (Product Delivery Guarantee System) enables us to deliver responsibly and on time through smooth communication with our customers.**

## Manufacturing Process



## SMART + System

**S****Specific Design Plan**

We check our customer needs

**M****Monitoring**

Provides continuous monitoring of progress.

**A****Achieve satisfaction**

We will Achieve customer satisfaction through strict quality control.

**R****Realistic partner**

We will Achieve customer satisfaction through strict quality control.

**T****Time**

Based on the customer's trust, we ship the product on the exact Time delivery date

**Assessment**

A comprehensive final inspection process

**SMART+SYSTEM Product delivery guarantee system**

## Quality Management System 5P+A

**5 P + A**

### Quality Management System 5P+A

We continue to communicate with customers and consider product quality as our top priority. We guarantee perfect quality through strict 5P+A quality control

#### **Plan**

Check customer needs

#### **Product Design**

Check program simulation

#### **Process Product**

product manufacturing process

#### **Product verification**

Evaluation of product design

#### **Period date of delivery**

Confirmation of the exact delivery date

#### **Assessment**

A comprehensive final inspection process

## Main Products - Products List 1 (ship engine parts)



Rudder Stock



Drive Shaft



GearWheel



Propeller Shaft



Intermediate Shaft



Piston Rod



Cylinder Cover

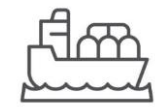


Piston Crown

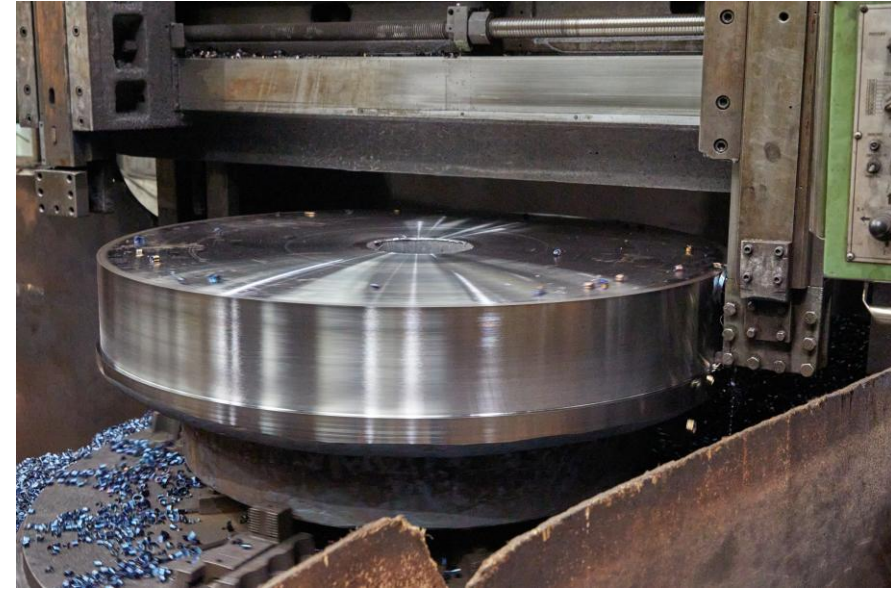


Cross Head Pin

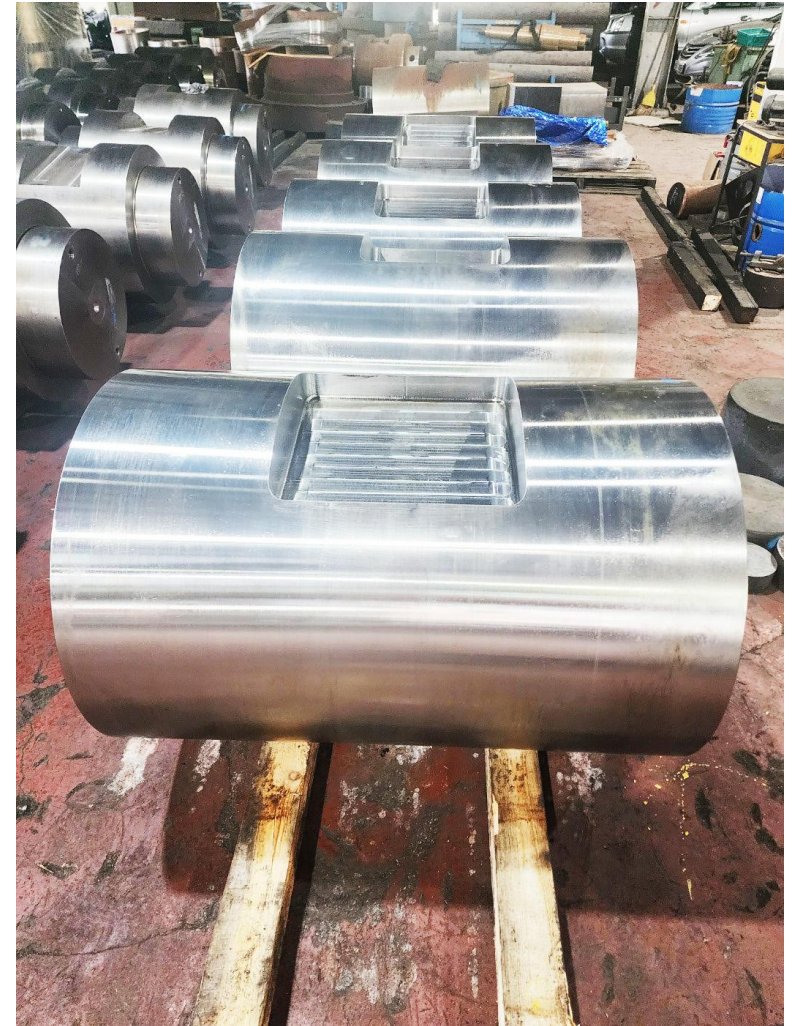
## Main Products - Products List 1 (ship engine parts)



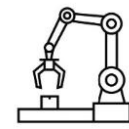
**INNO  
STEEL**



## Main Products - Products List 1 (ship engine parts)



## Main Products. - Products List 2 (Industrial Machinery parts)



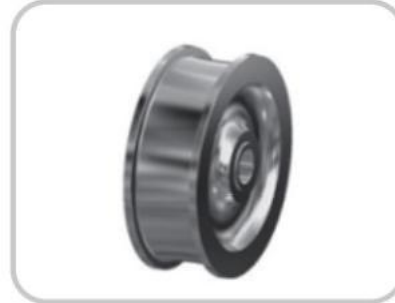
PIPE



Flanged Shaft



Bit



Roller



Table Roller



CrankShaft



Hook



Workroll



Wheel

Main Products. - Products List 3 (Nuclear power generation facilities)



Valve



Y-Type Valve



Forged Shell



Bonnet



Valve

Main Products. - Products List 3 (Thermal Power Plant Components Equipment)



Bureau Veritas Certification

## Certificate

Awarded to  
**INNO STEEL CO., LTD.**

62 Angok-ro 333beon-gil, Hallim-myeon, Gimhae-si, Gyeongsangnam-do, Republic of Korea, 50852

BUREAU VERITAS CERTIFICATION CZ, s.r.o. certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standard detailed below:

Standard  
**ISO 9001:2015**  
Scope of supply

**Production of Forged Products (Machinery Parts for Ship & Industry and Valves)**

Original Approval Date: 07-12-2022  
Expiry date of previous cycle: N/A  
Certification Cycle Start Date: 07-12-2022  
Certification Cycle End Date: 06-12-2025  
Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: 06-12-2025

To check this certificate validity please call: +420 210 088 215

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

Version 1 Issue Date: 07-12-2022  
Certificate Number: CZE - 2200301

MANAGING OFFICE: BUREAU VERITAS CERTIFICATION CZ, s.r.o., Ostravská 1, 140 02 Praha 4, Czech Republic  
ISSUING OFFICE ADDRESS: BUREAU VERITAS CERTIFICATION CZ, s.r.o., Ostravská 1, 140 02 Praha 4, Czech Republic

국제인증협력기구(IAF)의 상호인정협정에 의한 인증서입니다

인증서번호 : KEC-1629

## 환경경영시스템 인증서

(주)이노스틸  
경상남도 김해시 한림면 안국로333번길 62

한국생산성본부인증원은 위 회사의 환경경영시스템이 기술된 인증표준과 범위에 적합함을 인증함.

인증표준  
KS I ISO 14001 : 2015 / ISO 14001 : 2015

인증범위  
단조품(선박·산업용 기계 부품류 및 밸브류)의 생산

최초인증일자 : 2020년 06월 19일 인증유효기간 : 2023년 06월 19일 ~ 2026년 06월 18일

- 본 인증서는 위 조직이 인증유지기준을 지속적으로 만족하는 경우에 한하여 효력이 발생합니다.
- 인증효력의 유효성은 웹사이트(www.kpcqa.or.kr) (QR코드)에서 확인 할 수 있습니다.

발행일자 : 2023년 06월 02일

한국생산성본부인증원은 한국인증협약(KAS)회원사 환경경영시스템 인증기관으로 인정(인정번호: KAB-EC-05) 발인합니다.

## APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM000003V  
Revision No: 3

This is to certify:  
That  
**INNO STEEL CO., LTD.**  
62 Angok-ro, 333beon-gil, Hallim-myeon, 50852 Gimhae-si, Gyeongsangnam-do, Republic of Korea

is an approved manufacturer of  
**Steel Forgings**

in accordance with  
**DNV rules for classification – Ships**  
and the following particulars:

Application area	Forgings for shafting and machinery
Steel type	Carbon and carbon-manganese
Alloy	See page 2
Forging method	12 000 kg
Max. Weight	See page 2
Heat treatment condition	

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.  
Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at Hamburg on 2022-08-23

This Certificate is valid until 2025-06-30.  
DNV local station: Gimhae Station

Approval Engineer: Christian Wildhagen

for DNV  
Digitally Signed By: Romy, Stefan  
Location: DNV Hamburg, Germany  
Signing Date: 23.08.2022, on behalf of  
**Thorsten Lohmann**  
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or release thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Form code: AM 311      Revision: 2021-03      www.dnv.com      Page 1 of 2

Job Id: 263.11-010088-2  
Certificate No: AMMM000003V  
Revision No: 3

## Particulars of the approval

Forgings for shafting and machinery

Steel type	Grade	Forging method <sup>1)</sup>	Max. weight [kg]	Delivery condition <sup>2)</sup>
C and C-Mn	NV C400U, NV C440U, NV C480U, NV C520U, NV C550U, NV C600U, NV F640U, NV F680U, NV F720U, NV F760U	OD, CD	12 000	N, QT
Alloy	NV F800A, NV F700A, NV F800A, NV F900A, NV F1000A, NV F1100A	OD, CD	12 000	N, QT

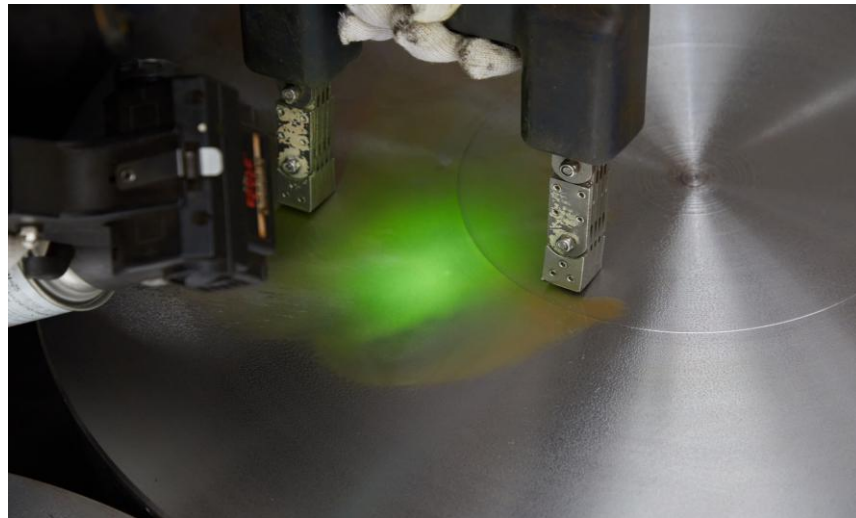
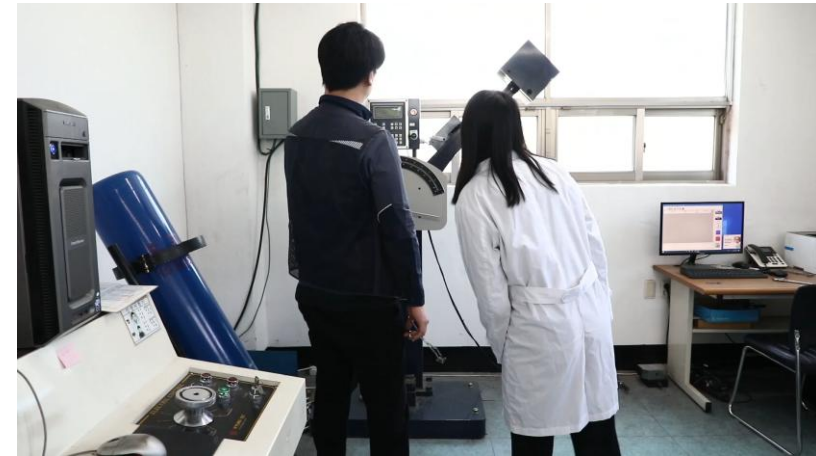
Remarks:  
<sup>1)</sup> OD: Open die forging  
 CD: Closed die forging  
<sup>2)</sup> N: Normalised  
 QT: Quenched and tempered

Special condition:  
 - Heat treatment is subcontracted to DNV approved heat treatment workshop

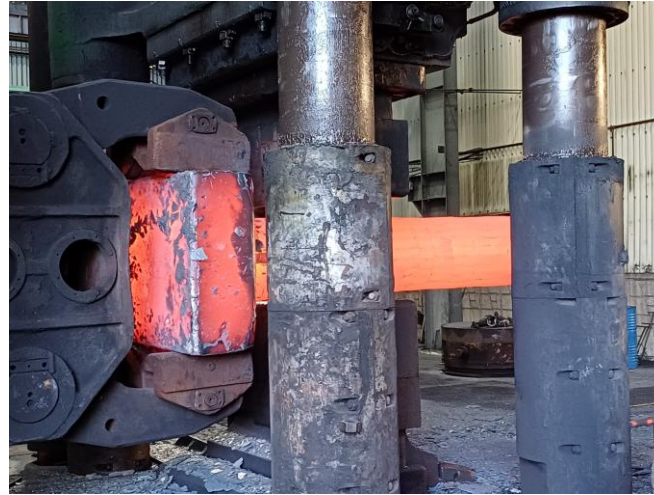
Form code: AM 311      Revision: 2021-03      www.dnv.com      Page 2 of 2



# Product inspection process







## Company workplace





Company workplace



# Company workplace





<http://innosteel.kr/lang/en>