



**Work Order – WO0120532
Forge Approval – Extension
Certificate No. FOR-00T2373265-1**

Attention: SEAH CHANGWON INTEGRATED SPECIAL STEEL CORPORATION
(WCN: 425208)

The documents shown in the attached list are reviewed or filed for reference in accordance with the applicable requirements of the following and the facility is considered approved to manufacture forgings for hull & machinery components as outlined in the process/product approval.

- ABS Rules for Materials and Welding Part 2-(2024)
- ABS Requirements for Materials and Welding for Stainless Steels (2022)

Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request annual endorsement survey or renewal of approval prior to the five-year expiry date.

Refer to attachments, Process/Product Approval; Manufacturer Approval Certificate (FOR-00T2373265-1).

For any clarifications, contact James Oehrle at +1-281-877-6148, joehrle@eagle.org.

Very truly yours,

Gareth Burton
Senior Vice President of Engineering

Electronically Signed by: Satya Meruva

Documents List

Drawing No.	Rev. No.	Title	Status
B410162400	-	400 mm Ø Forge Test Report	Reviewed
B420181800	-	500 mm Ø Forge Test Report	Reviewed

Electronic copies of the documents, appropriately stamped, are available in the ABS MyFreedom™ Client Portal.

Process/Product Approval

Certificate No. FOR-00T2373265-1

Grade	ABS & Non-ABS Grades:		
	Carbon Steels	Low-Alloy Steels	Austenitic Stainless Steels
Melting Practice	ABS Approved Sources		
Casting Practice	ABS Approved Sources		
Forging Practice	Open Die Forging		
Maximum Weight	100,000 kg	30,000 kg	6,000 kg
Maximum Diameter	2,500 mm	1,100 mm	500 mm
Heat treatment facility	In-house		
Application Examples	Propeller Shaft, Intermediate Shaft, Rudder Stock, Rudder Upper & Lower Pintle, Connecting Rod, Cylinder Cover, Piston rod, Piston Crown, Crosshead Pin, Camshaft, Crankshaft, etc.		

Note: Weld repair is generally not permitted, unless specially approved by the ABS Engineering Office.



CERTIFICATE NUMBER
FOR-00T2373265-1

ISSUING OFFICE
Houston Materials

CERTIFICATE OF FORGING FACILITY AND PROCESS APPROVAL

This is to certify that a representative of ABS did, at the request of
SEAH CHANGWON INTEGRATED SPECIAL STEEL CORPORATION
147 JEOKHYEON-RO, CHANGWON, Korea, Republic of

attend its facilities as indicated in the ABS Busan Port port office survey report number 5622273 dated 20 February 2023 in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

Steel Forging and Stainless Steel Forging components for marine applications

in accordance with the ABS Approval letter (Reference WO0120532), ABS Rules, designated standards and ABS approved drawings. The approval is valid till 19 February 2028 subject to adherence to relevant ABS Rules, Survey requirements and annual endorsement by an ABS representative.

Marcus Cridland
Chief Metallurgist, ABS

ISSUE DATE: 20 February 2023
EXPIRY DATE: 19 February 2028

FIRST ANNUAL
ENDORSEMENT:

SECOND ANNUAL
ENDORSEMENT:

THIRD ANNUAL
ENDORSEMENT:

FOURTH ANNUAL
ENDORSEMENT:

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, Guides, standards or other criteria of ABS as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a full description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of ABS who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.