



CERTIFICATE NUMBER

FOR-T1870119

ISSUING OFFICE

London Ship Eng - Materials

# CERTIFICATE OF FORGING FACILITY AND PROCESS APPROVAL

This is to certify that a representative of ABS did, at the request of

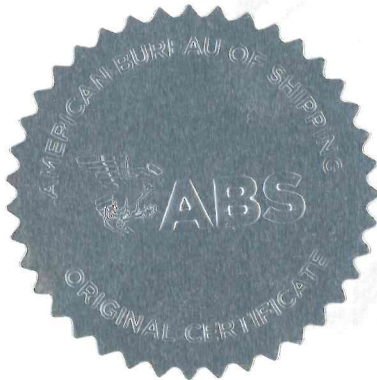
**BUDERUS EDELSTAHL GMBH**

BUDERUSSTRASSE 25, D-35576 WETZLAR, Germany

attend its facilities as indicated in the ABS Hamburg Port port office survey report number 3675605 dated 23 May 2019 in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

***Stainless Steel Forging and Steel Forging components for marine applications***

in accordance with the ABS Approval letter (Reference T1870119), ABS Rules, designated standards and ABS approved drawings. The approval is valid till 10 March 2024 subject to adherence to relevant ABS Rules, Survey requirements and annual endorsement by an ABS representative.



**Marcus Cridland**  
**Chief Metallurgist, ABS**

ISSUE DATE: 23 May 2019

EXPIRY DATE: 10 March 2024

FIRST ANNUAL  
ENDORSEMENT:

NORBERT ROSS 24 JULY 2020

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. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-AS/59 Terms and Conditions of the Request for Product Type Approval and Agreement (2019).

ABS94(111)



Documents List

Drawing No.	Rev. No.	Title	Status
Buderus ISO 9001 Certificate	-	Supporting document	Filed by ABS for Reference Only
Buderus Material Certificates	-	Sample Materials	Filed by ABS for Reference Only
Correspondence	-	Buderus Request for Forge Renewal	Correspondence
LofStats and Grade	-	Support Information	Filed by ABS for Reference Only
PO005-45553134	-	Purchase Order	Filed by ABS for Reference Only
Statement no Changes in Quality	-	Client Confirmation	Reviewed

Electronic copies of the documents, appropriately stamped are available through the ABS Eagle Construct Engineering Manager (O2E), Web portal.

Process/Product Approval

<b>Grade</b>	Non-ABS Grades: - Carbon Steel; Unalloyed and Low Alloy - Stainless Steel; Austenitic
<b>Melting Practice</b>	ABS Approved Sources
<b>Casting Practice</b>	ABS Approved Sources
<b>Manufacturing Practice</b>	Open-die forging
<b>Maximum Weight</b>	145 tons
<b>Maximum Thickness/Diameter</b>	3600 mm
<b>Heat Treatment Facility</b>	In-house
<b>Product Examples</b>	Square and Round Bars, Blocks, Flanges and Shaft etc..

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