



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00002CM**  
Revision No:  
**3**

This is to certify:

That

**Stahlhammer Bommern GmbH**  
**Carl-Zeiss-Str.7, 59077 Hamm,**  
**Germany**

is an approved manufacturer of  
**Steel Forgings**

in accordance with

**DNV rules for classification – Ships**  
**DNV-OS-B101 – Metallic materials**  
**DNV class programme – DNV-CP-0247 Steel forgings**

and the following particulars:

<b>Application area</b>	<b>Forgings for hull structures and equipment</b>
<b>Steel type</b>	<b>Forgings for shafting and machinery</b>
<b>Forging method</b>	<b>Carbon and carbon-manganese,</b>
<b>Max. Weight</b>	<b>Alloy</b>
<b>Heat treatment condition</b>	<b>See page 2</b>
<b>Additional approval conditions</b>	<b>6 000 kg</b>
	<b>See page 2</b>
	<b>Including forgings for chain cable accessories</b>

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 **2025-04-24**

This Certificate is valid until **2028-04-30**.

DNV local unit: **Essen**

Approval Engineer: **Christian Wildhagen**



for **DNV**

This document has been digitally signed and will  
therefore not have handwritten signature

Martin Wenning

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 reliance 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.

## Particulars of the approval

### Forgings for hull structures and equipment

Steel type	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
C and C-Mn	NV F400UW, NV F440UW, NV F480UW, NV F520UW, NV F560UW, NV F600UW	OD, CD	6 000	N, QT
Alloy	NV F550AW, NV F620AW, NV F650AW	OD, CD	6 000	N, QT

### Forgings for shafting and machinery

Steel type	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
C and C-Mn	NV F400U, NV F440U, NV F480U, NV F520U, NV F560U, NV F600U, NV F640U, NV F680U, NV F720U, NV F760U	OD, CD	6 000	N, QT
Alloy	NV F600A, NV F700A, NV F800A, NV F900A, NV F1000A, NV F1100A	OD, CD	6 000	N, QT

#### Remarks:

- 1) OD: Open die forging  
CD: Closed die forging
- 2) N: Normalised  
QT: Quenched and tempered
- 3) Including equivalent grades according to international standards