

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00001M2**  
Revision No:  
**1**

## This is to certify:

That

**Ewald Waffenschmidt GmbH + Co.KG**  
**Otto-Hahn-Str.6, 57482 Wenden-Huensborn,**  
**Germany**

is an approved manufacturer of  
**Steel Forgings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Nickel base alloy forging, Stainless steel forgings</b>
<b>Steel type</b>	<b>Austenitic stainless, Ferritic-austenitic (duplex) stainless Nickel base alloys</b>
<b>Forging method</b>	<b>See page 2</b>
<b>Max. weight</b>	<b>Open die forging</b>
<b>Heat treatment condition</b>	<b>See page 2</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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2020-09-07**

for **DNV GL**

This Certificate is valid until **2023-05-31**.

DNV GL local station: **Essen**

Approval Engineer: **Enno Brück**

**Thorsten Lohmann**  
**Head of Section**

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Job Id: **263.11-004413-3**  
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## Particulars of the approval

### Stainless steel forgings

Steel type	Grade	Forging method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
Austenitic	CrNi	CD	50	SHT
	CrNiMo	CD	50	SHT
Ferritic-austenitic	22 Cr Duplex	CD	50	SHT
	25 Cr Duplex	CD	50	SHT

### Nickel base alloy forging

Alloy type	Forging method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
Ni-base <sup>3)</sup>	CD	50	SHT

Remarks:

- <sup>1)</sup> CD: Closed die forging
- <sup>2)</sup> SHT: Solution Heat Treated (Solution Annealing)
- <sup>3)</sup> Possible application and certification of any material to classed object is subject to case by case approval