



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000000H**  
Revision No:  
**2**

This is to certify:

That

**Gustav Grimm Edelstahlwerk GmbH & Co. KG**  
Ronsdorfer Str. 172-174, 42828 Remscheid,  
Germany

is an approved manufacturer of  
**Wrought Aluminium and Aluminium Alloys**

in accordance with  
**DNV rules for classification – Ships**  
**DNV-OS-B101 – Metallic materials**

and the following particulars:

<b>Products</b>	<b>Forgings</b>
<b>Grades</b>	<b>5000 series alloys</b>
<b>Manufacturing method</b>	<b>Open die forging</b>
<b>Max. weight</b>	<b>10 000 kg</b>
<b>Heat treatment condition</b>	<b>O, H111, 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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2022-06-24**

This Certificate is valid until **2025-06-30**.

DNV local station: **Essen**

Approval Engineer: **Christian Wildhagen**



for **DNV**

Digitally Signed By: Roehr, Stefan

Location: DNV Hamburg, Germany

Signing Date: 24.06.2022 , 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 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.



Form code: AM 311

Revision: 2021-03

www.dnv.com

Page 1 of 2

## Particulars of the approval

---

### Aluminium forgings

Grade <sup>1)</sup>	Forging method <sup>1)</sup>	Heat treatment condition
5000 series alloys	OD	O, H111

Remarks:

<sup>1)</sup> OD: Open die forging