

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000015Z**  
Revision No:  
**2**

**This is to certify:**

That

**K. & H. Fischer GmbH**  
**Raiffeisenstraße 8, 42477 Radevormwald,**  
**Germany**

is an approved manufacturer of  
**Heat treatment**

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

and the following particulars:

<b>Application area</b>	<b>Heat treatment workshop</b>
<b>Heat treatment process</b>	<b>Quenching and Tempering, Normalizing, Annealing</b>
<b>Product type</b>	<b>Forging, Gearing, etc.</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese, Alloy</b>
<b>Max. weight</b>	<b>See page 2</b>
<b>Max. wall thickness</b>	<b>See page 2</b>
<b>Remarks</b>	<b>Approved as Independent Heat Treatment Company</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 **2020-09-10**

for **DNV GL**

This Certificate is valid until **2023-04-30**.

DNV GL local station: **Essen**

Approval Engineer: **Christian Wildhagen**

**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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **263.11-006711-2**  
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## Particulars of the approval

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### Approval scope for Independent Heat Treatment Company

Item	Description
Product type	Steel forgings, gearings, etc.
Steel Type	Carbon and carbon-manganese, Alloy
Applicable steel standards	EN 10083, EN 10084, EN 10088, EN 10250, EN 10025, EN 10028, ISO 4957
Maximum Loading Weight	15 000 kg
Max. Thickness	2 650 mm
Heat Treatment Type	Quenching and Tempering, Normalizing, Annealing (Soft annealing, Solution annealing, Stress relief annealing, +TH and +FP annealing)