



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM00002N9
Revision No:
2

This is to certify:

that

thyssenkrupp rothe erde Germany GmbH
Beckumer Str. 87, 59555 Lippstadt,
Germany

is an approved manufacturer of
Heat treatment

in accordance with

DNV rules for classification – Ships
DNV class programme – DNV-CP-0351 Manufacture of heat treated products - heat treatment workshop

and the following particulars:

Application area	Heat treatment workshop
Heat treatment process	Quenching, Tempering, Stress relieving, Induction hardening
Product type	Forging, Gearing, etc.
Steel type	Carbon and carbon-manganese, Alloy
Max. Weight	See page 2
Max. wall thickness	See page 2
Remarks	Approved as Independent Heat Treatment Company

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 **2025-12-02**

This Certificate is valid until **2029-01-22**.

DNV local unit: **Essen**

Approval Engineer: **Christian Wildhagen**



for **DNV**

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

Stefan Röhr

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 USD 300 000.

Particulars of the approval

Approval scope for Independent Heat Treatment Company

Item	Description
Product type	Forging, Gearing, etc.
Steel type	Carbon and carbon-manganese, Alloy
Heat treatment process	Quenching, Tempering, Stress relieving, Induction hardening
Max. thickness	Carbon and carbon-manganese: 800 mm Alloy: 800 mm
Furnace details	Working zone: max. Ø 8000 mm Max. Loading weight: max. 30 t