



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM00002NR
Revision No:
2

This is to certify:

that

Mannesmann Precision Tubes GmbH
Bielefeld, Nordrhein-Westfalen, Germany

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings

and the following particulars:

Product	Pipes
Application area	Pipes for pressure systems, Boiler and superheater tubes
Steel type	Carbon and carbon-manganese, Alloy
Manufacturing method	Hot and cold finished seamless
Max. outer diameter	See page 2
Max. wall thickness	See page 2
Heat treatment condition	See page 2
Additional approval conditions	See page 2

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 **2025-08-28**

This Certificate is valid until **2028-06-30**.

DNV local unit: **Essen**

Approval Engineer: **Andreas Koch**



for **DNV**

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

Christian Wildhagen

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

Pipes for pressure systems

Steel type /grade ²⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	CFS	120.4	17	acc. to standard
Alloy	CFS	120.4	17	acc. to standard

Boiler and superheater tubes

Steel type /grade ³⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	CFS	120.4	17	acc. to standard
Alloy	CFS	120.4	17	acc. to standard

Remarks:

- ¹⁾ CFS: cold finished seamless
- ²⁾ Suitable pipe grades shall be selected from the following recognized standards:
 ISO 9329 Parts 1 and 2, EN 10216 Parts 1 to 3, EN 10305 Part 1 and 4, ASTM A53, ASTM A106, ASTM A335, JIS G3454, JIS G3455, JIS G3456 or JIS G3458
- ³⁾ Suitable pipe grades shall be selected from the following recognized standards:
 ISO 9329 Part 2, EN 10216 Part 2, ASTM A209, ASTM A210, ASTM A213, JIS G3461, JIS G3462 or JIS G3463

Special conditions:

Including automatic UT / ET testing in lieu of hydraulic testing according to relevant standard