



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM000029J
Revision No:
3

This is to certify:

that

Mannesmann Line Pipe GmbH
In der Steinwiese 31
57074 Siegen,
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
DNV class programme – DNV-CP-0347 Steel hollow sections

and the following particulars:

Product	Pipes
Application area	Structural hollow sections Pipes for pressure systems, Pipes for low-temperature service, Normal strength steel, High strength steel
Steel type	Carbon and carbon-manganese
Manufacturing method	Welded
Max. outer diameter	See page 2, 3
Max. wall thickness	See page 2, 3
Heat treatment condition	See page 2, 3

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 **2025-11-25**

This Certificate is valid until **2027-07-31**.

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

Pipes for pressure systems

Pipes for low-temperature service

Steel type / grade ^{3) 4)}	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Carbon, Carbon-Manganese	HFI / HFW	406.4	16.0	N

Structural hollow sections

Steel type / grade	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Structural hollow sections acc. EN 10219-1 ⁵⁾				
S235JRH, S275J0H, 275J2H, S355J0H, S355J2H, 355K2H, S275NH, S275NLH, S355NH, S355NLH, S420NH, 420NLH, S460NH, S460NLH	HFI / HFW	406.4	16.0	Acc. standard
Structural hollow sections acc. EN 10210-1 ⁵⁾ (round)				
S235JRH, S275J0H, 275J2H, S355J0H, S355J2H, 355K2H, S275NH, S275NLH, S355NH, S355NLH, S420NH, 420NLH, S460NH, S460NLH	HFI / HFW	406.4	16.0	N
Structural hollow sections acc. DNV-OS-B101 and DNV RU-Ship Pt.2 Ch.2 (round)				
NV D36	HFI / HFW	406.4	16.0	N

Pipes for applications subject to special approval

Steel type / grade	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Pipes acc. ISO 3183 ⁵⁾				
L245ME, L245NE, L290ME, L290NE, L360ME, L360NE, L415ME, L415NE, L450ME, L485ME	HFI / HFW	406.4	16.0	N / TM
Pipes acc. API 5L (PSL1/PSL2) ⁵⁾				
B, X42, X52, X60, X65, X70, BN, X42N, X52N, X60N, BM, X42M, X52M, X60M, X65M, X70M	HFI / HFW	406.4	16.0	N / TM

Remarks:

- 1) HFI: high-frequency induction welding
HFW: high-frequency welding
- 2) N: Normalised
TM: thermo-mechanical rolling
- 3) Suitable pipe grades shall be selected from the following recognised standards:
ISO 9329 Parts 1 and 2, ISO 9330 Parts 1 and 2, EN 10216 Parts 1 to 3, EN 10217 Parts 1 to 3, EN 10305 Part 1 and 2, ASTM A53, ASTM A106, ASTM A135, ASTM A335, JIS G3454, JIS G3455, JIS G3456 or JIS G3458
- 4) Suitable pipe grades shall be selected from the following recognised standards:
ISO 9329 Part 3, ISO 9330 Part 3, EN 10216 Part 4, EN 10217 Part 6, ASTM A333, ASTM A334 or JIS G3460
- 5) Possible application and certification of any material to classed object is subject to case by case approval