



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00002AM
Revision No:
1

This is to certify:

That

Salzgitter Mannesmann Stainless Tubes Italia S.r.l.
Via Piò, 30
24062 Costa Volpino, BG,
Italy

is an approved manufacturer of
Steel Pipes and Fittings

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

and the following particulars:

Product	Pipes
Application area	Austenitic and ferritic-austenitic steel pipes
Steel type(s)	Austenitic stainless, Ferritic-austenitic (duplex) stainless
Manufacturing method	See page 2
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 **2021-11-24**

for **DNV**

This Certificate is valid until **2024-12-31**.

DNV local station: **Italy/Malta CMC**

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 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.



Particulars of the approval

Austenitic and Austenitic- ferritic steel pipes

Steel type ³⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	CFS	220	16	SHT
Ferritic-austenitic (22Cr & 25Cr duplex)	CFS	60.3	9.09	SHT

Remarks:

- ¹⁾ CFS: cold finished seamless
- ²⁾ SHT: Solution Heat Treated (solution annealing)
- ³⁾ Austenitic and ferritic-austenitic steel pipes
 Suitable pipe grades shall be selected from the following recognized standards:
 ISO 9329 Part 4, EN 10216 Part 5, ASTM A269, ASTM A312, ASTM A358, ASTM A789 or JIS G3459

Special conditions:

Incl. automatic eddy current testing or ultrasonic testing in lieu of hydraulic testing according to relevant standard