



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000025U
Revision No:
2

This is to certify:

That

KME Special Products & Solutions GmbH
Klosterstr. 29, 49074 Osnabrück,
Germany

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials

and the following particulars:

Product	Pipes
Application area	Austenitic and ferritic-austenitic steel pipes
Steel type	Austenitic stainless
Manufacturing method	TIG-welded
Max. outer diameter	12.7 mm
Max. wall thickness	1.65 mm
Heat treatment condition	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 **2022-02-14**

for **DNV**

This Certificate is valid until **2024-06-30**.

DNV local station: **Essen**

Approval Engineer: **Stefan Röhr**

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 stainless

Steel type /grade ³⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic stainless	EFW	12.7	1.65	SHT

Remarks:

- 1) EFW: Electric fusion welded
- 2) SHT: Solution Heat Treated (solution annealing)
- 3) Suitable pipe grades shall be selected from the following recognized standards:
ISO 9329 Part 4, ISO 9330 Part 6, EN 10216 Part 5, EN 10217 Part 7,
ASTM: A269, A312, A358, A789, A790, A928 and JIS G3459