

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

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

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	Austenitic stainless
Manufacturing method	TIG-welded
Max. outer diameter	12.7 mm
Max. wall thickness	1.65
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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2021-01-05**

for **DNV GL**

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

DNV GL local station: **Essen**

Approval Engineer: **Stefan Röhr**

Thorsten Lohmann
Head of Section

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Job Id: **263.11-003040-3**
Certificate No: **AMMM000025U**
Revision No: **1**

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