

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000008X
Revision No:
1

This is to certify:

That

Heinz Gothe GmbH & Co. KG
Druckerstraße 12-20, 41238 Mönchengladbach,
Germany

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Product	Pipes and fittings
Application area	Austenitic and ferritic-austenitic steel pipes, Piping fittings
Steel type	Austenitic stainless, Ferritic-austenitic (Duplex) stainless, See page 2
Manufacturing method	Longitudinal fusion welding
Max. outer diameter	2 000 mm
Max. wall thickness	50 mm
Heat treatment condition	Solution heat treated
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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2019-03-13**

for **DNV GL**

This Certificate is valid until **2021-10-31**.

DNV GL local station: **Essen**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-005279-2**
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Particulars of the approval

Austenitic and Ferritic-austenitic steel pipes

Steel type	Grade	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	1.4301 acc. EN 10217-7	EFW	2 000	50	SHT / as welded
	1.4404 acc. EN 10217-7				
	1.4571 acc. EN 10217-7				
	1.4435 acc. EN 10217-7				
	1.4439 acc. EN 10217-7				
	1.4539 acc. EN 10217-7				
	1.4529 acc. EN 10217-7				
	1.4550 acc. EN 10217-7				
Ferritic-austenitic	1.4462 acc. EN 10217-7	EFW	2 000	50	SHT / as welded

Piping fittings

Steel type	Grade	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	1.4301 acc. EN 10253-4	EFW	2 000	50	SHT / as welded
	1.4404 acc. EN 10253-4				
	1.4571 acc. EN 10253-4				
	1.4435 acc. EN 10253-4				
	1.4439 acc. EN 10253-4				
	1.4539 acc. EN 10253-4				
	1.4529 acc. EN 10253-4				
	1.4550 acc. EN 10253-4				
Ferritic-austenitic	1.4462 acc. EN 10253-4	EFW	2 000	50	SHT / as welded

Remarks:

- 1) EFW: electric fusion welded
- 2) SHT: Solution Heat Treated (solution annealing)