

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM00001ND Revision No: 2

This is to certify:

## That Busch + Kunz GmbH & Co. KG Carl-Benz-Str. 17-19, 57299 Burbach, Germany

is an approved manufacturer of **Steel Pipes and Fittings** 

in accordance with DNV rules for classification – Ships DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings

and the following particulars:

Product Application area Steel type	Fittings Piping fittings Carbon and carbon-manganese, Alloy, Austenitic stainless,
Manufacturing method Max. outer diameter Max. wall thickness Heat treatment condition	See page 2 Hot formed / cold formed See page 2 See page 2 See page 2 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 2023-11-01

This Certificate is valid until **2026-08-31**. DNV local unit: **Essen** 

Approval Engineer: Christian Wildhagen

for DNV

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

#### **Piping fittings**

Steel type	Standard <sup>3)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn, Alloy	EN 10083	HF, CF	610	40	N, NT
	ISO 3183				
	EN 10216-1				
	EN 10216-2				
	EN 10216-3				
	EN 10216-4				
	EN 10222				
Austenitic stainless	EN 10217-7	HF, CF	323.9	12	SHT
	EN 10216-5				

#### Remarks:

- <sup>1)</sup> HF: hot finished
- CF: cold finished
  <sup>2)</sup> N: Normalised
  NT: Normalised and tempered
  SHT: Solution Heat Treated (solution annealing)
- <sup>3)</sup> Starting material. Final pipe fittings to comply with the following recognized standards: EN 10253, ASTM A234, ASTM A403, ASTM A420, ASTM A744, ASTM A815, ASTM A960, ASTM A961, JIS B2312, JIS B2313 or JIS B2316.