APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM00001ND
Revision No:
3

This is to certify:

that

Busch + Kunz GmbH & Co. KG
Carl-Benz-Str. 17-19, D-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	**Fittings**
Application area	**Piping fittings**
Steel type	**Carbon and carbon-manganese,** **Alloy,** **Austenitic stainless,** **See page 2**
Manufacturing method	**Hot formed / cold formed**
Max. outer diameter	**See page 2**
Max. wall thickness	**See page 2**
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 **2026-09-10**

This Certificate is valid until **2029-08-31**.
DNV local unit: **Essen**

Approval Engineer: **Andrzej Otrebski**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

Christian Wildhagen

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 USD 300 000.

Particulars of the approval

Piping fittings

Steel type	Standard [3]	Manufacturing method[1]	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition[2]
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:

1) HF: hot finished
   CF: cold finished
2) N: Normalised
   NT: Normalised and tempered
   SHT: Solution Heat Treated (solution annealing)
3) 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.