

## APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00001Z1** Revision No:

This is to certify:

That

Wieland-Werke AG Graf-Arco-Straße 36 89079 Ulm, Germany

is an approved manufacturer of Wrought Copper and Copper Alloys

in accordance with

DNV rules for classification – Ships DNV class programme – DNV-CP-0253 Non-ferrous tubes

and the following particulars:

Application area Copper and copper alloy tubes
Alloy type(s) Phosphorus-deoxidised Copper,

Copper-Nickel, Aluminium brass, Admiralty brass

Manufacturing methodSeamlessMax. outer diameter70 mmMax. wall thicknessSee page 2Heat treatment conditionSee 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 2023-12-08

for **DNV** 

This Certificate is valid until 2026-12-31.

DNV local unit: Essen

Approval Engineer: Andreas Koch

Thorsten Lohmann
Head of Section

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Job Id: **263.11-003918-4** Certificate No: **AMMM00001Z1** 

Revision No: 2

## Particulars of the approval

## Copper and copper alloy tubes

Steel type	Manufacturing method	Max. outer diameter [mm]	Max. wall thickness	Heat treatment condition
Phosphorus- deoxidised copper	seamless	70	finned section max. 3 mm, un-finned section max. 8.5 mm	Acc. to applicable standard
Copper-Nickel				
Aluminium brass				
Admiralty brass				

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