



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00002AR**  
Revision No:  
**2**

This is to certify:

That

**Wieland Austria Ges.m.b.H.**  
**Fabrikstraße 4, 3300 Amstetten,**  
**Austria**

is an approved manufacturer of  
**Wrought Copper and Copper Alloys**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Copper and copper alloy tubes</b>
<b>Alloy type(s)</b>	<b>Copper-Nickel 90-10</b> <b>Copper-Nickel 70-30</b>
<b>Manufacturing method</b>	<b>Seamless</b>
<b>Max. outer diameter</b>	<b>See page 2</b>
<b>Max. wall thickness</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>See page 2</b>

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 **2021-12-13**

for **DNV**

This Certificate is valid until **2024-12-31**.

DNV local station: **Augsburg**

Approval Engineer: **Christian Wildhagen**

**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

---

### Copper and copper alloy tubes

Alloy type	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]
Copper-Nickel 90-10	HFS / CFS	159	8
Copper-Nickel 70-30	HFS / CFS	159	8

Remarks:

- <sup>1)</sup> HFS: hot finished seamless  
CFS: cold finished seamless