



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000026D**  
Revision No:  
**3**

This is to certify:

That

**INOXYDA S.A.**

**4-8 Etienne Dolet, 76140 Le Petit Quevilly Cedex,  
France**

is an approved manufacturer of  
**Copper Alloy Castings**

in accordance with

**DNV rules for classification – Ships**

**DNV class programme – DNV-CP-0251 Copper alloy castings**

and the following particulars:

<b>Application area</b>	<b>Castings for valves, fittings and general application</b>
	<b>Castings for propellers</b>
<b>Alloy type</b>	<b>Ni-Al bronze (Cu3)</b>
<b>Casting method</b>	<b>Sand casting</b>
<b>Max. weight</b>	<b>10 700 kg</b>
<b>Heat treatment condition</b>	<b>As cast</b>
<b>Additional approval conditions</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 **2024-11-06**

This Certificate is valid until **2027-06-30**.

for **DNV**

DNV local unit: **France FIS**

Approval Engineer: **Andreas Koch**

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

### Castings for valves, fittings and general application Castings for propellers

Alloy type	Grade	Casting method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
Ni-Al-bronze	NV Cu3	SC	10 700	AC

Remarks:

- <sup>1)</sup> SC: Sand Casting
- <sup>2)</sup> AC: As cast

### Additional approval conditions:

Repair welding is in general permitted according to approved procedure

- WPS No.: RV001 dd. 2008-09-03 (cert.: WF 0810328 HH)

As well as according to other welding procedures approved by DNV. The requirements for repair welding as stated in DNV-RU-SHIP Pt.2 Ch.2 Sec.11 shall be complied with.