

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:**

**That**

**Santa Caterina s.r.l.**

**Via Giovanni XXIII, 94/b, 21015 Lonate Pozzolo VA, Italy**

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

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

and the following particulars:

<b>Application area</b>	<b>Castings for valves, fittings and general application</b>
<b>Alloy type</b>	<b>Leaded gunmetal, Ni-Al-bronze</b>
<b>Manufacturing method</b>	<b>Sand casting</b>
<b>Max. weight</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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2021-02-08**

for **DNV GL**

This Certificate is valid until **2024-02-07**.

DNV GL local station: **Milan**

Approval Engineer: **Stefan Röhr**

**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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

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### Castings for valves, fittings and general application

Alloy type	Grade <sup>4)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition <sup>2)</sup>
Leaded Gunmetal	ASTM B62 C83600	SC	1000	100	As cast
Ni-Al-bronze <sup>3)</sup>	ASTM B148 C95800	SC	1000	100	As cast
	ASTM B148 C95500	SC	1000	100	As cast

Remarks:

- 1) SC: Sand Casting
- 2) AC: As cast
- 3) Possible application and certification of any material to classed object is subject to case by case approval
- 4) Incl. equivalent grades in acc. to other standards