

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

Eliche Radice S.p.A.

Via Valtellina, 45 20092 Cinisello Balsamo (MI), Italy

is an approved manufacturer of
Copper Alloy Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Castings for propellers
Alloy type	Ni-Al-bronze (VL Cu3)
Manufacturing method	Sand casting
Max. weight	1 500 kg
Max. wall thickness	See page 2
Heat treatment condition	See page 2
Additional approval conditions	Foundry plant located in: Via I Maggio, 40 - 24060 Telgate (BG), Italy

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 **2021-02-04**

for **DNV GL**

This Certificate is valid until **2024-02-03**.

DNV GL local station: **Italy/Malta CMC**

Approval Engineer: **Andreas Koch**

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Thorsten Lohmann
Head of Section

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Job Id: **263.11-010173-1**
Certificate No: **AMMM00002UG**

Particulars of the approval

Castings for propellers

Alloy type	Grade	Casting method ¹⁾	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition ²⁾
Ni-Al-bronze	VL Cu3	SC	1 500	130	AC

Remarks:

- 1) SC: Sand Casting
- 2) AC: As cast
- 3) Incl. equivalent grades in acc. to other standards