

Page 1 of 2

Certificate No: LR23392856WA-03

Issue Date: 14/05/2025 Expiry Date: 24/09/2026

## **Copper Alloy Castings For Propellers**

Manufacturer VEEM LTD

**Address** 22 Baile Road, Canning Vale, Western Australia, 6155, Australia

**Type** Copper Alloy Castings For Propellers

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given on subsequent pages of this certificate.

This certificate is issued to the named manufacturer, and is valid until the expiry date specified. Lloyd's Register is to be notified of any change that may affect the validity of this certificate, and reserves the right to cancel or withdraw this certificate.



71 Fenchurch Street, London, EC3M 4BS, United Kingdom

## **Clive Arnold**

Metallurgy Team - Lead Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Page 2 of 2

Certificate No: LR23392856WA-03

Issue Date: 14/05/2025 Expiry Date: 24/09/2026

## **Copper Alloy Castings For Propellers**

| Copper Alloy<br>Castings for<br>Propellers | Propellers | Grades | Maximum Weight | Units  |
|--|------------|--------|----------------|--------|
| -  | -          | Cu1    | 0.56           | Tonnes |
| -  | -          | Cu3    | 2.10           | Tonnes |

## **Additional Remarks**

Approval covers manufacture of Propeller castings, Cu 3 alloy, maximum weight, 2.1 tonnes.

Approval covers manufacture of Propeller Hub castings, Cu 3 alloy, maximum weight, 3.55 tonnes.

Approval covers weld repair of Cu 3 propeller and hub castings.

Approval covers heat treatment for Cu 3 alloy as part of post weld repair heat treatment.

Welding Procedure for pre-authorised weld repairs on propeller and hub castings is VEEM PQR 499 Rev 0.

Propellers and hubs for naval application are to be inspected by Dye Pentrant and UT techniques, as per procedures agreed with Lloyd's Register.

The scope of approval does not cover heat treatment or weld repairs of copper alloy propellers in Cu 1 alloy.



71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.