



Marine & Offshore  
Division

Certificate number: 25437/B0 BV

File number: MAT 11108-2011

Product code: 8159I

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## APPROVAL CERTIFICATE for MATERIALS

*This certificate is issued to*

**C.C. JENSEN**  
SVENDBORG - DENMARK

*for the type of product*

### COPPER ALLOY CASTINGS

Castings in non-finished machined condition in copper alloy type CU3 of maximum weight 3200 kg

**Requirements:**

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 14 Nov 2021**

**For BUREAU VERITAS,**

At BV FREDERICIA, on 14 Nov 2016,

Jesper Jensen



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION :**

Castings in non-finished machined condition in copper alloy type CU3 of maximum weight 3200 kg intended to be used for propellers.

Mould making: sand casting with sodium silicate.  
Alloy melting in electrical and induction furnaces.

### **2. DOCUMENTS AND DRAWINGS :**

Document "C.C.JENSEN Casting department data" issued by C.C. Jensen A/S and dated 17/10/2016.

### **3. TEST REPORTS :**

As per test reports No. 111-20407/6977.01, No. 111-20407/6977.02 dated 15/03/2011 issued by force technology institute.

### **4. APPLICATION / LIMITATION :**

As per Bureau Veritas Rules for Classification.

### **5. PRODUCTION SURVEY REQUIREMENTS :**

The castings are to be supplied by C.C. Jensen A/S in compliance with the type and the requirements described in this certificate.

This type of product is within the category IBV of Bureau Veritas Rule Note NR320. BV product certificate is required.

### **6. MARKING OF PRODUCT :**

As per Bureau Veritas Rules for Classification.

### **7. OTHERS :**

This certificate replaces approval No.25437/A0 BV.

**\*\*\* END OF CERTIFICATE \*\*\***