

# Approval Certificate for Manufacturing Process

[ Copper Alloy Castings ]



**Initial Approval** 30 October 2012  
**Manufacturer** JC Navalips S.L.  
 Avenida Juan Carlos I, 3 39600 Maliano, Cantabria, Spain

**Product Description** Copper Alloy Castings for Propellers

- Grade : CU 3 (Aluminium bronze casting, Grade 3)
- Melting furnace : Electric induction furnace
- Casting method : Sand casting
- Mass : Max. 10 000 kg / piece
- Diameter : Max. 3 000 mm

**Approval Condition** Individual Product Certification is required.

**THIS IS TO CERTIFY** that the manufacturing process for the above mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and/or of the recognized standards as follows.

Pt. 2, Ch. 1, Art. 702 of the rules for Classification of Steel Ships

This Certificate is valid until 8 May 2027

Reissued at Busan, Korea on 12 June 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23023876763) and certificate No.(MAD39748-CU001).



**KOREAN REGISTER**

*General Manager of  
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
  2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
  3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
  4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.