

TYPE APPROVAL CERTIFICATE

Certificate No.

: LDN23355-BM001

Initial Approval: 14th January, 2009.

Product

: Non-Metallic Bearing Material

Manufacturer

: ACM Bearings Ltd

Derwent Way, Wath Upon Dearne, Rotherham, South Yorkshire S 63

6EX, United Kingdom

Product Description: Rudder Bearing & Rudder Carrier Bearings (Type: ACM L2 Marine)

- Density

1.30 ~ 1.35 g/cm³ 360 ~ 414 MPa

- Compressive strength

123 Shore D

Hardness

Max. surface pressure

* h : bearing hight

5.5 MPa for $1.1 \le h/d \le 1.2$, 10.0 MPa for

h/d = 1.0, * d : Diameter of Shaft : Water, Oil_lubricated or Dry running

- Application - Approved Documents

L2 Marine Engineering Manual approved on 7 Nov, 2008

Approval Condition: 1. This approval is based on the Independent Test Results for mechanical and thermal of the material carried out at Allvac Ltd and Sheffield University.

2. Individual Product Certification is not required.

that the above-mentioned product has been approved THIS IS TO CERTIFY in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 4, Ch. 1, Art. 901 & 902 of the Rules for Classification, Steel Ships.

This Certificate is valid until 13th January, 2019. Issued at Busan, Korea on 5th December, 2013.

KOREAN REGISTER OF SHIPPING

General Manager of Materials and Equipment Team

Note:1: The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2: The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.