



TYPE APPROVAL CERTIFICATE
No. **MAC154420XG**

This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	Epoxy resin for machinery chocking
<i>Type</i>	Chockfast Orange PR-610 TCF
<i>Applicant</i>	ITW Performance Polymers Bay 150, Shanon Industrial Estate Shannon IRELAND
<i>Manufacturer</i>	ITW Performance Polymers
<i>Place of manufacture</i>	Bay 150, Shanon Industrial Estate Shannon IRELAND & 130 Commerce Drive, Montgomeryville, Pennsylvania, 18936 USA
<i>Reference standards</i>	Part C, Chapter 1, Section 2 of RINA Rules for the classification of ships
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in **Hamburg** on **July 10, 2020**. This Certificate is valid until **July 9, 2025**



RINA Services S.p.A.
Giuseppe Russo

This certificate annuls and replaces the previous one No. MAC14915CS dated 10/07/2015
This certificate consists of this page and 1 enclosure

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No. **MAC154420XG**
Enclosure - Page 1 of 1
Chockfast Orange PR-610 TCF

Reference documents

Manufacturer's technical bulletins no. 659 H, 659G

Technical characteristics

- Maximum service temperature of chocks: 80°C
- Maximum specific load on the chocks due to the weight of machinery: 0.7 N/mm²
- Maximum specific load on the chocks due to weight and holding-down bolt tension: 4.4 N/mm²

Fields of application

Foundation chocking of diesel engines, reduction gears and other auxiliary machinery

Acceptance conditions

- For propulsion plant arrangements, prior to each individual installation, detailed plans of the chocking arrangement with bolt tightening calculation are to be submitted for approval
- The installation on board is to be made in accordance with the manufacturer's instructions, by qualified personnel approved by the manufacturer, to the satisfaction of the RINA surveyor
- The proper alignment of the machinery is to be checked both prior to pouring and after tightening of the holding-down bolts
- After hardening of the chocks and prior to tightening of the holding-down bolts a hardness test is to be performed, the Barcol hardness being at least 35
- The tightening-up of the main engine holding-down bolts controlled at the installation is to be checked after sea trials when cooled down.

Hamburg July 10, 2020

