


# **ITW Philadelphia Resins Corporation**

## **InterOffice Memo**

**To:** All International Marine Distributors  
All Domestic Marine Distributors

**From:** Bruce S. Shipley 

**Date:** September 10, 1997

**Subject:** Various Approvals

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Attached is some recent correspondence for your Approval Files:

1. Use of CHOCKFAST Orange in stern tubes - a search of our records indicated ITW PRC never had formal approval from Lloyd's Register for using CHOCKFAST Orange to install stern tubes. This LR memo provides such approval in addition to several guidelines.
2. China Classification Society TG-7B Type Approval - this is a copy of the Type Approval Certificate for the Cryogenic Material TG-7B.
3. Korean Register Type Approval for CHOCKFAST Orange - this is actually a revision of the existing certificate and now permits a deadweight loading of 9 kg/cm<sup>2</sup> (up from 7 kg/cm<sup>2</sup>).

**CC:** E. Dow  
S. Nelson  
R. Budweg  
J. Farrell



FAX MESSAGE  
000637

REPLY CATEGORY:  
 URGENT  ACCELERATED  ROUTINE

LLOYD'S REGISTER MARINE DIVISION  
LLOYD'S REGISTER HOUSE  
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TO PHILADELPHIA RESINS CORPORATION Attn: Mr. Bruce Shipley	FAX NO. +1 215 855 4688	DATE 04 Apr 97
	TOWN Montgomeryville	PAGES 1 of 2
	COUNTRY USA	DIRECT FAX
OUR REF. MDD/O-580/97/FAK	YOUR REF.	
SUBJECT USE OF CHOCKFAST ORANGE IN STERN TUBES		

LLOYD'S REGISTER OF SHIPPING, REGISTERED OFFICE: 71 FENCHURCH STREET, LONDON EC3M 4ES

1. I refer to your fax dated 17 March 1997 in respect of the above.
2. We have searched our records and are unable to find an official letter of approval having been formulated or sent to Philadelphia Resins for the use of Chockfast Orange specifically for Sterntube applications although as you say there are letters of inference regarding its acceptability.
3. However, for your information the instructions to our surveyors regarding the installation of sterntubes and sternbushes using resin are stated below:
  - a) The resin is to be of an approved type for use in installations requiring critical alignment (Note: Chockfast Orange is an approved type).
  - b) Preparation of the sterntube or bush and mixing and pouring of the resin is to be carried out under the supervision of experienced personnel.
  - c) The whole of the work is to be carried out to the Surveyor's satisfaction.
  - d) Test samples of the resin are to be prepared for crushing and hardness tests.
  - e) Suitable pouring and venting holes are to be provided at opposite ends within the vent hole at the highest point.
  - f) The minimum radial gap occupied by the resin is to be not less than 6 mm at any one point with a nominal resin thickness of 12 mm. This is to ensure that the necessary exotherm is achieved to properly cure the resin.
  - g) In the case of oil lubricated sterntube bearings, the arrangement of the oil grooves is to be such as to promote a positive circulation of oil in the bearing. Provision would need to be made for remote measurement of the temperature at the aft end of the aft bearing, with indication and alarms at the control stations.
  - h) The requirements of Part 5, Chapter 6, Section 3.12 of the Rules for Ships are to be complied with as applicable and in this respect the means of ascertaining the temperature of oil in the sterntube is to be provided in addition to the requirements of (g).
  - j) The resin is not to be relied upon to prevent rotation of the sterntube or bush, for which purpose positive mechanical means should be provided.
  - k) Due regard is to be given to the difficulty of removal of the sterntube or bush when this becomes necessary and consideration should be given to the application of a release agent.
  - l) The Owners would need to be advised and a reference should be made in the First Entry Report in order that a suitable note may be included in the Memoranda (Machinery).
  - m) The plans showing the arrangement and details for each installation are to be submitted for approval.

4. With regard to the localised radial gap, it is suggested that a radial gap between 6mm and 2mm is avoided due to the likelihood of non uniform external heating post cure and also the likelihood of additional/non-uniform shrinkage of the resin chock on the inner metal element(tube); the thinnest section could be adversely affected.
5. A generalised minimum Barcol hardness of 24 has been stated in the instructions to our surveyors for use in installations requiring accurate alignment and these instructions are subject to revisions from time to time. Although the hardness of a cured chock is dependent on the chocking compound and this value should be provided by the manufacturer, our Materials Department in a recent memorandum to us questions the validity of any Barcol hardness value below 30.
6. I trust the above information is of some assistance to you.

Regards.



Albert Khayyat  
Senior Surveyor  
Machinery Design & Dynamics  
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