EPOCAST

Successful Lifetime Main Engine Chocking & Superior Tech Support with EPOCAST 36[®]

Problem:

On a commercial ship, the main engine crankshaft was damaged. After being replaced, the engine needed to be realigned to the reduction gear and shaft bearings of the propeller arrangement. To preserve and maintain the new alignment, new epoxy chocks were required. This particular engine required very tight tolerances at the coupling to within just a couple hundredths of a millimeter. Without this level of precision, increased loads on the bearings can increase the potential for breakdown while the vessel is underway.

Solution:

With local conditions and the shipyard production in mind, the Epocast 36 pourable chocking system was selected as the repair solution. Additionally, the epoxy chocking compound was chosen over competitors due to the high physical strength properties as well as holding Type Approval Certifications (TACs) from all major classification societies.

Using calculations and requirements from the RINA Italy Classification society, the anchor bolts were tensioned after the Epocast installation. A hydraulic tensioning tool was used to achieve the required bolt tensioning to ensure that the engine was kept in place throughout its seagoing operations.

The application engineers were trained and authorized to execute best practices, coupled with the technical support, kept the engine safely in position during the sea trail.

Project Outcome:

Lifetime Lasting High Durability

Epocast 36 will remain effective throughout the lifetime of the main engine and will only need to be replaced if the engine is replaced on its foundation. Therefore, the durability and lifetime value are two great outcomes.

Reliable and Thorough Technical Support

The Epocast technical support in the field ensured a successful installation and coordination between all parties involved, from receiving application approvals to classification societies and to ship owners and the shipyard.

The technical information, recommendations and other statements contained in this sheet are based upon good faith tests or experience that ITW Performance Polymers believes are reliable, but the accuracy and completeness of such information is not guaranteed. This information is not intended to substitute for the customers' own testing. ©ITW Performance Polymers, June 2024.



VESSEL PARTICULARS	
IMO number	9251755
Vessel Name	COSMO
Ship type	Chemical/Oil Products Tanker
Flag	Italy
Homeport	a
Gross Tonnage	4425
Summer Deadweight (t)	5885
Length Overall (m)	100
Beam (m)	17
Draught (m)	a
Year of Built	2003

