Passenger ferry engine cylinder repair

ID: 10053

Industry:	*Marine*	Customer Location:	*Scotland, UK*
Application:	*ENC-Engines and Casings*	Application Date:	*January 2021*
Substrate:	*Carbon steel*		
Products:	*Belzona 1311 (Ceramic R-Metal)*		

Problem

An engine used to run one of the bow thrusters was found to have damage within it's engine cylinders. This was suspected to be caused by cavitation between the wall & the cylinder liners.

Vessel docked during overhaul

Damaged area identified

Surface preparation

Belzona 1311 applied & then machined flat with the surrounding metal

Application Situation

A repair was required on these cylinders to stop the erosion/corrosion from going further into the cylinder wall. Hot works were undesirable on this equipment due to the risk of cracks or heat distortion

Application Method

The identified areas were ground out using an angle grinder. Belzona 1311 was then applied 'proud' of the lost metal. Once the product had reached its initial cure stage it was then machined down flat with the metal.

Belzona Facts

Using the Belzona solution meant the application could be completed promptly with minimal risk to the equipment & disruption to

the surrounding overhaul works.

ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

Belzona products are manufactured under an ISO 9000 Registered Quality Management System.

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