CORROCOAT

Case Study: 013

Corroglass 200 & Fluiglide Used to Refurbish Six High Speed Ferry Water Jet Pumps

The Industry

Marine

The Challenge

High-speed jetfoil ferries use powerful jet pumps to provide propulsion. However, the conditions in which these operate are very aggressive and severe corrosion, erosion, and cavitation from continuous use in seawater, are major problems. Corrocoat Japan Ltd was approached by one leading ferry operator to refurbish and recoat six aluminium alloy jet pumps.

The Solution

The work involved: fabricating replacement pump dome covers, rebuilding the guide vanes, grit blasting the pump bodies to standard Sa 2.5, then applying Corroglass 200 and finally a coating of Fluiglide.

The combined use of Corroglass 200 and Fluiglide offers dual benefits. The system not only reduces fuel consumption by achieving notable increases in overall efficiency levels, but also provides an effective corrosion barrier, preventing early fall-off in performance due to nodular growth and surface corrosion.

Credentials

There is an on-going drive to make more effective use of energy resources by maximising the performance of pumping systems used in marine, power generation, processing and water and waste industries. Corrocoat was a pioneer in the introduction of new technology in coating materials which have now been applied to thousands of pumps worldwide, achieving in every case significant improvements in efficiency.

The Fluiglide coating system makes it possible to increase the effective life of a jet pump operation by between 4 and 5 years. Because severe operating conditions mean that, erosion and cavitation problems are always present it is vital that pumps be constantly maintained. In many cases, the cost of pump replacement is far greater than refurbishment with Corrocoat

Photographs

Left: The damaged pump dome
Middle: A new dome fitted
Right: The pump after Repair & coating

Forster Street Leeds, West Yorkshire LS10 1PW, UK T: +44 (0)113 2760 760 E: info@corroserve.com www.corroserve.com