

**Customer** Tug Operator, Mersey  
**Sector** Marine  
**Date** June 2012  
**Ref no.** 20068

## APPLICATION EXAMPLE

# Repairs to tug voith unit

## Situation

The O-ring seat on each blade housing had become corroded and pitted allowing water to seep into the mechanical gear box housing. To remove and machine the voith unit plate was out of the question and an in-situ repair was needed, so the owners called **Mark Specialist Applications** to seek expert advice.

## Implication

Left untreated the problem would only get worse leading to substantial leakage / gearbox / efficiency issues.

## Solution

The O-ring faces were rebuilt using Resimac ceramic filled epoxy paste and left on heat to cure. Once cured, the faces were mechanically and hand dressed to leave a smooth face for the O-ring to seal. The outer face was also filled using ceramic paste and a ceramic fluid was applied to give additional protection.

## Facts

The Mersey is a busy river and the Tugs are required 24 hours a day. This urgent repair was carried out over a 24 hour period to ensure a quick return to service for this workhorse of the port.

