



Ravensthorpe Fabri Actuation Problems



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Ravensthorpe Nickel in Western Australia never reached full commercial operation before being shut-down and placed into Care and Maintenance in November 2008 after about one year of start-up and commissioning.



First Quantum bought this \$3 Billion dollar asset early in 2010 and is working on correcting the technical issues that prevented Ravensthorpe from achieving its original design.

CGIS bid on a won the severe service knife gate package with Guided Shear Gates. Mistakenly, CGIS did not bid on the general purpose knife gate package which was eventually won by ITT Fabri. During the yearlong commissioning and start-up process, CGIS visited Ravensthorpe four times and saw their Guided Shear Gates were working extremely well with no issues.

The Fabri knife gates were not as trouble free. One of the big problems that soon appeared was the Fabri cylinder rods that began to rust very quickly in the Australian climate and local atmosphere. Fabri uses chrome plated carbon steel piston rods for the pneumatic cylinders, as well as an open uncovered bonnet design.

The rust that accumulated on the rods soon began to tear the rod seals upon cycling and the air pressure that was required to move the valve escaped into the atmosphere leaving the valves stuck in position, unresponsive to a control command.

Guided Shear Gates did not suffer this fate. They use solid 17.4 PH rods along with rod scrapers to maintain the long term operability of the valves, as well as covered bonnets.

While 17.4 PH is considerably more costly than chrome plated or even stainless steel rods; this cost increase for the valve acquisition is more than compensated for during operations and for increased reliability and asset availability. You get what you pay for and the devil is in the details. CGIS knows this intimately and can help you plant gain significant operational service.

