

Customer Water Authority, North West
Sector Water / Wastewater
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APPLICATION EXAMPLE

Rebuild of concrete trough

Situation

A collapsed bearing in the main screw drive had led to the screw slowly wearing away the concrete trough up to the point where the clearance from the screw tip to the trough wall was almost 20mm against the original spec of 6mm. The length of damaged area was around 5 metres.

Implication

The screw was operating at 30% reduced efficiency, and power consumption increased dramatically.

Solution

A repair technique was devised whereby, 6mm bars were tack welded onto the screw blade tips. The area to be repaired was primed and the epoxy based concrete repair material was introduced whilst the screw was turning slowly. The flat bar plates effectively reformed the original profile with the net result being the required 6mm was recreated once the material had fully cured and the forming bars were removed.

Facts

This application was innovative, cost effective and functional.

