

Customer Chemical Company, North West
Sector Chemical / Petrochem
Date May 2012
Ref no. 20049

APPLICATION EXAMPLE

Repairs to process vessel main shell

Situation

The blending tower external shell was found to be leaking from a crack. The crack started on the main connecting flange and ran through a bolt hole and into the main body of the vessel.

Implication

If the casting was left unrepaired the crack would have travelled further down the vessel which could have meant replacing the entire section of the tower meaning significant downtime and disruption to the process.

Solution

The casting was blasted to SA2.5 and the extent of the crack inspected. The crack termination point was drilled to prevent the crack from increasing in size. Once the casting was cleaned the surface was re-built using Resimac 101 repair paste ready to cold bond the pre-manufactured plates. The plates ensured the integrity of the vessel by encapsulation the bolt holes and crack area. The repair was protected with a coating of high temperature Resimac ceramic repair fluid, 205 HT.

Facts

The crack was identified just in time to prevent a failure of the vessel section. The repair was classified as an emergency repair and was completed within 24 hours of notification and to the satisfaction of the insurance inspector.

