Belzona Shaft Repair Keeps the Conveyors Turning

ID: 6408

Industry: *General Industry*
Application: *MPT-Mechanical Power Transmission*

Customer Location: *Tennessee, USA*
Application Date: *August 2016*

Substrate: *Carbon Steel*
Products: ** Belzona 1111 (Super Metal) ,*
** Belzona 9111 (Cleaner Degreaser) ,*

Problem
A bearing had overheated and seized resulting in a worn area on the shaft.




Photograph Descriptions

* 1) Shaft undercut and grooved in preparation for application Photo 2) Belzona 1111 build up completed Photo 3) Turning shaft back to original outer diameter Photo 4) Application completed and perfectly fit to a new bearing ,

Application Situation

A snack manufacturer was looking for a way to repair shafts rather than constantly replacing components.

Application Method

Application was carried out in accordance with Belzona System Leaflet MPT-1. Shaft was placed in a lathe and the damaged area was undercut and grooved to aid in mechanical bonding. Final cleaning was done using Belzona 9111 cleaner/degreaser. Belzona 1111 was built up on the shaft, taking care to press it firmly into the grooves and avoid air entrapment. After approximately 90 minutes the shaft was turned on the lathe back to its original outer diameter and polished with emery cloth to create a perfect fit with a new bearing.

Belzona Facts

The manufacturer uses dozens of these shafts in their conveyor system and this is a recurring problem. They had previously been replacing each shaft at a cost of $300 each. The Belzona solution will allow for up to a dozen repairs using a single 1 KG unit of Belzona 1111 and a savings of approximately $250 per repair which will add up to thousands of dollars in savings annually.