# BELZONA KEEPS THE CHIPPER CHIPPING

#### **CUSTOMER**

Northern Idaho, USA

# **APPLICATION DATE**

November 2013

# **APPLICATION SITUATION**

Shaft repair for spun bearing at a lumber mill.

# **PROBLEM**

The bearing on the chipper disc shaft had spun out, damaging the shaft.

#### **PRODUCTS**

Belzona 1111 (Super Metal) Belzona 9111 (Cleaner Degreaser) Belzona 9411 (Release Agent)

## **SUBSTRATE**

Steel

## **APPLICATION METHOD**

This application was completed on a Saturday in November, below freezing outside and the job was located in an unheated area of the mill. All the mixing was done in a heated area and then moved to the area of the repair. The application was carried out in accordance with Belzona Know-How System Leaflet MPT-2. The damaged area was ground down on the shaft and then cleaned thoroughly with Belzona 9111. Belzona 9411 was applied in 2 coats to the two part steel former that was made. A thin layer of Belzona 1111 was applied to the former, and about a 1/4" layer of Belzona 1111 was applied to the prepared shaft area. The former was then mounted on the shaft and tightened down, squeezing the excess material out. Heat lamps and a heat gun were used to warm the shaft due to the temperature. After approximately 2 hours, the former was removed and the initial clean up was done. The following day, Sunday, it was sanded down and the new bearing and sleeve were mounted. Then the chipper disc was reassembled. The chipper was successfully returned to operation on Monday.

# **BELZONA FACTS**

The mill was facing a lengthy and expensive procedure to fix this shaft. Standard procedure is to bring in a crane, remove a portion of the mill roof, lift the entire chipper disc with the crane, remove the shaft, ship the shaft to a repair facility to be welded and machined, then ship the shaft back, reassemble the chipper disc and lower it back into the building using the crane and then re-install the roof. This takes most of a week and would have cost them \$13,500.00. No more than \$150.00 of Belzona products were used for this repair and it was completed in less than a weekend. This repair has been in place for over one year and is still in 100% working condition, proving the longevity of these repairs.

# **PICTURES**

- 1. Damaged chipper disc shaft being ground.
- 2. Shaft ground down and clean.
- 3. Belzona 1111 applied to the shaft and the former is in place with heat lamps.
- 4. Completed repair, ready for reassembly.







For more examples of Belzona Know-How In Action, please visit http://khia.belzona.com



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