

# BELZONA KEEPS THE CHIPPER CHIPPING

ID: 4938

Industry: *Pulp & Paper*  
Application: *MPT-Mechanical Power Transmission*

Customer Location: *Northern Idaho, USA*  
Application Date: *November 2013*

Substrate: *Steel*  
Products: *\* Belzona 1111 (Super Metal) ,*  
*\* Belzona 9111 (Cleaner Degreaser) ,*  
*\* Belzona 9411 (Release Agent) ,*

## Problem

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



## Photograph Descriptions

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

## Application Situation

Shaft repair for spun bearing at a lumber mill.

## Application Method

This application was completed on a Saturday in November in North Idaho and it was 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 guns 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

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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.

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