



Leaders in Industrial Maintenance Solutions  
Volume 1 Issue 3 & Pump Technology

## CASE FILE

### Shaft Repair at Lead Smelter

#### The Customer

Mount Isa Mine, Mount Isa, Queensland, AUSTRALIA

#### The Application

Damaged Shaft on Ducon Fan Blower



The Mount Isa Plant



Removal of bearing and...



...grinding out the score on the shaft



After building up the shaft with Belzona 1111, the former is removed, and the excess Belzona ground off



A Perfect Finish!  
And ready for work again by the end of the shutdown!

#### The Problem

The bearing had seized on this fan blower, which is used to extract lead dust from the blast furnace to the main stacks at the smelter, resulting in this damaged 150mm shaft.

#### The Products Used

Belzona® 1111 Supermetal  
Belzona® 9411 Release Agent

#### The Substrate

Mild Steel

#### The Application Method

The application consisted of grinding out the score on the shaft, followed by grit blasting to 75 micron with a 45 angular grit. A former was made up and used, made up in accordance with Belzona Know-How System Leaflet MPT-2.

#### The Outcome

The plant only had a 48 hour shutdown period, in which the repair had to be done.

This was easily achieved in situ with significant savings to the plant, who would have otherwise incurred increased down time and huge costs.