

## CONTINUOUS CASTING LADLE TURRET BEARING REPAIR WITH BELZONA

### CUSTOMER

Steel Plant South Wales

### APPLICATION DATE

October 2020

### APPLICATION SITUATION

The client had a bearing failure on the Ladle turret, causing damage to the shaft seat. The turret carries two ladles which are full with molten steel, one is draining the steel into the Concast casting a steel slab, whilst the other is being recharged. The total weight of each ladle whilst full of metal is 500 tons. This Failure had brought steel production to a standstill on the production line.

### PROBLEM

The collapse of one bearing had damaged the bearing seat area putting the machine out of use. The shaft diameter is 450mm and the width of the damage was 200mm with up to 6mm in depth. There were no spares available and due to difficulty in machining the shaft and the tight tolerances needed, Belzona were asked if we could help.

### PRODUCTS

Belzona 1121 (XL metal)  
Belzona 9111 (Cleaner Degreaser)  
Belzona 9411 (Release Agent)

### SUBSTRATE

High Carbon Steel

### APPLICATION METHOD

System Leaflet MPT-2, for rebuilding damaged shafts using forming techniques

### BELZONA FACTS

The overall cost for the Belzona material were close to £800.00, the cost saving to the client were in the thousands of pounds in lost production and renewal of parts.

### PICTURES

1. Top of the damaged area on the shaft and how access was difficult
2. Overview of the shaft and bearing housing area
3. Former manufactured for this repair
4. Finished repair after removal of the former



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Q 09335  
ISO 14001:2004  
EMS 509612

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