

# Cyrus-Bradford

## Case Study 02005 Main Spindle Repair



### Project Background

UK Based Steel facility capable of rolling rail up to 120 metres long, obviously requires heavy duty support equipment to perform reliably within a highly abrasive environment.

### The Brief:

The customer initially reported a problem within the mill due to a potential overload upon investigation it was found that one of the spindles was twisted midway along the male splined section, Cyrus-Bradford were asked to strip, inspect and report on the condition of the spindle and offer a repair procedure to be agreed with the customer, including refurbishment of the journal cross assemblies, and rebuild to an agreed specification. In addition to the overhaul we would discuss and agree an on-going repair & maintenance program.

The unit was re-assembled, test run & certified at Cyrus-Bradford workshops with the client in attendance. Condition monitoring values were said to be to finer limits those previously achieved by OEM.



FM: 615940



## The Solution:

Cyrus-Bradford engineers carried out detailed inspection of several sample components and collated this information the results of which were used to calculate the operating and manufacturing tolerances prior to production. Manufacturing drawings were produced and approved prior to manufacture.

The new parts were manufactured and assembled at Cyrus-Bradford workshops, final inspection of clearances were recorded prior to shipment and installation at site.

## The Result:

The package was successfully installed and commissioned without need for adjustment and is fully operational. Client was impressed with the work and agreed an ongoing maintenance program for other units onsite, including provision and holding of spares for future use.

## Technical Data:

**Requirement:** To overhaul the spindles to return to full working order with new components. Complete with a schedule of spares for use in ongoing maintenance programs.

**Plant:** Crude Oil Facility UK

**Application:** Re-Boiler Gear Unit.



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