

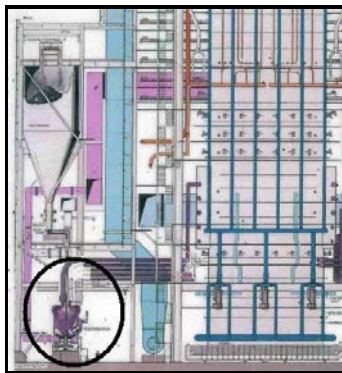
Example of a Successful Application Severe Abrasion Protection - Power Station

Heavy Duty Abrasion SOLUTIONS with Thistlebond TR240 HD Protection

Problem:

Coal fired Power Station. Constant HIGH ABRASIVE WEAR in ALL the parts that come into contact with the High Temperature Coal Fuel - HIGH Abrasion.

Extreme wear and abrasion has been causing excessive wear on all parts coming into contact with the coal dust that acts as the FUEL SOURCE. This was a particular problem in the rotating pulverisers which are used to break down the raw coal that is used as fuel for power generation.



Schematic of the Power Station showing the pulverising unit.



This is the ROTATING UNIT that crushes the coal.



Close-up view of rotating pulveriser.

Further problems occur when the METAL CASE is worn.

THISTLEBOND TR105 (Metal Engineering Paste) is used to QUICKLY and EFFECTIVELY seal the holes and enable continued operation.

IF this procedure was not available then LARGE DOWNTIME costs would be incurred by the Power Station.

If you look to the LOWER RIGHT CENTRE of the photograph above, some **THISTLEBOND TR105** repairs can be seen in 4 areas of the metal. These repairs are more clearly visible in the smaller photograph below.



Four repaired areas

Solution:

All parts that have been eroded by the coal dust are taken out of service and then BLASTED with GRIT to achieve the required PROFILE (75 microns) for the application of **Thistlebond Heavy Duty Ceramic Wearing Compound TR240**.



This photograph shows the INLET PIPE CONNECTION as BLASTED

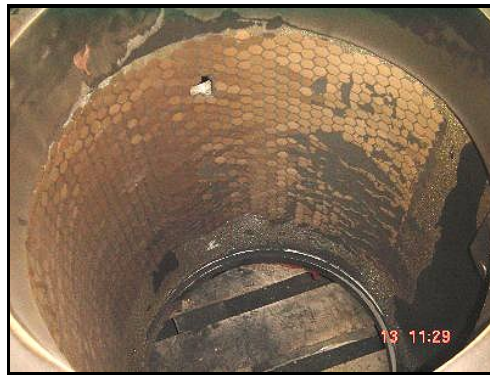
The **THISTLEBOND TR240** can be EASILY built up to Re-Profile all parts. Once the repair has been achieved a further two coats of **Thistlebond TR205 (Fluid Ceramic - High Abrasion Resistance)** is applied over the surface of the **TR240**.



This photograph shows the **DAMAGED INTERIOR**

Result:

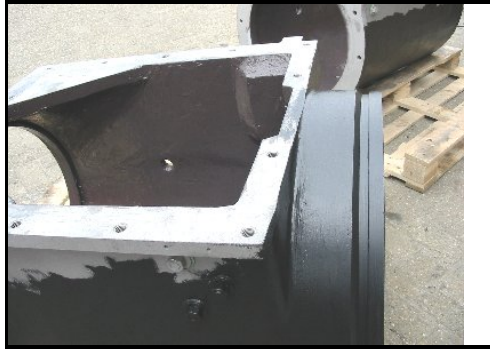
Protection from abrasion by the coal dust offering the customer **EXTENDED** Operating times and **INCREASED** periods between maintenance and repair.



This photograph shows **TR240** that has been **PROTECTING** this equipment for **OVER 5 YEARS** now, & the **CERAMIC** back-up **TILE** squares.

This is very **COST EFFECTIVE** - as not only does the use of **THISTLEBOND TR240**, **THISTLEBOND TR105** & **THISTLEBOND TR200** offer Long Term Protection **BUT** it allows the re-use of the existing equipment - eliminating the need for further **EXPENSIVE CAPITAL EXPENDITURE!**





The two photographs above show the FINISHED coating - **TR240 Heavy Duty Ceramic - PLUS - Top Coat of Two Coats TR2005**