



## Coal Mill Classifier Repair

### PROBLEM:

*The Coal Mill Classifier Cone directs the pulverized coal out of the mill and into the furnace. Hot air, from the air side of the air preheater, is pulled through the coal mill by the exhaust fan (refer CH-801) picking up the fine coal dust and feeding it to the furnace. The classifier cone is generally lined with thick Alumina wear plates to protect the cone from the abrasive coal particles. With time, these plates wear down and must be replaced. Replacement is done both in the field and at the manufacturer. The replacement wear plates are metal backed with a hole in the center to allow welding to the metal classifier cone. The problem is to protect the weld holes after installation, and to a lesser extent, the edges where each plate meets the next one.*

### SOLUTION:

After trying a number of products to fill in the weld hole and edge openings, **DUROMAR HAR** was used and found to have both the abrasion resistance and ease of application required for field or factory installation. **DUROMAR HAR** is a 100% solids, two-part epoxy system heavily filled with Silicon Carbide to impart both excellent abrasion resistance and temperature tolerance. The **DUROMAR HAR** is mixed as needed and troweled into place and allowed to cure forming a tightly bonded, abrasion resistant plug.

### RESULTS:

**DUROMAR HAR** was applied to the weld areas and around the plate edges. Inspections confirmed that the **HAR** was wearing at about the same rate as the Alumina plates. No failures had occurred due to adhesion problems, and no plates had failed due to the weld areas being attacked.

### CURRENT STATUS:

On the yearly inspections, it was found that the **DUROMAR HAR** continued to wearing similar to the Alumina plates. No plate failures had occurred due to adhesion problems or weld failure. Many additional crushers have been rebuild using this procedure.

### COMMENTS:

**DUROMAR HAR** is now used as a part of the standard repair system when relining C.E. Raymond Mills and for many other types of Classifier Cones. In many instances, when excessive wear has been found on the Alumina Plates themselves, field repairs have been made by troweling the **DUROMAR HAR** over the effected areas.



QUALITY SYSTEM  
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