

# CEMENT MILL SHELL CRACK RECONDITIONING

APPLICATION- Cement Mill Shell Crack Reconditioning

#### **Crack Details:**

- > Through Crack Generated with the length of 5 meters circumferentially in different places nearer to diaphragm.
- > Shell Thickness is 50 mm.

### **Cement Mill Details:**

- Cement Mill Capacity is 80 TPH
- > Mill Type is Ball mill
- ➤ Mill Length is 16.035meters and Dia is 3.4meters
- Base Material is Cast Steel

## **Core Activity**

- > 'C' clamps were welded horizotaly along the crack to maintain the alingment.
- V groove fomation with gouging electrodes
- Surface preperation by grinding.
- ▶ Pre heated the surface area slowly up to 200 °C and maintained temperature till completing metal build up.
- > Root run of Diffusaloy 800 ELH has been Given.
- > Superaloy 1770 is used for metal build up.
- After completion of build up the reconditioned area reinforced with ribs(ø40\*200mm size rods).
- After completion of above process, the reconditioned area is posts heated to 550 °C and allow to cooled down slowly for stress reliving.









Total Material Consumption: Super gouge - 100 Kgs

Diffusaloy 800ELH - 30 Kgs Superaloy 1770 - 100 Kgs

Since last 10 months the repaired crack is found intact. We have got performance certificate for same.

### **DIFFUSION ENGINEERS LIMITED**

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