

## **RAWMILL TRUNION HEAD CRACK REPAIRING**

Job description : Rawmill inlet trunion head crack repair

Parent equip & age : Raw mill 25yers

Capacity of mill : 150tph Dia of mill : 4600mm Dia of trunion : 1800mm Thicknes of trunion : 280mm Cost of trunion : 2.3crores : 4500mm Length of crack Depth : 120mm Width: : 90-100mm

## **Core Activites**

- > C-Clamps were welded along the crack ,on the outer periphery of the trunion head.
- Total weight of mill was decreased by lifting the mill by hydraulic jack.
- > Total crack was divided into 9 parts each 500mm.
- Material was removed by using air gouging.
- Preheating up to 150 deg cent. Have done
- Welding was started at the two ends of crack simultaneously.
- ➤ Root run strated with 800ELH ,3.15mm.
- > Two layers of welding over the root run & one layer side walls of the V grove.
- SS tube inserted over the root run, which is having the dia of 12mm & wall thickness 4mm.
- Joining of SS tube by using 925-4mm.
- Complete buildup of V-groove was done by using Superaloy-1770-3.15mm & 4mm.
- After completion of welding stiffners were provided on the welded portion.
- Post Heating up to 550 Deg Cent have done.
- Finally Ultrosonic Test have done









COST ANALYSIS: Total Material Consumption

Diffusaloy 800ELH : 40 Kgs
Diffusaloy 925 : 25 Kgs
Superaloy 1770 : 100 Kgs

Total Cost Of Electrodes is 8.2 Lacks. Cost of New Trunion is 2.3 Crores Job completed in 7 Days.

Since last 3 months the repaired crack is found intact and till date, 2,40,000 production have taken successfully.

## **DIFFUSION ENGINEERS LIMITED**

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