

Assignment

Kraatz was contacted by Rossing Uranium, a member of the Rio Tinto group, to assist and advise on the reclamation of a thickener gearbox. Sections of the gearbox housing and the associated mechanical lifter mechanism broke due to adverse operating conditions.



Figure 1 - Broken lifting pedestal

The lead time for a replacement gearbox was 18 weeks and this had a negative impact on production. The affected components were made of cast iron which makes the welding task quite difficult.

Getting the job done

Welding cast iron requires special treatment. Once again, attention to the correct weld procedure was critical and therefore preheat and interpass temperatures were closely monitored as well as the cooling process and consumable



Figure 1 - Drilling of lifting pedestal

selection. Our Line Boring machine was used for machining prior and after welding to adhere to state-of-the-art engineering practices.

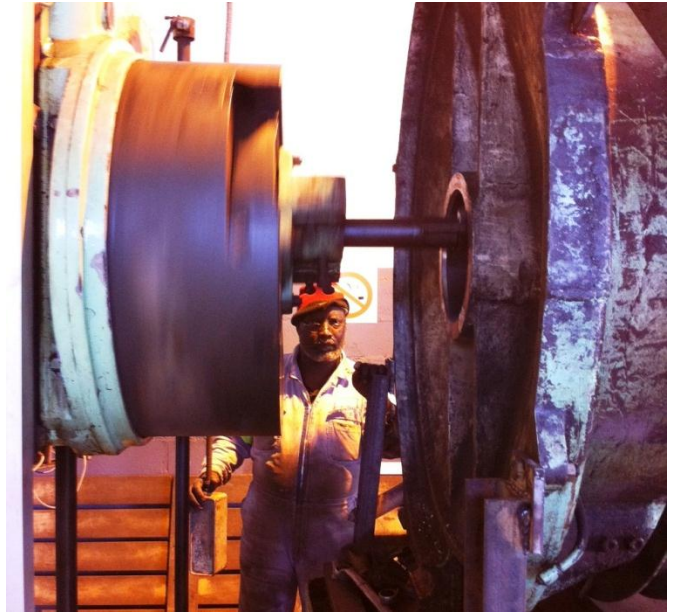


Figure 3 - Machining of gearbox housing

Key Learnings

Kraatz is able to minimize downtime of mechanical equipment by offering mechanical repairs and refurbishments on short notice, backed by machine shop capabilities.



Figure 4 - "Brand new" lifting pedestal