Eaton Supports ArcelorMittal in Record Time

Location: Vanderbijlpark, South Africa
Segment: Mining, Metals and Minerals
Problem: Steel plant was expected to be out of commission for 90 days due to motor control gear destroyed by fire; such an outage period could not be afforded.
Solution: Eaton was able to replace the motor control centres (MCC) in record time.
Results: Production restarted weeks sooner than originally estimated.

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Background
On the 9th of February 2013 at around 2pm the Basic Oxygen Furnace (BOF) number 2 at the ArcelorMittal Vanderbijlpark plant in South Africa experienced an uncontrolled tilting of the furnace. This resulted in a steel spill which caused a fire that severely damaged the electrical control and motor control rooms, ultimately causing a shutdown of the plant.

ArcelorMittal's Vanderbijlpark plant contributes 3.7 million tons of steel which makes up 47 percent of ArcelorMittal's total annual output in South Africa. The initial damage assessment estimated that the plant would be out of commission for three months (90 days). ArcelorMittal's management concluded that such a long outage was not affordable and began calling local vendors to request assistance with the rebuilding of the electrical reticulation. ArcelorMittal had one proviso: the first BOF Motor Control Centre (MCC) panels had to be delivered in ten days.

Challenges
Eaton's Electrical Sector business in South Africa was called in on Friday, 15th February 2013 at 1pm to discuss ArcelorMittal's requirements with André van Staden, Group Manager, CTO Project Management. Athol Hankey, Eaton SA Product Line Manager – Africa, had no hesitation in accepting this deadline stating that, "Arcelor Mittal is our customer and if our customer is in trouble then we are in trouble."

Hankey also states, "This ‘can do’ attitude is part of our DNA, Eaton has a long track record working with customers to help them rapidly recover from similar emergencies".

Eaton walked away with a copy of the drawings on that afternoon and ArcelorMittal confirmed that it would engage Eaton to lead the recovery project at 5pm on Friday, 15th February 2013.

Solution
Johan Hanekom the project engineer called all product managers and the production team in on Saturday, 16th of February 2013 to ensure all components were correctly selected and that production could start with sheet metal punching.

The clock was ticking and Eaton had a night shift in place to ensure that ArcelorMittal's deadline be met.

Eaton delivered the first 35 vertical sections as promised with the next 35 vertical sections delivered every ten days thereafter for the other two furnaces.
Eaton’s installation crew installed the 105 vertical sections in record time taking only twelve days to complete.

**Results**

Hankey bases the success of this project on Eaton’s standard product offering, a one-stop shop production facility and a team of ‘can do’ staff along with the dedication of the ArcelorMittal team that believed that it was possible to turn the BOF plant around quicker.

ArcelorMittal successfully re-started the first furnace within 39 days of the fire and the second furnace in 53 days.

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First and second floor control rooms burnt to ruins

First floor Motor Control Centres - irreparable

Stage one of the new Motor Control Centres being commissioned

An unrecoverable MCC

First floor MCC completed and fully functional