

# 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

## **Contact Information**

Athol Hankey Product Line Manager atholhankey@eaton.com

Sumaya Abdool Marketing Manager - Africa sumayaabdool@eaton.com

# **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.

Eaton is a power management company with 2013 sales of \$22.0 billion. Eaton provides energy-efficient solutions that help our customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton has approximately 103,000 employees and sells products to customers in more than 175 countries. For more information, visit www.eaton.com.



First and second floor control rooms burnt to ruins



First floor Motor Control Centres - irreparable



An unrecoverable MCC



Stage one of the new Motor Control Centres being commissioned



First floor MCC completed and fully functional



**Eaton Industries Manufacturing GmbH**Eaton Electrical Sector EMEA
Route de la Longeraie 7

1110 Morges, Switzerland www.eaton.eu

© 2014 Eaton Corporation All Rights Reserved April 2014

Eaton Electric (South Africa) (Pty) Ltd

Wadeville, 1422, Gauteng, South Africa tel: +27 11 824 7400 fax: +27 86 681 9302 www.eaton.com

Eaton is a registered trademark of Eaton Corporation.

All other trademarks are property of their respective owners.