

**Press release:** For immediate publication

2 November 2010

## **BMG: asset productivity essential for profitability**

*"Meet maintenance needs on a scheduled basis, rather than a breakdown basis"*

BMG - Bearing Man Group – has been able to save large production plants and mining operations millions of rands by implementing a system of predictive maintenance through its "World Class Production Efficiency" initiative. Dave Russell, BMG's group technical director, says the initiative is founded on the notion that the prime driver of an enterprise's profitability lies in the productivity of its assets.

### **"Skills shortages have reached acute proportions"**

"We have seen some major shifts in South African industry over the last decade," says Dave Russell, "we have recognised that the need for our customers to control costs has emerged because of increasing global competition. Skills shortages have now reached acute proportions, which negatively affect our ability to do cost effective maintenance and the need for companies to act to reduce environmental impacts has become a priority".

BMG's World Class Production Efficiency programme involves a practical six step plan that starts with the need to establish a baseline measurement of exact consumption, as well as the mechanical condition of equipment. A power analyser is used to monitor consumption, for at least 150 hours, in conjunction with a portable online condition monitoring pack. The results of the equipment's operating performance forms the basis for all interventions which will improve efficiency and reliability.

According to Dave Russell the programme has proven very successful and effective for their clients: "our World Class Production Efficiency initiative was applied to 55kW belt conveyors which transport coal from a mine to an Eskom power station. A detailed Measurement and Verification study conducted by BMG, was followed up with recommendations for drive changes which result in energy savings of 13kW per conveyor as well as reliability improvements and reduced maintenance costs."



*Conveyor belt transporting coal to Eskom*

### **Reliability and Maintenance Week**

The engineering giant will speak about their success in providing world class maintenance solutions for their clients at the upcoming **Reliability and Maintenance Week** conference and exhibition, in Johannesburg from 22-24 November 2010. Eskom is the host utility for

this platform for service providers and the operational contingents from power utilities, municipalities, mines and the petrochemical sector to tackle and present solutions to South Africa's challenges in preserving, upgrading and ensuring continuous reliability of physical assets and human resources.

### **Shock-pulse monitor: SPM-HD system**

Most bearing failures are caused by incorrect fitting says Dave Russell and adds "BMG's service also includes checking the condition and adjustment of installed equipment, overseeing maintenance and assistance with troubleshooting and problem resolution".

Dave Russell says vibration analysis remains the benchmark tool for condition monitoring of rotating equipment. He continues: "added to that, is a new, unique system, called SPM-HD, for Shock Pulse Method - High Definition - an additional analysis tool to help the BMG team analyse the condition of rolling-element bearings operating at all common process speeds, including low speed equipment like kilns, agitators, mixers, crane hoists, booms, slewing drives and low speed conveyor head shafts."

### **"Machining failures have been avoided"**

"We have had great success in pinpointing failures in processes for clients and therefore putting maintenance procedures in place which, in turn, have saved our customers millions of rands," says the BMG Group Technical Director. He continues: "for example, in the paper industry we use the system to detect bearing failure in the twin wire presses. Machine failures, costing an estimated R 350 000.00 per incident, have been avoided following exceptionally long pre-warning times. Before SPM HD, the onset and development of bearing damage had been impossible to detect."



*Paper wire presses*

The SPM HD system is also applied to a drum reclaimer at an iron ore mine that BMG services. A solution was required to reliability problems with the slow rotating support bogie wheel bearings. The solution saves repair and downtime costs of approximately R600 000.00 per incident.



*Drum reclaimer at an iron ore mine.*

### **Speaking for BMG at Reliability and Maintenance Week:**

***International keynote: Increase your profit: World class maintenance for world class manufacturing*** Thomas Ålund, Senior Consultant, Idhammar AB, Sweden

**Event website:** [www.reliabilityweek.co.za](http://www.reliabilityweek.co.za)

**Dates and location:** 22-24 November 2010, Emperors Palace, Johannesburg, South Africa

**For interviews and media accreditation please contact:**

Communications Manager: Annemarie Roodbol

Email: [annemarie.roodbol@clarionevents.com](mailto:annemarie.roodbol@clarionevents.com)

Phone: +27 21 700 3500 EXT: 3558

Mobile: +27 82 562 7844 (International)

Fax: +27 21 700 3501 (International)