

Siemens presents Digitalization in Mining as a lever to increased productivity.

The global mining industry faces major challenges while needing to meet mounting stakeholder expectations. In order to stay competitive, companies have to become leaner, stronger, and more innovative. In this context, digitalization plays a crucial role by offering new possibilities to increase productivity – and operational excellence

As a leading provider of efficient, sustainable and class leading equipment to mining companies in Africa, Siemens offers solutions tailored to the region's needs. Presenting its comprehensive and integrated solutions in the Mining portfolio, Siemens hosted its major customers recently in Sandton for a Mining Technology day with a leading delegation of global and local business and technical experts.

Representing the Chamber of Mines, Mr Sietse Van Der Woude, Head of Modernisation and Safety delivered the key note address and provided an insight to the Chamber's strategic partnerships and collaboration and mining modernisation and the impact of future technologies.

We are proud to be directly involved in around 50% of the South African mining sector. Our customers are using Siemens automation and drives technology to make mining safer, increase productivity and improve efficiency. In 2014, our technology enabled R140 billion of value by helping our customers to move 175 million tons of material in key sectors like platinum, gold, diamond, coal and iron ore', says Sabine Dall 'Omo, Siemens Chief Executive Officer (CEO) for Southern and Eastern Africa.

Digitalization in Mining:

Technologies are available today to help mining companies increase digitalization. Siemens creates sustainable value for its customers in the mining industry by optimising plant efficiency and Digitalization can help the minerals sector tackle major challenges like productivity improvement.

Digitalization is one of the levers that Siemens is offering its mining customers for mastering major challenges such as the need to increase productivity.

To drive the progress of highly efficient and sustainable mines, Siemens offers proven digitalization solutions: an industry-specific process control system for comprehensive automation (MinAS), an engineering tool for effective plant management (Comos), and a platform for aggregating, relating and presenting operational and business data for the big picture (XHQ). It's time for a higher degree of digitalization – to gain a true competitive edge.

Siemens has been active in SA mining since 1897, and today the industry depends on Siemens' innovative drive, automation and electrical technology for everything from extraction to transportation and beneficiation.

Ends...

Reference projects:

As part of its track record in Africa's mining sector, Siemens in Africa have completed some exciting projects. Anglo American uses Simatic PCS7 from Siemens at many of its coal plants. One such plant is Dalyshope in South Africa. In this instance, Siemens answered the question of how to control a plant remotely without using the conventional communication system, thereby lowering downtime. Standard software blocks were developed and used blocks were developed and used throughout the software. Online monitoring made possible by Simatic PCS 7 is also profiting operations at Isibonelo Colliery, Anglo American's latest openpit coal operation around 120 km east of Johannesburg

The Lumwana Copper Mine in Zambia relies on Siemens for all of its electrical equipment, including automation. "Africa is a challenging place to operate," says Zane Berry, the Superintendent of the Lumwana Mining Company. "Therefore, mines need the most reliable solutions available." A highlight at the mine is the truck-trolley system: Siemens provided the electrics for 28 Hitachi 250-ton mining trucks, including the electrical variable speed drives as well as the electric wheel motors, each rated at 2MW.

Fully automated DC containerised substation solution

Billions of litres of diesel are consumed annually by the global mining industry, which is under severe pressure from weak commodity prices. Up to 80% of this costly fuel consumption comes from haulage trucks moving uphill on ramps. In addition to its Drive and Automation technology, Siemens Rail Electrification Siemens SA recently launched its fully automated DC containerised substation at 11 MW, reinforcing position as global pioneer in trolley assist technology for over 30 years. This has established Siemens as a world leader in manufacturing DC containerised substations. Siemens SA launched one of three completed units at its Siemens North Riding. They will be used to power a fleet of Komatsu 960E trucks, which are among the industry's biggest and highest capacity mine haulage vehicles, with a load capacity of 214 m³ or 327 tonnes. We now have the skill sets locally to manufacture components at our Northriding factory. This is not only just good for job creation, but also reduces manufacturing costs which in turn contributes to lower prices and improved turnaround times.

Local Manufacturing:

Siemens signed a local manufacturing agreement with Cape Town-based Electro Inductive Industries (Eii) – a Level 2 B-BBEE black industrialist company that manufactures distribution transformers and miniature substations. The new transformer partnership is a major milestone in the localisation of Siemens medium power transformers assembly, which forms part of the government's ongoing multi-billion-rand Black Industrialist Programme that focuses on the localisation of electrical products such as transformers. The manufacturing facility is currently being developed and upgraded in Cape Town, to cater for a new line of Siemens transformers as part of its growth and job creation strategy.

Relevant links:

www.siemens.com/mining
www.siemens.co.za

Contact for journalists

Keshin Govender

Phone: +27 11 652 2000; E-mail: keshin.govender@siemens.com

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Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years. The company is active in more than 200 countries, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is No. 1 in offshore wind turbine construction, a leading supplier of gas and steam turbines for power generation, a major provider of power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. The company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2015, which ended on September 30, 2015, Siemens generated revenue of €75.6 billion and net income of €7.4 billion. At the end of September 2015, the company had around 348,000 employees worldwide.

Further information is available on the Internet at www.siemens.com.