SIEMENS

Background information

Munich, April 9, 2019

bauma 2019, Hall C2, Booth 325

Siemens at bauma 2019: SmartMining thanks to digitalization

At this year's bauma, visitors experienced the implementation of Digital Mining – and how Siemens is paving the way for mining companies to achieve a digitalized future. The company exhibited under the slogan "Innovate. Digitalize now. SmartMining." at the Munich trade fair in Hall C2, Booth 325, demonstrating how the industry can make use of a unique range of services, comprehensive support and many years of technology and industry expertise to secure and increase the availability and productivity of their mines. The digital solutions range from individual aspects to the entire mining operation.

Digitalization: A paradigm shift in mining

The digital portfolio from Siemens combines an in-depth understanding of mining processes with the latest electrical, automation and IT technologies. Through the cloud-based SmartMining platform, anomalies in milling plants, conveyor belts or mine elevators can be detected and removed at an early stage. This reduces downtimes for the systems. Using the latest technologies, Siemens is able to integrate AI modules and specific know-how which enable the user to implement immediate corrective action.

Minerals Operation Management solution

Siemens has designed, built and commissioned a new production management system. With technology-based services over the entire life cycle of an industrial plant, Siemens offers higher productivity, increased flexibility and greater efficiency in a system that is reliable, global and available 24/7. Users benefit from improved planning and optimal business insights, which are based on the integrated, up-to-date and usable data from their information system.

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Integrated engineering and integrated operation for mines and cement works

Simulation improves technical and operational efficiency: data from COMOS can be used and generated directly from the engineering using the Simatic PCS 7 process control system – even before the system is actually commissioned. Automation functions can be simulated and tested, enabling the efficient and smooth startup of the actual plant, while errors and costly rework can be avoided. This also increases security enormously.

Innovative services for the digital future of the mining industry

In order to remain competitive in the long term, the mining industry must secure and ideally increase the availability and productivity of their mines. To this end, Siemens offers its customers a unique range of services with tailored services and comprehensive support, based on its many years of technology and industry expertise – over the entire system life cycle. Through the combination of product-specific know-how and mining-specific competence, plant availability can be increased even with a reduced maintenance budget. The Siemens service team has comprehensive technical competence and many years of experience in the mining industry and has dealt with the specific demands of the extreme ambient conditions in mining for many years. Siemens Mining Services help to make mining assets more profitable and efficient during the entire life cycle, and help companies benefit from the advantages of digitalization while at the same time reducing total operating costs.

Mobile Mining solutions

Simine drive solutions for trucks and loaders supply mining vehicles reliably– even under extremely harsh ambient conditions. Particularly in deep mining, compact and durable drive systems are essential. In line with this principle, Siemens Mobile Mining has been equipping mining vehicles with appropriate solutions for more than 40 years. At bauma 2019, Siemens Mobile Mining is presenting the second generation of traction converters for deep mining vehicles. In combination with a robust permanent magnet synchronous motor, powerful and robust drive systems can be implemented for various vehicle types. Both components exhibited at the Siemens booth are encapsulated and virtually maintenance-free, increasing the TCO of the vehicle.

Flender drive components

Everything in daily life is made from materials that have been extracted, mined, transported and processed. Wherever this takes place around the globe, reliable Flender drive components are used. Flender drive technology stands for durability, reliability and innovation. With innovative tools and digitalized drive technology, Siemens meets the challenges of today and tomorrow.

Siplus extreme – Automation in harsh environments

With Siplus extreme, you can rely on the latest sophisticated automation and drive components. Siplus extreme products are standard products with improved resistance to mechanical loads, chemical and biological substances, condensation and temperature fluctuations. They are also designed for temperatures between - 40° and +70° Celsius. Siplus extreme is therefore the first choice for all applications where the established standard is no longer sufficient.

For further information on Siemens at bauma 2019, please see www.siemens.com/press/bauma19

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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 170 years. The company is active around the globe, focusing on the areas of electrification, automation and digitalization. One of the largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. With its publicly listed subsidiary Siemens Healthineers AG, 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 2018, which ended on September 30, 2018, Siemens generated revenue of €83.0 billion and net income of €6.1 billion. At the end of September 2018, the company had around 379,000 employees worldwide. Further information is available on the Internet at www.siemens.com.