

Industry Sector Industry Solutions Division

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Siemens: New AC Drive Systems for Heavy Trucks Promote Greater Productivity in Mining

Siemens announces the introduction of a new AC drive system for heavy haul trucks that offer payloads of 260 tons and larger. This latest generation electrical drive system reduces environmental impact, offers greater fuel economy and lowers operating costs in the mining industry. The new Siemens drive systems will power the newly announced Komatsu 860E-1K truck with other development projects planned for the future.

After successfully testing the prototype systems in the harsh mining environments of Arizona and South Africa, Siemens and Komatsu are ramping up production for early 2009 to meet market demand. The 860E-1K electric drive rigid frame dump truck's engine was designed to be Tier 2 certified to reduce emissions. By offering a factory installed trolley-capable system option, mining operations can save fuel and prolong the life of the truck's motor. The trolley system can be used on either 1,600 or 1,800 volt lines that enable the trucks to propel uphill faster while the engine RPM lowers, saving fuel and extending the life of the engine.

Specifically developed for the rugged demands of the mining industry, the new drive system has been designed to withstand a higher vibration and altitude spectrum and offer a temperature spectrum from -40 to 60 degrees centigrade.

The innovative, liquid-cooled AC-drive system helps users achieve high productivity while lowering operating costs through its exceptional performance, efficiency and reliability. AC drives offer many advantages over traditional DC drives. Unlike DC drives, they have no brushes or commutators that require maintenance and wear out. Siemens' Insulated Gate Bipolar Transistor (IGBT) inverter technology converts the alternator power first to DC and then to variable frequency AC for the wheel motors.

"With `Siemens inside' the new truck generations improve productivity in mining," said Dietmar Juerges, head of Siemens Mining Technologies worldwide. "As one of the largest global providers

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of electrical solutions, Siemens has worked extensively with the world's leading mining heavy equipment manufacturers, such as Komatsu, to provide innovative, reliable and efficient technologies. Our technologies are matched only by our global support that ensures users have the best products and services available anywhere in the world."

Further information at: <http://www.siemens.com/mining>

A photo supplements this press release. Please see:

<http://www.industry.siemens.com/data/presse/pics/09087283.jpg>



The new Siemens drive systems will power the newly announced Komatsu 860E-1K truck

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