MES solution from Siemens features additional functions for optimizing open-cast mining operations

The Simine MES (Manufacturing Execution System) solution of the Siemens Industrial Solutions and Services Group (I&S) features additional functions for operations in open-cast mining. With the extended open-cast mining industry library, a mining company can now adapt its operations optimally and flexibly to business management goals. The provision of real-time information enables rapid decision-making of the management in the event of problems, failures or new production schedules.

Siemens I&S has developed the Simine MES mining library specifically for open-cast mining companies. The package includes interfaces to the production units as well as new standard functions which support the management level by providing online information on production activities along the whole process chain. The library provides more transparency throughout the production processes - from excavating and transport to crushing and secondary processes such as water treatment or stock pile. The information is presented to the respective users according to their specific requirements. Based on Simatic IT components special MES functions have been added for open-cast mining to cover the various process steps.

For example, the “Product Tracking & Tracing” component monitors the material flow from excavation to transportation and further processing until it arrives at the stockpile.
or loading station onto train or ship. Other components supply information for purposes of quality management, production order management, scheduling, secondary processes, maintenance management and energy optimization.

Using this information, key performance indicators (KPI) are generated to analyze the plant availability, utilization, safety and environmental conditions as well as maintenance activities of the different production units. This enables benchmarking and continuous monitoring of the whole value added chain of an open-vast mining operation. Thus MES bridges the gap between the process automation system and the business-management level. In their efforts to continuously improve their processes, open-cast mine operators can now use the KPIs to analyze their installations in real time, specify measures to be taken and then check whether the measures have actually had an effect.

A picture supplements this press release. Please see:


User interface of a tip management system.

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

The Siemens Industrial Solutions and Services Group (I&S) is the integrator of systems and solutions for industrial and infrastructure facilities and global service provider for the plant and projects business
covering planning, installation, operation and the entire life cycle. I&S uses its own products and systems and process technologies in order to enhance productivity and improve competitiveness of companies in the sectors of metallurgy, water treatment, pulp and paper, oil and gas, marine engineering, open-cast mining, airport logistics, postal automation, intelligent traffic systems and industrial services. In fiscal 2006 (to September 30) I&S employed a total of 36,200 people worldwide and achieved total sales of EUR 8.819 billion, according to U.S. GAAP.

Further information and download at: http://www.industry.siemens.com