Compact Time Converter for Reliable Operation in Harsh Environments

Siemens has expanded its portfolio of rugged network components with the Ruggedcom RMC8388 - a cost effective compact time converter designed to operate in harsh environments with widely varying climatic and environmental conditions.

Withstanding extreme temperature from -40 up to +85 degrees Celsius, vibration and shock the device offers high reliability for Electric Power applications. By enabling cost effective time synchronization Ruggedcom RMC8388 reduces both capital expenditures and maintenance costs.

The Ruggedcom RMC8388 is available in multiple variants and can convert between the modern Precision Time Protocol IEEE 1588v2 and the legacy IRIG-B (Inter-range instrumentation group) time codes or PPS (pulse per second). The RMC8388 enables the usage of legacy IEDs (Intelligent Electronic Devices) within modern Ethernet networks without the need for maintaining a separate network for time synchronization.

The compact form factor makes the Ruggedcom RMC8388 ideal within modern Ethernet based networks while it uses only limited additional space in existing cabinets and defers capital expenditures by enabling cost effective time sync to existing non IEEE 1588 capable IEDs. Besides extending the service life of legacy IEDs, the new Ruggedcom RMC8388 also enables the connection of legacy time sources to a modern Ethernet based network to enable upgrading in phases without the need for upgrading everything at once.

Ruggedcom RMC8388 also reduces high maintenance costs on legacy coax cabling by replacing them with standard Ethernet cabling for both communications and timing purposes, all the way to the switchyard cabinets.

Primetals Technologies to Supply Equipment for Relining A Blast Furnace for Rogesa

Primetals Technologies has received an order from ROGESA Roheisengesellschaft Saar mbH in Dillingen, Germany, to modernize the electrical, measuring, analytical and automation equipment in conjunction with the relining of blast furnace 4. The project involves equipping the blast furnace with a new control system based on Simatic PCS7, new automation and new switchgear. The existing field devices will be replaced, and the cabling renewed. Primetals Technologies is also responsible for hardware planning. The order is worth over ten million euros.

ROGESA Roheisengesellschaft Saar mbH, Dillingen, is a joint subsidiary of Dillinger Hüttenwerke Incorporated, Dillingen, and Saarstahl AG, Völklingen, each of which holds directly and indirectly 50 percent of the shares. ROGESA currently produces up to 4.6 million metric tons of hot metal per year, exclusively for the two shareholders. Blast furnace 4 was built in 1974, and last relined in 2003. With a hearth diameter of 11.2 meters, it has an effective volume of 2,360 cubic meters. The nominal production rate is 6,100 metric tons of pig iron per day.

In conjunction with the relining, blast furnace 4 will be equipped with a new control system based on the current version Simatic PCS7 V8.1. The system is completely virtualized, and equipped with a redundant OS server, to which are connected five engineering stations, 15 operator stations, six AS 410 automation systems and type ET200SP distributed I/O devices. Data is exchanged via Profibus and Profinet. An archiving and reporting system, a system for recording and analyzing measured values, and a network management solution are also integrated into the control system.

Primetals Technologies will also be responsible for planning the hardware and adapting it to the new structure, renewing the switchgear, ET stations and local control points, and installing the requisite network infrastructure. At field level, Primetals Technologies will replace all field devices and the complete measuring and analytical equipment, as well as renewing the cabling for the complete electrical, instrumentation and control equipment. Bähr Anlagentechnik will lead an external consortium that will install the electrical equipment.