



6. Automatic Control System of Electrolytic Copper Production

(1) System Structure

Electrolysis process is the most recent but also a very important process of copper smelting. Its major equipment is a direct current power supply system, also including output of commuting system for electrolysis, short circuit switch of the current bus, liquid-level tanks, circulation grooves, acid pumps, heat exchangers and sump pumps. The whole system consists of data collection, monitoring & management system and a communication network.

(2) Network Requirements

The communication network is an industrial Ethernet network, which carries the communication between the field data collection systems and the monitoring & management system.

Due to environmental factors like saltwater, electromagnetic radiation and high temperature, the industrial Ethernet switches are required to be qualified for anticorrosion, high temperature resistance and EMC.

(3) Product Application

Industrial Ethernet switches like SICOM3000, SICOM3016, SICOM3024 and KIEN6000 are employed in the fields of electrolytic copper production.

(4) Network Diagram

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