GE Mill Drive Increases Grupo Mexico Capacity

Over the last several years, there has been a growing demand for copper ore exports from Mexico. To help meet this demand, Grupo Mexico, in conjunction with Metso Corporation, added 6 huge 14 MW ball mills to their facility located in the Sonora state of Mexico. For these new mills, the engineering team needed a proven electric drive technology that was reliable and had unique efficiency characteristics to help offset their increased operational power costs.

GE proposed and sold six Quadramatic™ Drive Systems which includes a total of 12 low-speed synchronous motors to drive the mill through air clutches and pinions onto a common ring gear. Quadramatic electric synchronous motors work as pairs with adjustable torque to handle cascading loads in a mill while providing leading VAR’s back into the plant grid. Thereby, power requirements for the system are lower than for other mill drive technologies.

“We selected GE’s Quadramatic motor technology to help us boost production and take advantage of record high copper prices driven by Asia’s strong infrastructure expansion activities,” said the Corporate Purchasing Director at Grupo Mexico. “By supporting the long-term economic viability of the Buenavista mine, our expansion project will support the local economy at Cananea Sonora, Mexico.”

The elegant simplicity of the Quadramatic Systems have built a strong reputation in the mining industry for over 40 years.