



Converter / Inclined hoist: Robust encoders ensure more precision and less downtimes

- Greater functional component reliability
- Higher converter plant availability
- More precise measurement signals despite shock and vibration loads
- Easy and time-saving programming



Before: Old skip-car control mechanism with two mechanical geared cam limit switches



After: More precise signals because of robust combination of bearing block and heavy duty encoders.

Task

The skip-car control mechanism utilised to date included two mechanical, geared cam limit switches that are time consuming to program. The mechanical overspeed switch utilized can prove problematical when subjected to shock and vibration loads. Neither of these components exhibits the required precision and as such are not suitable to meet the modern-day requirements of steel mill operations.

The Hübner Giessen solution

Upgrading to meet modern demands required suitable components for measuring actual values that are not only characterized by their high accuracy and functional reliability, but are also easy to program. Hübner Giessen replaced one of the geared cam limit switches with a series FG 4 K incremental encoder and an AMS 4 K type absolute encoder with integrated SSI interface. Fitting the devices to a bearing block increases their resistance to shock and vibration loads and compensates the mechanical tolerances of the installed, previous transfer gearbox. The other cam limit switch will also be replaced in a second modernizing step as will the mechanical overspeed switch be replaced by a programmable electronic overspeed switch.

Products

- FG 4
- AMS 4
- EGS 4
- HKD 5
- Engineering support