

INDUSTRY *Steel and rolling mills*

FIELD *Steel making*

APPLICATION *Inclined converter hoist*

In addition to a high level of efficiency process speed and quality are extremely important factors in the production of steel as are the operational reliability, long service life and maintenance-friendliness of the components.



Task:

The skip-car control mechanism utilised to date included two mechanical, geared cam limit switches, which require a lot of time to program. The mechanical overspeed switch utilised can prove problematical with 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.

Huebner solution:

Upgrading to meet modern demands required suitable components for measuring actual values that not only meet demands for high levels of accuracy and operational reliability but are also easy to program.

Huebner 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 previous transfer box gearing.

The other geared cam limit switch will also be replaced in a second upgrading step as will the mechanical overspeed switch by a programmable, electronics overspeed switch.



Products

- Incremental encoder FG 4 K
- Absolute encoders AMS 4 K, SSI-Interface
- Electronic overspeed switch EGS 4 K
- Bearing block

Customer benefits

- Improved operational component reliability
- Improved converter plant availability
- More precise measurement signals despite shock and vibration loads
- Easy and time-saving programming