

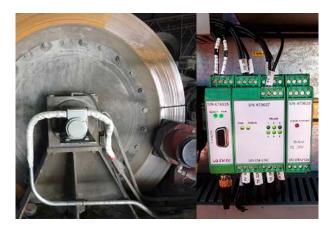


Hoist / Drum: Improved operating reliability and positioning accuracy at the ladle crane

- Reliable braking when overspeed is detected
- Precise switching of hoist positions
- Configure parameters quickly and easily
- Preset shortens downtimes after rope change



Before: Hoist drum with mechanical rotary cam limit switch, but without overspeed detection. Bottom right, the new holding brake.



After: Hoist drum with U-ONE basic unit and holding brake. The photo right shows the U-ONE electronic modules in the switchboard.

Task

Fundamentally improve the operating reliability and positioning accuracy of the ladle crane hoist used in steel production by implementing the following measures:

- Replacement of the existing mechanical cam limit switch with an electronic position switch that ensures significantly higher accuracy
- Additional implementation of an electronic overspeed switch to realize overspeed detection as well as an emergency break (not included in scope of supply of Hübner Giessen)

The Hübner Giessen solution

Installation of the modular universal encoder system U-ONE, which offers the following special characteristics:

- Basic unit mounted directly at the hoist drum by using a double joint coupling on a tailor-made base plate construction
- Signal transmission via fiber optic cable prevents EMC problems
- The following electronic modules were installed, well-protected in the switchboard:
 - FOC decoder
 - Electronic position switch (ERC) with 6 relay outputs and preset input to facilitate plant adjustments
 - Electronic overspeed switch (EGS) with 2 relay outputs and integrated system check function

Products

- UOM 41L, UO-EM-D41, UO-EM-ERC, UO-EM-EGS41
- Certified solid shaft assembly
- HKDS 5
- Base plate
- Engineering support