



Rolling mills / main drive: modernization with the U-ONE universal encoder system

- Reduces mechanical interfaces
- Increases accuracy and plant safety
- Lower space requirements
- Reliable signal transmission via fiber optic cable



Original installation with a distribution gear, tachometer and overspeed switch.



New installation: U-ONE basic unit with a new adapter shaft

Task

The conversion of a control system in a rolling mill operation required new signal outputs from the main drives.

The Hübner Giessen solution

Hübner Giessen dismantled the entire existing sensor system and replaced it with a modern U-ONE universal encoder system. The main advantage of this solution is that the existing distribution gear is completely eliminated, and the number of individual sensors and switches is reduced. The U-ONE universal encoder system generates all required signals in the basic unit, which was mounted on the main drive motor via a new adapter shaft. A fiber optic cable connects the basic unit to the electronic modules in the switchboard. Here, the customer can read all required signals and switching outputs – in this case, the incremental speed signals for the inverter, the absolute position signals to determine the rotor position and two safety-certified speed switches to ensure access to the mill stand.

Products

- Basic unit U-ONE with hollow shaft
- Electronic function modules
- Adapter shaft