



Rolling mills / Main drives: Electronic overspeed switch EGS 41 ensures safe rolling mill operations

- Safely-Limited Speed (SLS) during maintenance and setup procedures
- Adhering to provisions in the Machinery Directive relating to the protection of persons
- Straightforward implementation with certified EGS 41 (SIL 2 / PL d)
- User-friendly configuration, storage and switch tests



Rolling mill in a hot rolling mill.



Electronic overspeed switch EGS 41 mounted on an incremental encoder FGH 6.

Task

For precise speed control in rolling mills the main drives of the roll stands and the coilers need to be equipped with an encoder. In addition, it is often necessary to provide increased protection for personnel during special operating modes, such as:

- Setup procedures with rotating rollers
- Maintenance work under electrical voltage

The risks of such situations can be significantly reduced by implementing the safety function "Safely-Limited Speed" (SLS). SLS can be realized by using an overspeed switch that operates independent of the encoder and fulfils the special safety requirements (Safety Integrity Level SIL / Performance Level PL).

The Hübner Giessen solution

To meet these requirements Johannes Hübner Giessen supplies the overspeed switch EGS 41, which is certified up to SIL 2 to IEC 61508 and PL d to DIN EN ISO 13849. In addition to two safe switching outputs for speed monitoring of overspeeds and underspeeds it offers integrated standstill functionality as well as an integrated diagnostics switch to monitor safety functions integrated in the device. The programming software included in the scope of supply supports user-friendly parameterization via a USB interface.

Products

- EGS 41
- FGH 6
- Flange adapter shafts
- Torque brackets
- Engineering support