



## Rolling mills / Tandem motors: Encoder retrofitted directly to the tandem drive ensures trouble-free rolling mill operations

- Straightforward retrofit without free shaft end
- Bearingless magnetic encoder with split pulse wheel and narrow construction
- Replacement for belt drive that required intensive maintenance
- Also suitable for high speed and rapid reversing movements



Motor shaft of a rolling mill tandem motor with mounted MAG-G system.



Bearingless magnetic encoder system MAG-G with split pulse wheel and scanning head.

### Task

Only the rear motor of tandem drives has a shaft end available to which an encoder can be attached. However, a speed signal is also required from the front motor for synchronizing purposes in tandem operations or as motor feedback in single-motor operations (decoupled mode of operation). This is often generated by an encoder driven by a toothed belt, but typical disadvantages of this solution (tension, alignment, wear etc.) have a negative impact on the quality of the signal and lead to increased servicing costs. The better solution is a special encoder that can be attached directly to the shaft of the front motor without having to separate the tandem motors.

### The Hübner Giessen solution

To be able to mount an encoder where there is no shaft end available Johannes Hübner Giessen installed its bearingless, magnetic type encoders MAG-G. Consisting of two half shells they can be retrofitted at any point of a rotating shaft. The staggered design of the two half shells ensures the construction is suitable for applications with high speed and rapid reversing movements. The bearingless version offers protection against shaft currents, it is wear free and also suitable for large shaft diameters. Thanks to its slim design width of just 30 mm the MAG-G system is easy to integrate in existing solutions.

### Products

- MAG-G incremental
- Engineering support