JOHANNES HÜBNER GIESSEN

Rolling mills / Looper: Special looper encoders withstand the most extreme operating conditions in hot roll stands

- Subject to high loads from shock, temperature and cooling emulsions
- Heavy-duty ball bearings with special lubrication
- Increased lifetime
- Reduced downtime

Loopers in hot rolling mills are working under extremely rough conditions.

Looper encoder with heavy-duty ball bearings and special lubrication for long lifetime.

Task

Loopers are normally used to control the tension of the metal strip between roll stands. The rotational angle of the looper is measured by a feedback encoder that is exposed to special demands. The setting angle up to only about 45° results in a partial load on the encoder bearings in conjunction with insufficient bearing lubrication. The encoder is subject to high levels of shock and temperature loads as well as oil/cooling emulsions/water at the place of installation. Formerly used standard encoders have not reached the required lifetime.

The Hübner Giessen solution

For this application Johannes Hübner Giessen developed a special looper encoder, which boasts a considerably longer lifetime thanks to especially designed-in features. These contain oversized bearings with the dynamic load rating increased by 40% as well as a special radial shaft sealing ring with an additional protective lip. To guarantee the best signal quality the bearings are not primarily designed for high speeds, but rather for high shock loads up to 450 g. The min. degree of protection is IP66/IP67 with an operating temperature up to 100 °C.

Products

- ALS 40
- HKS 5
- Intermediate flange
- Engineering support

More information: www.huebner-giessen.com/en/applications