Hot Rolling Mill / Screw downs: Replacing of old resolver technology

- Assembly of hollow shaft absolute encoder ASSH 60 K-16/50P (SSI interface)
- Improved final quality of the rolled material due to increased thickness accuracy
- Direct assembly to the screw down spindle



Before: The old resolver transducer



After: Hollow shaft absolute encoder type ASSH 60 K-16/50P with torque bracket (directly mounted)

Task

The customer needed to replace the old resolver technology to improve the thickness control precision and thereby, the material quality. For this purpose they attempted a solution using a linear transducer, which did not give satisfactory results due to its mechanical weakness.

Finally, they came to the conclusion to use a high resolution absolute encoder suitable for heavy duty applications.

The Hübner Giessen solution

Due to the required robustness, a hollow shaft absolute encoder model ASSH $60\,\text{K-}16/50P$ with corresponding torque bracket was chosen.

The SSI interface with a resolution of 16 bit provides highly accurate signals for the thickness control.

At the customer's request, the Hübner Giessen engineering department helped in the design of the mounting materials, which were produced by themself.

Products

- ASSH 60 K-16/50P
- Torque bracket
- Engineering Support