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## Linear Motion Technology: Inductive detection of axes movements

# Laser-sharp path measurement

**For laser cutting, the machine tool manufacturer TRUMPF relies on the IMS inductive distance measuring system from Bosch Rexroth. Thanks to its robust design, it avoids the typical problems encountered with glass scales. It is less susceptible to dirt, copes with high dynamics and simplifies processes from engineering to maintenance.**

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### Inductive distance measuring: precise, robust and cost-effective

Following in-depth tests, the IMS inductive measuring system proved to be a robust and stable alternative to glass scales. When combined with the BSHP ball rail system from Bosch Rexroth, it achieved an equally high level of measurement precision. The system will be able to follow with even greater dynamics in the future. TRUMPF now uses the IMS in five different machine series.

### Reduced installation, production and maintenance times

Because the IMS is integrated into the linear guide, mounting requires fewer connection points. Plug and play commissioning and the quick connection of drives via the optional SIEMENS DRIVE-CLiQ interface help to save even more time. The IMS also allows easy maintenance. For example, the runner block can be replaced independently of the measuring system. Last but not least, the IMS provides up-to-date contamination data for predictive maintenance and even greater availability in the field.

### Challenge

An alternative to distance measurement using glass scales: just as precise and dynamic but less susceptible to dirt.

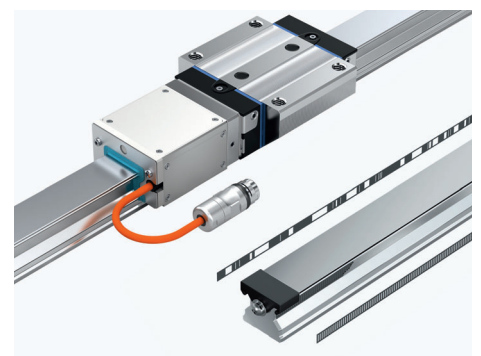
### Solution

Maintenance-free and robust: inductive measurement thanks to linear guide with integrated measuring system.

### Result

*"The new measuring system is just as precise but more stable and compact. This frees up space and makes many processes from engineering to maintenance easier."*

Karsten Radestock, Flying Optic developer, Trumpf Machine Tools



### Solved with

- ▶ IMS inductive measuring system
- ▶ With SIEMENS DRIVE-CLiQ in certain cases
- ▶ BSHP ball rail system
- ▶ Consultation and testing