



Greater tempo and precision thanks to the roller rail systems from Rexroth

Gear housing machined faster by 40 percent

The Schwäbische Werkzeugmaschinen GmbH continues to set standards with their cutting-edge solutions for high-speed machining of steel and light metals. Their single-spindle BA one6 machining center is equipped with high-precision roller rail systems and boasts impressive speed and unbeatable precision in machining large workpieces.

Not only are the automotive and aerospace industries turning to light-weight construction, but manufacturers of hydraulic and pneumatic components are doing the same thing. And everywhere, where maximum precision is required to fulfill the highest quality and safety requirements throughout all the production steps, the new single-spindle BA one6 machining center of Schwäbische Werkzeugmaschinen GmbH has proven itself as absolutely reliable. It is designed for four to five-axis machining of large light-metal workpieces. With the RSHP roller rail system runner blocks from Rexroth, the BA one6 is not only more precise than comparable solutions, it is faster, quieter and longer-lasting.

Designed for greatest dynamics

When in operation, the RSHP roller rail systems must withstand the most extreme mechanical and magnetic loads due to the highly dynamic linear motors. Even at accelerations of up to 150 m/s^2 and speeds of up to 240 m/min , the rail systems still meet all precision requirements. A newly designed entry channel also significantly reduces pulsation in all three directions and creates the conditions for increased quality and surface quality of the workpiece. With the linear motors interacting perfectly with the RSHP, greatly shortened cycles can be achieved with chip-to-chip times of less than 2.5 seconds.

Minimal assembly and maintenance work

To keep assembly work down to a minimum and to make service easier, the BA one6 is based on Rexroth's principle of interchangeability: RSHP runner blocks and profile rails of the same size can be combined with each other as required—even older rails of earlier models can be used without any problem. The user benefits also benefits from a longer service life of up to 35 percent with the new RSHP elements.

Tough application

Fast, high-precision and efficient machining of large light-metal workpieces

Ingenious solution

Extremely robust, extra-reinforced and long-lasting profiled rail systems in perfect interaction with linear motors for maximum speeds and the highest quality

Exactly

"With our system, we are clearly the fastest on the market and our customers reduce their cycle times by up to 40 percent."

Wolfgang Armleder, Schwäbische Werkzeugmaschinen GmbH



Solved with

- ▶ High-precision RSHP roller rail systems and runner blocks with new entry channel for optimal quiet running and reduced pulsation