



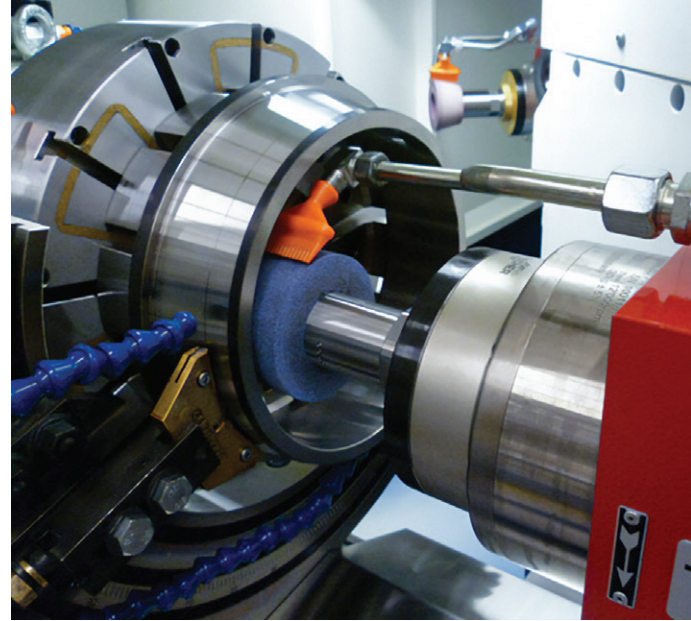
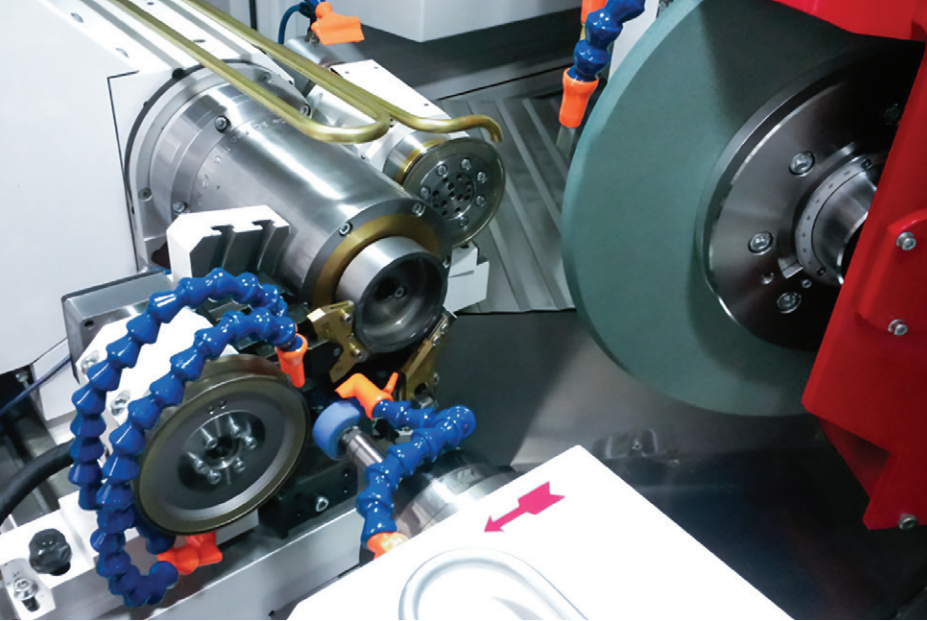
AT LAST, A BETTER WAY

SINGLE-SETUP BEARING MANUFACTURING,
COURTESY OF STUDER AND UNITED GRINDING.

Traditionally, shoe grinding has been done on dedicated machines for either external or internal grinding and moving the part from machine to machine.

But now there's a better way. Bottom line: what used to take multiple machines now takes only one.





SHOE GRINDING

TRADITIONAL SHOE GRINDING

Shoe grinding is a variation of centerless grinding that uses a magnetic plate to support the workpiece axially while driving the bearing along with a set of precision locating pads (shoes) that support the workpiece radially. Using this workholding system, thin-walled, circular workpieces, such as roller bearing races, can be secured to reduce deformation and ensure that that absolute concentricity from OD to ID is assured. Traditional shoe grinding processes take place across multiple setups and/or machines that are dedicated to either OD grinding or ID grinding.

THE STUDER METHOD

The flexibility of STUDER's universal grinding machines allows for grinding of both the OD and ID of high precision bearing races in a single setup. The result is less changeover and better concentricity. For high precision bearings, one STUDER machine can do the same operations as two or three machines in a production line. Single-setup efficiency has finally come to shoe grinding.

TALK TO UNITED GRINDING

When you're ready to see what single-setup bearing manufacturing can do for you, we'll be ready to show you. Talk to us to start building a shoe grinding gameplan, customized for you and your shop.

Visit: grinding.com | Call: 1.937.859.1975

Email: info@grinding.com

BENEFITS

- The electromagnetic chuck, controlled through the CNC control, is installed by UNITED GRINDING. Fully integrated into your machine, it allows for variable clamping force.
- With the variety of surfaces required in bearing races, UNITED GRINDING will work with you to propose the right solution for the bearing application.
- Variable magnetism lets you adjust as clamping force in the grinding program. Automatically increase clamping force for the roughing cycle, then decrease the force for the finish grind.
- All operations are ground in one clamp, meaning there's no cumulative error you might see when using multiple machines.
- Enjoy massive boosts to quality, time savings and revenue.

