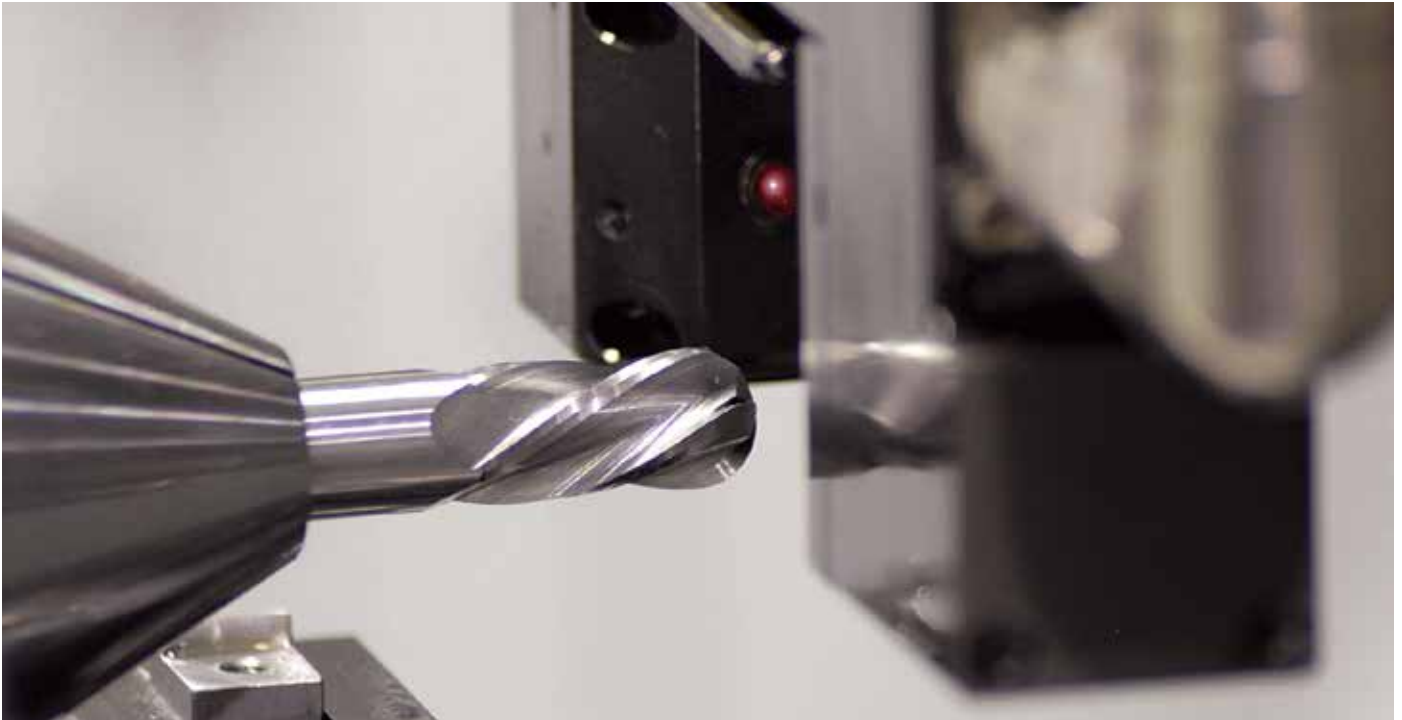


# LaserPlus

## Measurement System



Precision and productivity are important in manufacturing. The new LaserPlus Measurement System helps operators achieve both. Using the built-in laser probe you can accurately measure tool geometries in-process within +/- 2 microns or less.

LaserPlus uses a laser beam to measure a ground cutting tool's dimensions accurately without removing it from the tool grinder.

The software then compares a ground tool's actual measurements to the required tool geometry. If needed, the machine automatically compensates to ensure tools are consistently within required tolerances.

The non-contact nature of the laser probe is one of its strengths. As it doesn't come in contact with tools it can't damage them, especially fragile micro-tools.

The frequency of laser probing during batch grinding is set up in the software. This helps ensure that your tools remain within the required tolerances from the first tool of the batch, to the last.

A controlled air blast system on the laser unit ensures that coolant or contaminants do not interfere with the measurement process.

The laser measures the top and bottom of the tool to obtain an absolute diameter for maximum accuracy.

LaserPlus is ANCA's premium tool measurement product. It provides a new level of automation and precision to the grinding process. LaserPlus will enable customers to measure and compensate –

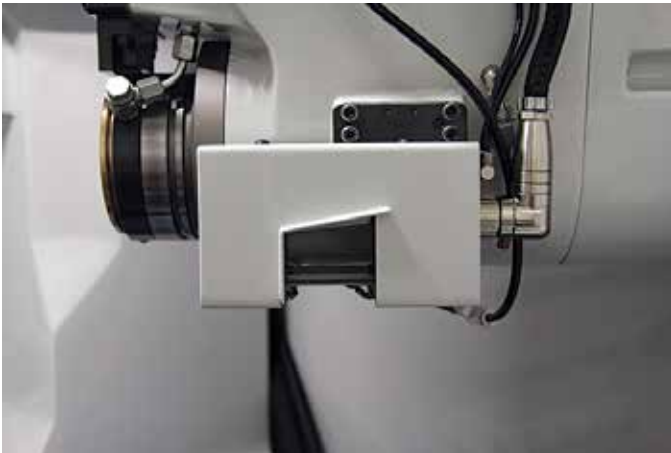
- Outside diameter (OD) of tapered and non-tapered tools with Facet and Eccentric relief
- Ballnose profile and Corner radius profile
- Ballnose radius and Corner radius
- Profile tools

## Key Benefits

- Reduced set-up times
- Can measure micro-tools
- Increased productivity
- Reduction of waste
- Laser OD SPC cycle
- Any required adjustments are found & made automatically
- No tool damage as non-contact
- Reduces the need for expensive off-line measuring equipment
- Automatic in-process measurement saves operator time
- No operator intervention

## Specifications

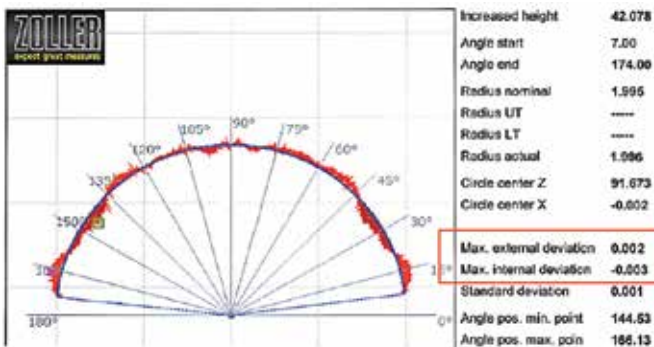
	TX	MX
Max. tool diameter	45 mm (1.8")	20 mm (3/4")
Min. tool length (from collet nose) for measurement in LaserPlus	10 mm (3/8")	10 mm (3/8")
Max. length of OD measured in LaserPlus	65 mm (2.6")	38 mm (1.4")
Tool measurement accuracy	0.002 mm (0.00007")	0.002 mm (0.00007")



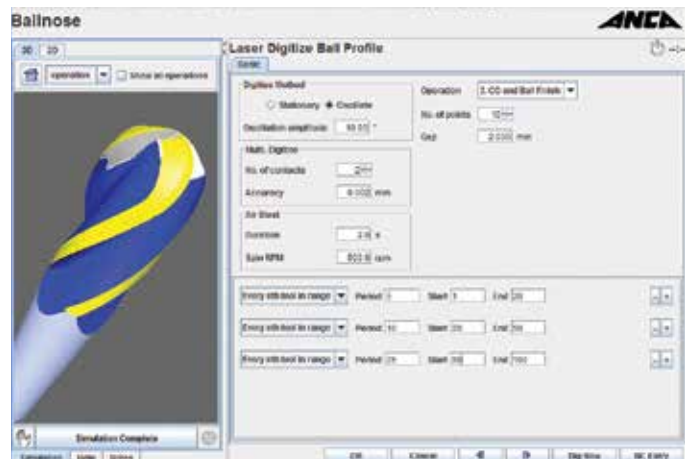
LaserPlus in tool grinder



LaserPlus without cover



Automatic in-process compensation of the ball profile down to +/- 2 micron or better



ToolRoom software for LaserPlus