

Inspection Machine »µFocus«

## Precise measurement of cutting edge preparation and surface finish

### Highlights

- 2 in 1  
Measurement of Cutting Edge Preparation and Surface Finish
- Refined  
High-precision evaluation of areas and lines
- User-friendly  
Low training effort thanks to simple operation
- Fast and precise  
High-performance optics and "pilot" image processing
- Robust  
Workshop-ready design and alloy
- Process reliability  
Intelligent software and highest security standards
- Ergonomic  
Sophisticated, functional design
- Economic  
Premium quality at best price-performance ratio

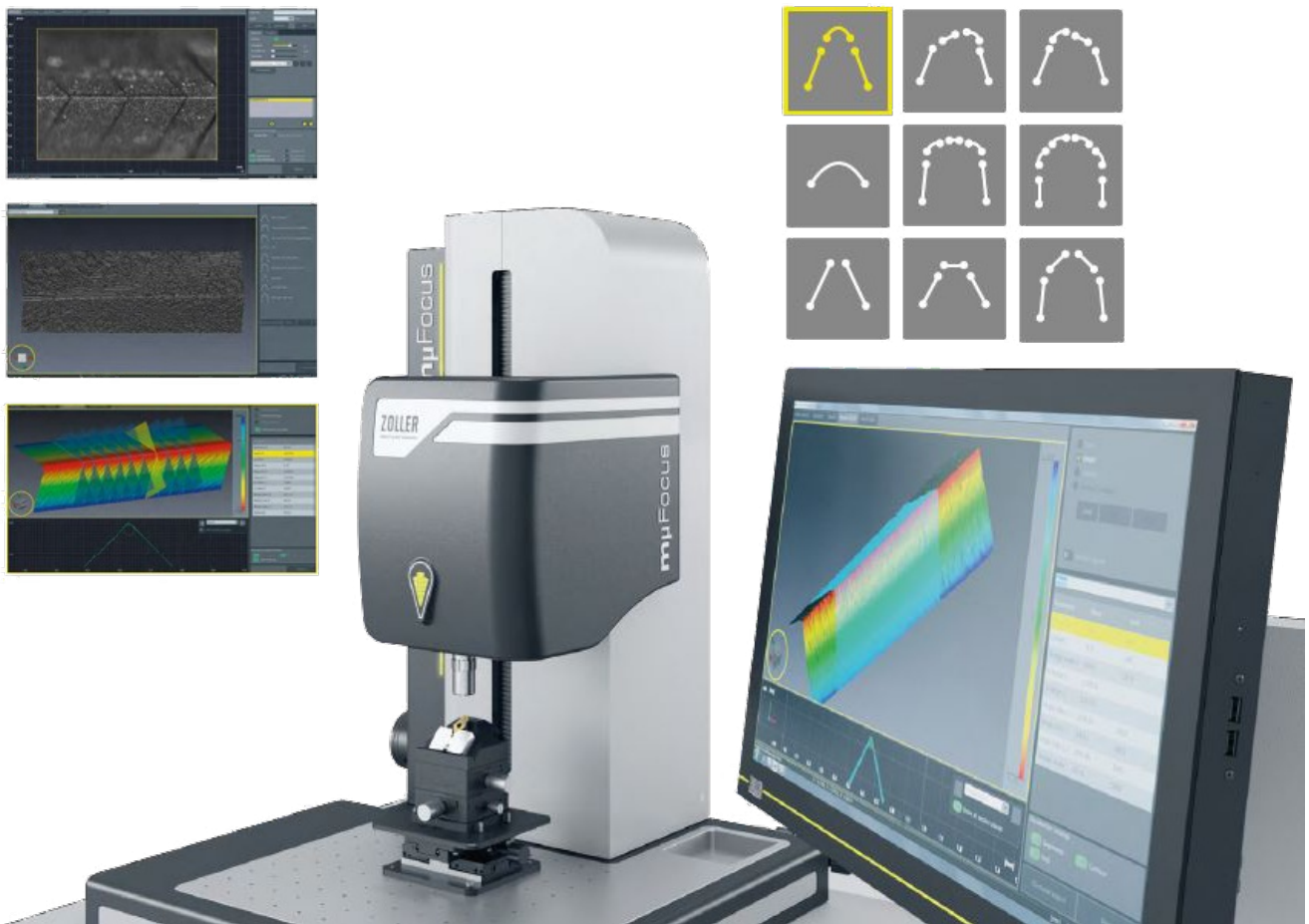
### Software

## The Most Modern Measuring Software

»pilot« machine software offers comprehensive convenience. The selection and input fields are easy to understand, all functions support efficient work, and the software offers multiple options to prepare measured values and display them in a clear way.

## Guides You to the Finest Structures

ZOLLER » $\mu$ Focus« systematically approaches microstructures. Clear processes and supporting tools provide detailed insight of cutting tool edges and surfaces. You can detect wear quickly, create a 3D model with just one click, and easily measure cutting edge preparation and roughness. » $\mu$ Focus« takes multiple individual images to record comprehensive raw data, then uses it to calculate a 3D model of the cutting edge. Then you can complete a standardized analysis of the measuring results and prepare them graphically using »pilot«.



## Technical Data

### »zep« Sensor to measure cutting edge geometry

Symbol	Z axis
blue	300 mm
AA*	Measuring principle
30 mm	Strip projection
Smallest measurable radius	Numerical aperture
3 $\mu$ m	-

### »zep-R« Sensor for measuring 3D cutting edge geometry and surface roughness

Symbol	Z axis
yellow	300 mm
AA*	Measuring principle

20 mm  
Smallest measurable radius  
3  $\mu\text{m}^{**}$

Confocal microscope  
Numerical aperture  
0,42

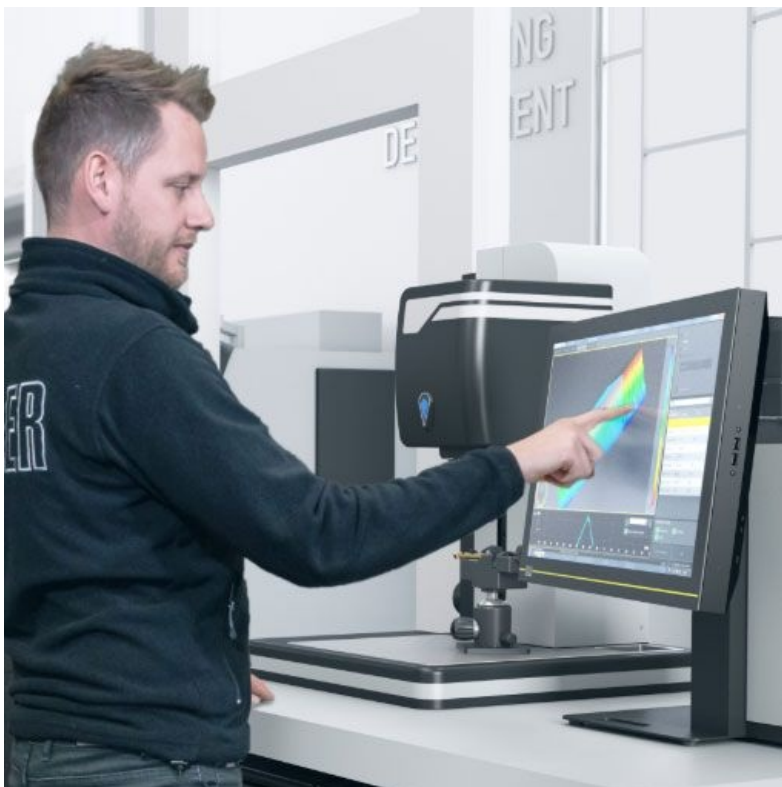
Note: \*AA=AA describes the smallest distance between the lens and the measured object. \*\*Values for 20x lens; values for 50x lens: 1.4  $\mu\text{m}$ .

## Focused on Perfection

You want to produce the perfect cutting edge – one that ensures a long tool life, minimal wear, optimal chip formation, and precision workpiece processing, thereby significantly lowering costs for production.

Achieve your goals with high-precision tool geometry and optimal surface textures customized to your specific application. If you want to ensure exact, standardized quality in your tool development, then the ZOLLER » $\mu\text{Focus}$ « inspection machine is the right choice for your needs.

» $\mu\text{Focus}$ « uses non-contact measurement procedures to determine the surface roughness and cutting edge preparation of your tool, down to the  $\mu\text{m}$ . Use the ZOLLER » $\mu\text{Focus}$ « to create fully optimized tools.





## Proud of » $\mu$ Focus«

“For me, to assembly a » $\mu$ Focus« is something special every single time. The machine combines two different characteristics you would not necessarily expect to go together: Although it is extremely heavy with a massive weight of 200 kilograms, it offers highly precise measuring technology that measures exactly, down to the  $\mu\text{m}$ . I install top-quality sensors and many other elements using modern technology into » $\mu$ Focus« machines. I am very proud that installing the » $\mu$ Focus« is one of my duties.

I can promise you one thing: The » $\mu$ Focus« is a seriously high-tech machine you can use to easily measure cutting edges and surfaces with outstanding precision.” says Markus Müllner, Measuring Technology Fitter at ZOLLER.