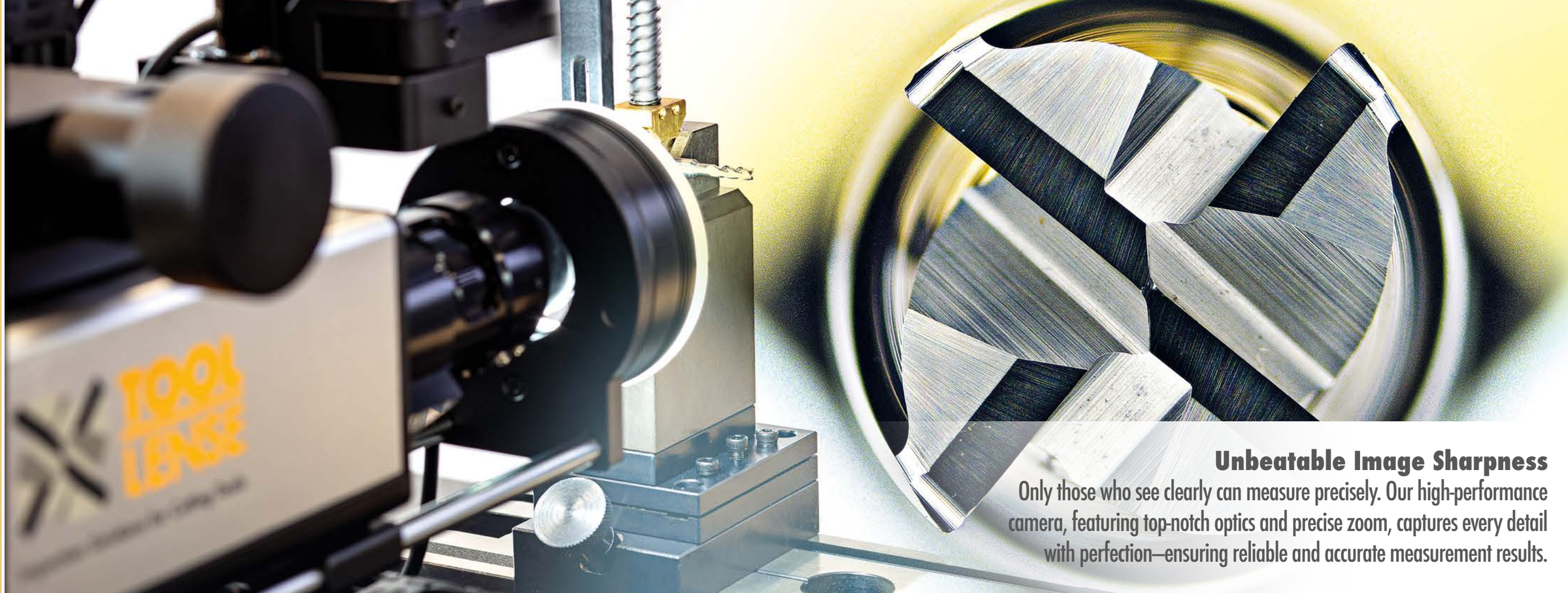
TOOL
LENSE
Inspection Solutions for Cutting Tools
Never seen tools this sharp before?
You don't believe it? This is not a joke, it's absolutely real–
no Photoshop, no tricks, just: Toollense!
www.toollense.eu

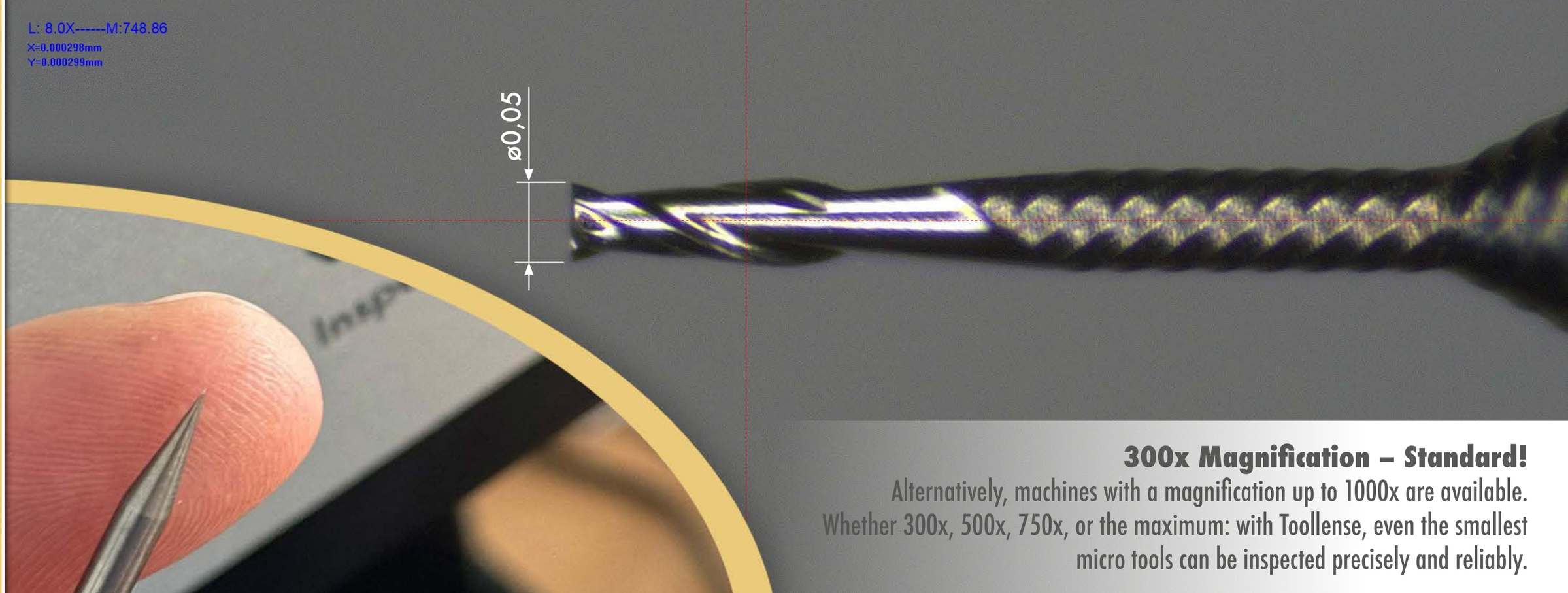
Unbeatable Image Sharpness



Unbeatable Image Sharpness

Only those who see clearly can measure precisely. Our high-performance camera, featuring top-notch optics and precise zoom, captures every detail with perfection–ensuring reliable and accurate measurement results.

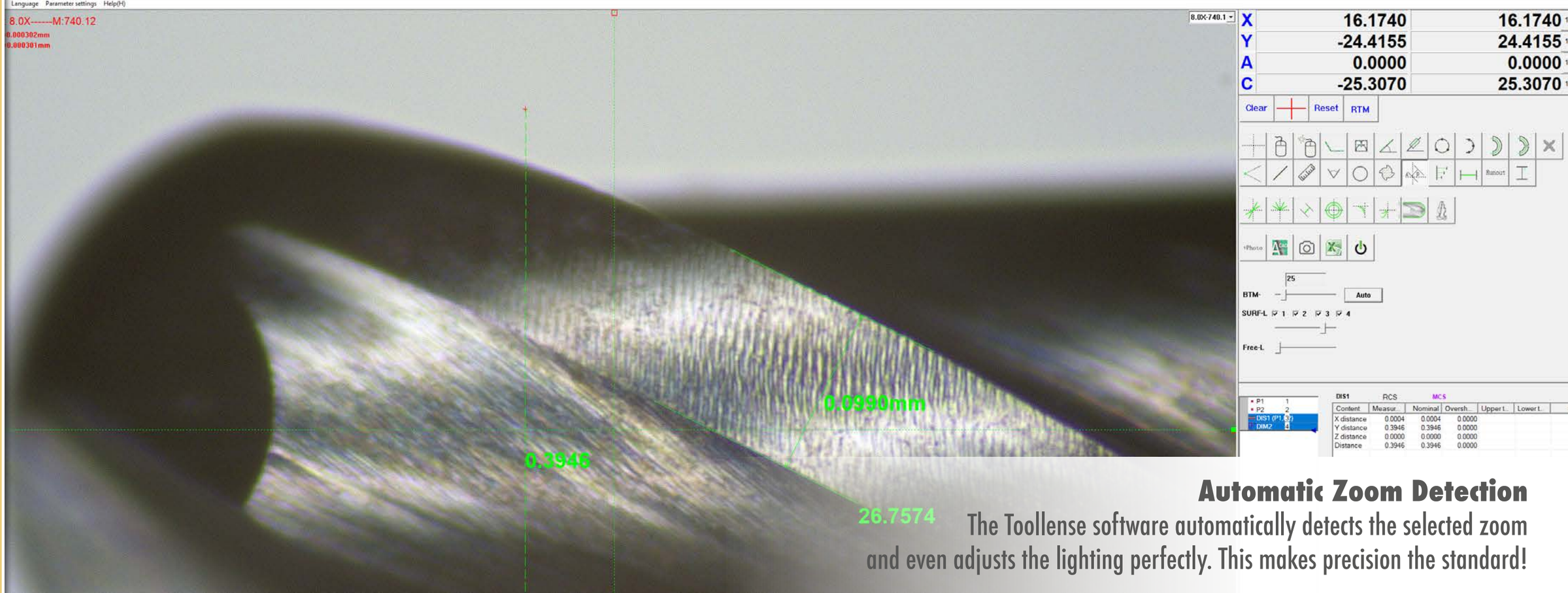
Down to the finest Detail



300x Magnification – Standard!

Alternatively, machines with a magnification up to 1000x are available. Whether 300x, 500x, 750x, or the maximum: with Toollense, even the smallest micro tools can be inspected precisely and reliably.

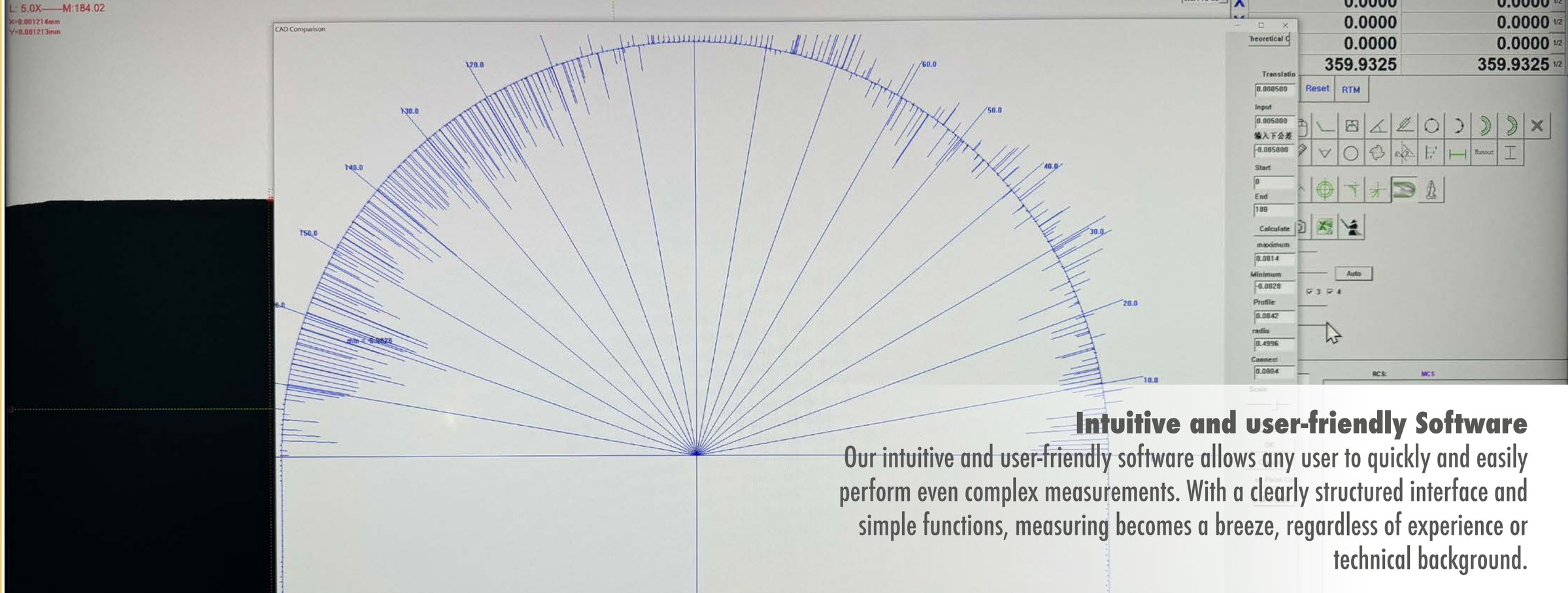
Never Measure Incorrectly Again



Automatic Zoom Detection

The Toollense software automatically detects the selected zoom and even adjusts the lighting perfectly. This makes precision the standard!

Intuitive and User-Friendly



Intuitive and user-friendly Software

Our intuitive and user-friendly software allows any user to quickly and easily perform even complex measurements. With a clearly structured interface and simple functions, measuring becomes a breeze, regardless of experience or technical background.

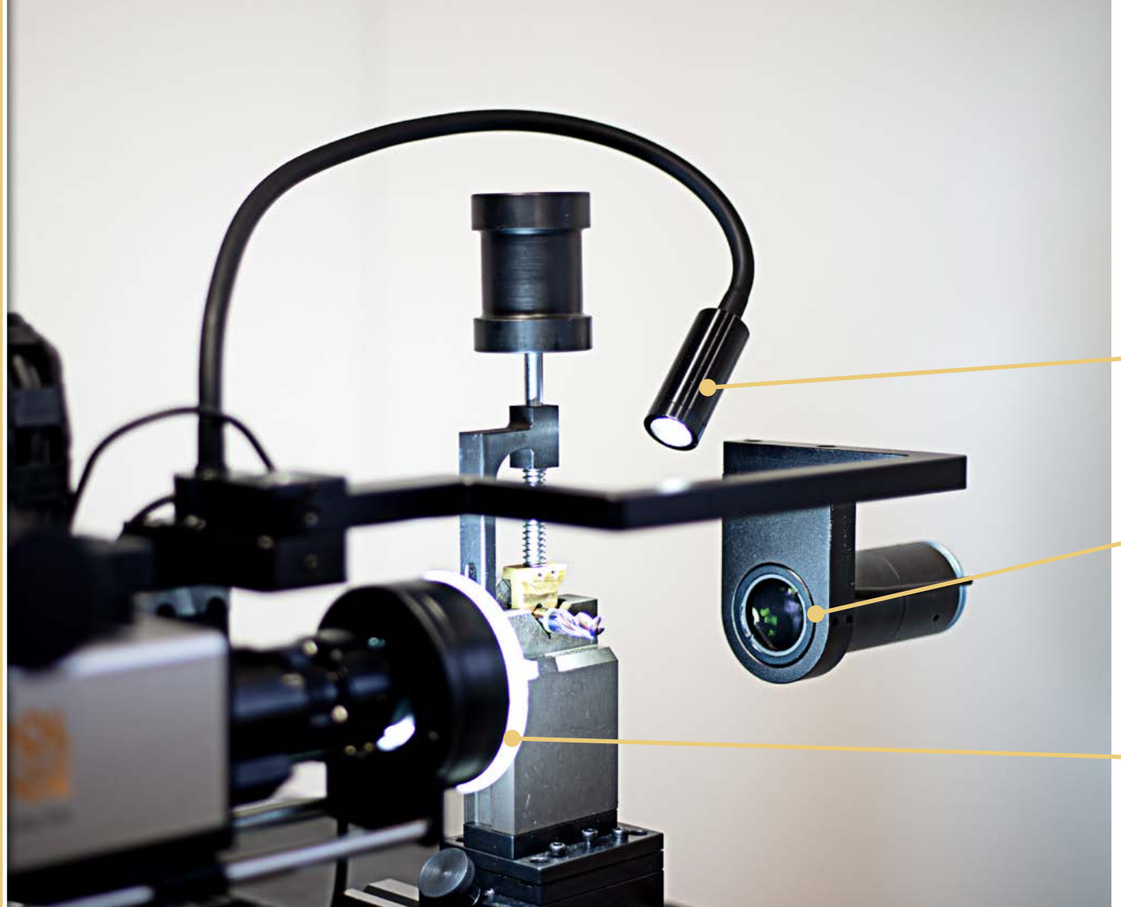
Ergonomic Design

Toollense was specifically designed to optimize user-friendly and comfortable handling. The thoughtful arrangement of controls ensures a natural and comfortable working posture, reducing fatigue. The ergonomic design promotes efficient work processes, enhancing both comfort and productivity.

Massive base for maximum Precision

A massive base is essential for long-lasting precise measurements. Toollense is designed to meet these requirements:
Toollense is precisely leveled at three points and guarantees a foundation for long-term measurement accuracy and maximum reliability with its solid, stable, and high-precision granite plate. Therefore, Toollense is ideal for precise requirements directly in the production or in the quality inspection room.

Optimal Lighting



Light is the most important factor for achieving optimal image quality. Only with proper illumination can edges be displayed with maximum sharpness, enabling precise measurements when using the automatic edge detection.

Free-hand Light

And if additional light is needed in a specific area, the free-hand-light provides a flexible solution to create optimal conditions.

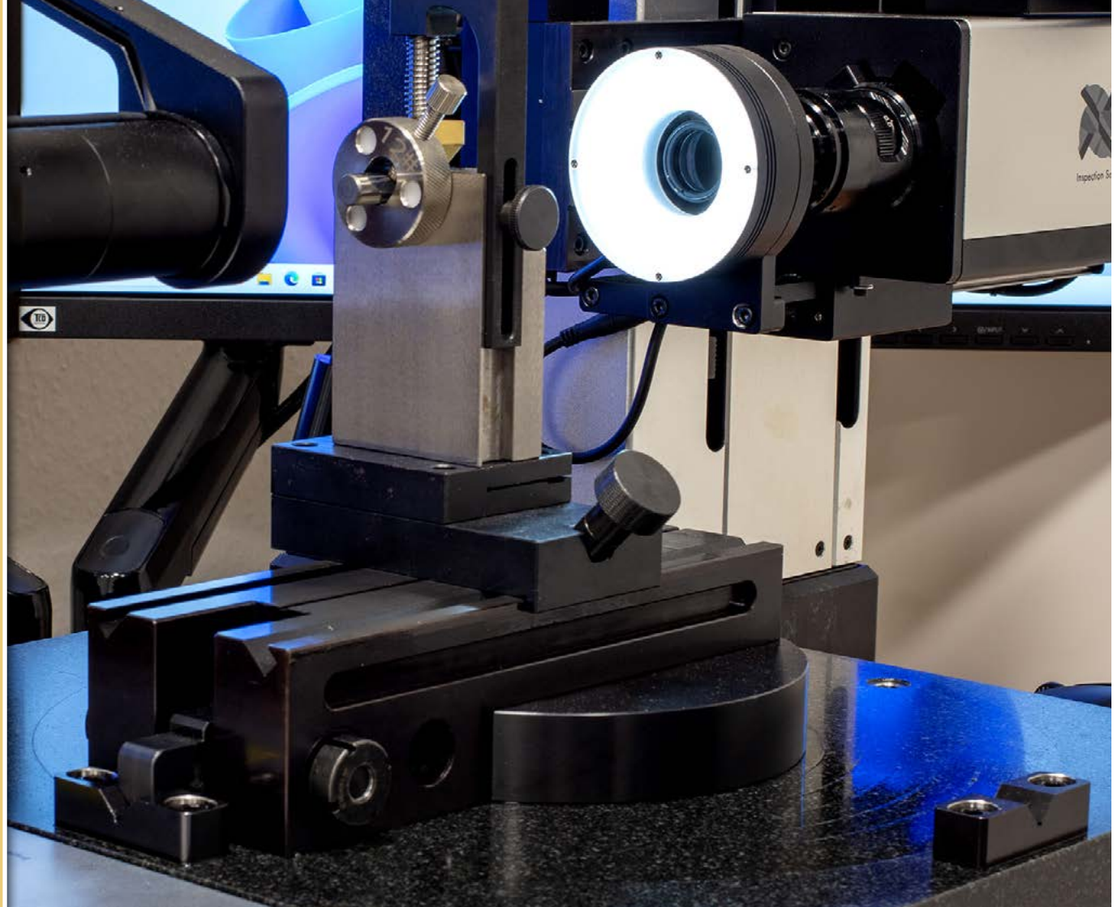
Back-Light

The automatic backlight adjusts the brightness automatically when the zoom factor changes.

Frontal Ring-Light

The frontal ring light is infinitely adjustable and divided into four quadrants, each of which can be switched on or off individually. Particularly useful is the longitudinal adjustment independent of the focus axis, ensuring perfect imaging.

Swivel Table (C-Axis)



X	16.2669	16.2669 1/2
Y	-6.9100	6.9100 1/2
A	0.0000	0.0000 1/2
C	-90.0000	90.0000 1/2

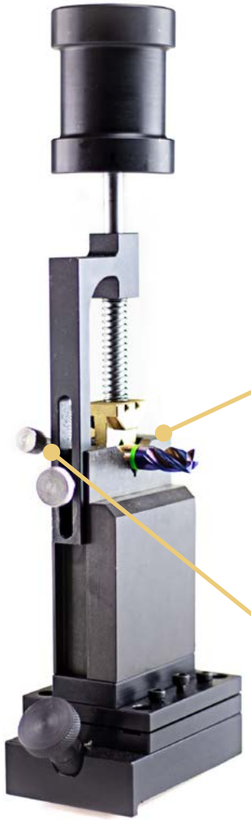
Clear | Reset | RTM

Swivel Table

The swivel table enables quick and flexible clamping of various tool holders. Thanks to its fixed 90° indexing, it can be precisely and rapidly adjusted for circumference or face measurements.

An integrated rotary encoder continuously displays the exact angular position (C-axis) and allows manual swiveling to any desired angle. This allows quick and effortless swiveling to, for example, the helix angle.

Innovative Clamps

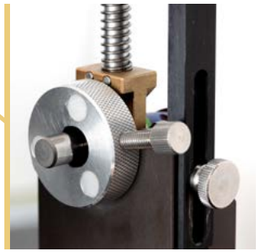


V-Clamp

For high-precision axial and radial runout

Radial

Clamp your cutting tools simply and quickly in the prism support. The adjustable spring force ensures that the shaft of your cutting tool fits cleanly and precisely, running perfectly round radially.



Axial

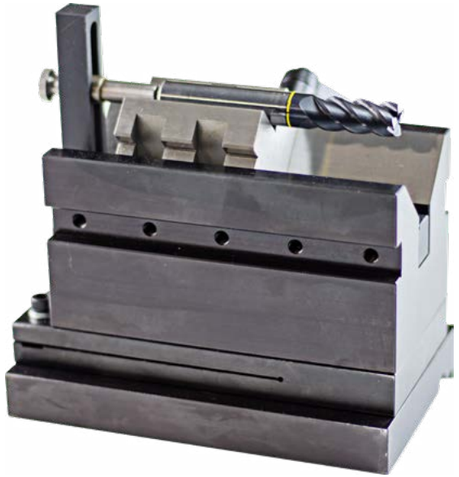
The magnetic disc precisely positions the cutting tool, whether it's a mill or drill, axially, and it reains its position even while rotating.

Roller clamp

Precise rotation with hand-wheel

V-Block

Flexibility and Precision

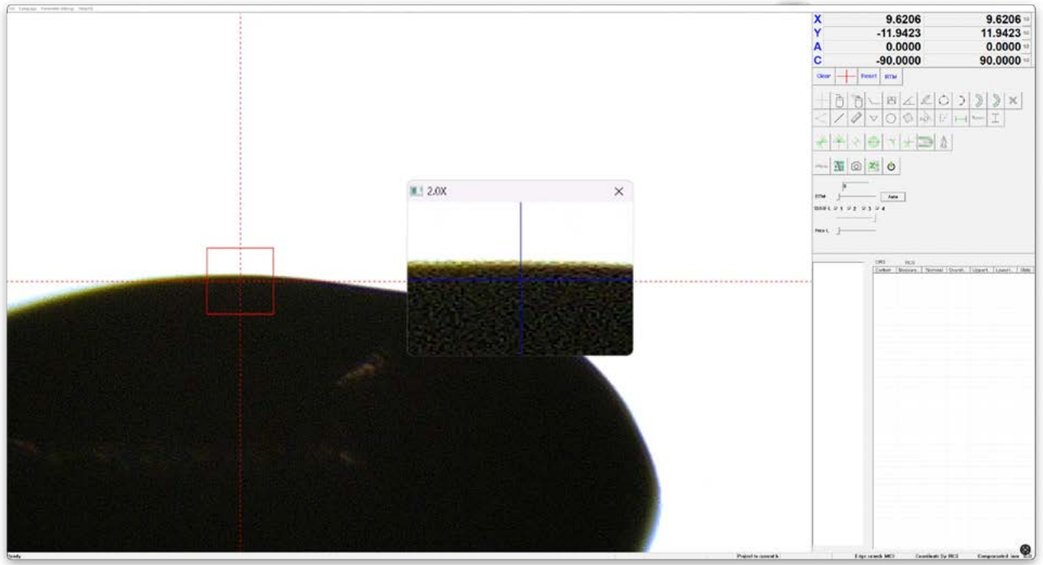


Software functions

Magnifier - Auxiliary Aggregation

A small but very useful tool, for example, when precisely focusing, with a 2x to 6x additional digital magnification function.

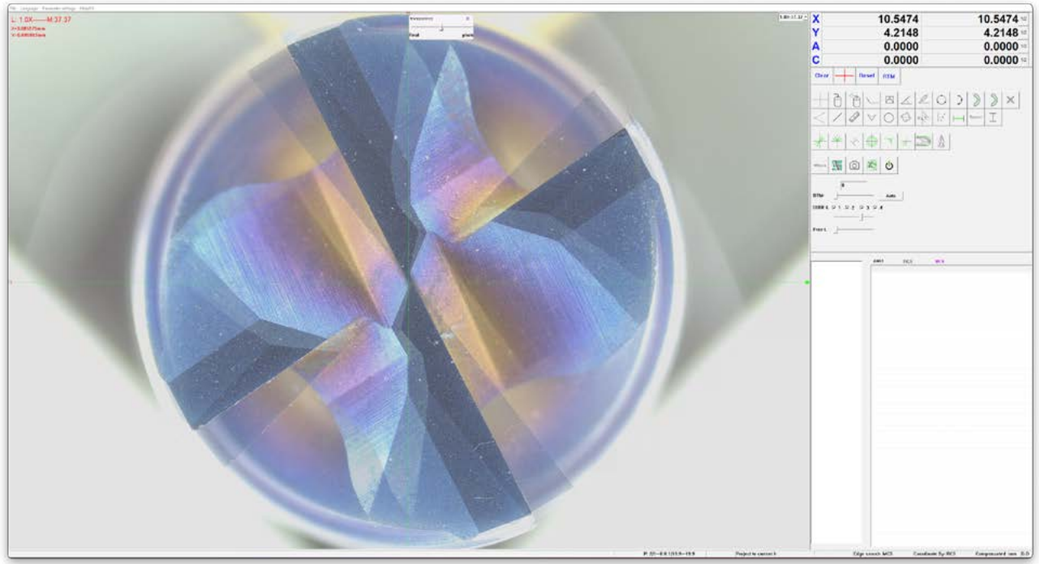
Video



Video

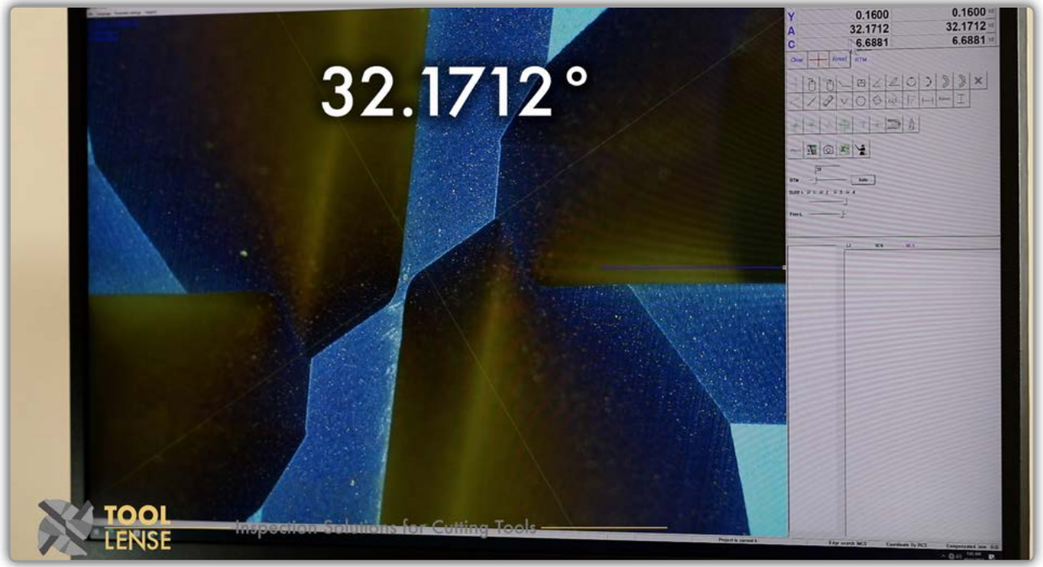
simple picture- / DXF - Comparison

Overlay the current tool image with, for example, an image of a master tool or a DXF contour, and visually compare them.



Manual Measurments

With the crosshair (RTM), angles, diameters, lengths, and more can be manually, easily, and quickly determined, just like with traditional profile projectors.



Video

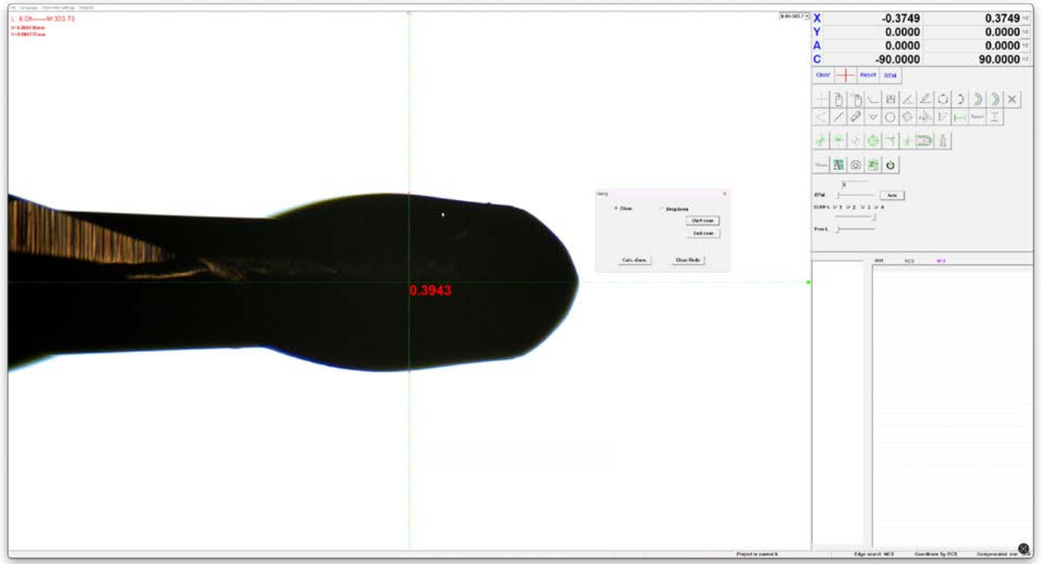
Toollense - Software

Toollense - Software

Video

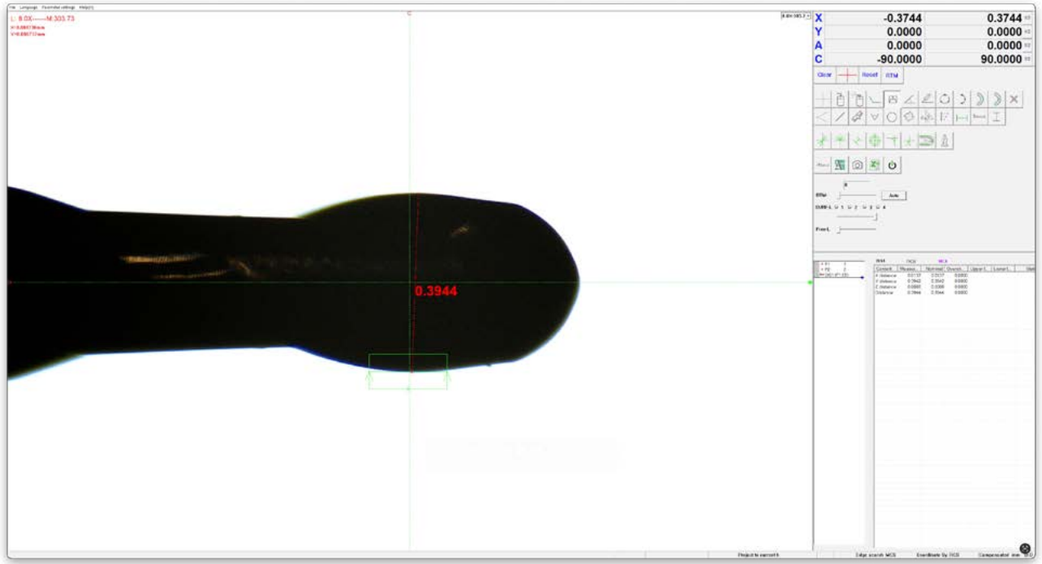
Measuring Diameter

Within seconds, with the EASY – Diameter function.



Measuring Diameter

Ultraprecise through automatic detection of the highest point on the upper and lower cutting edges.



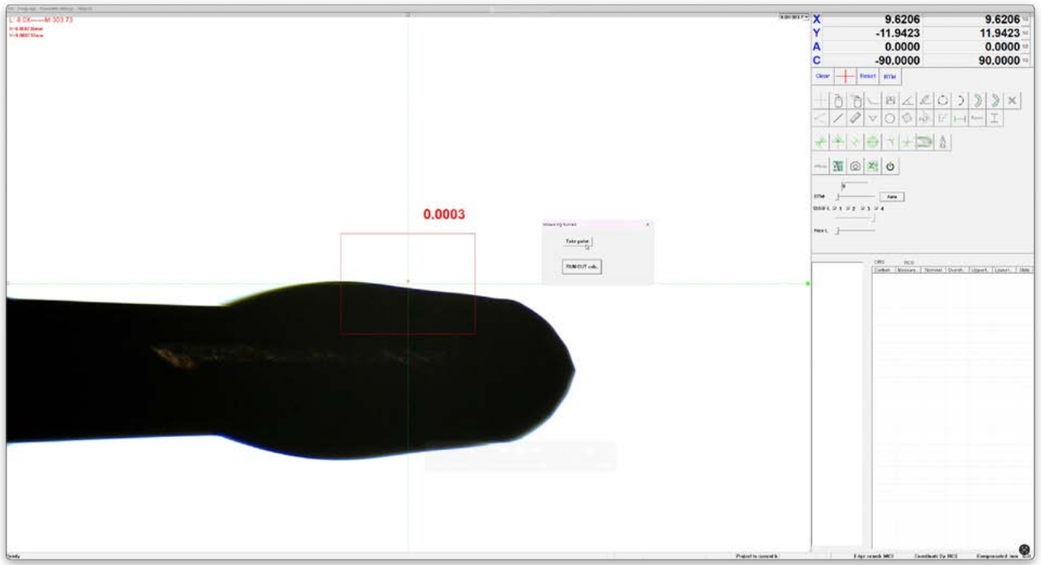
Video

Toollense - Software

Video

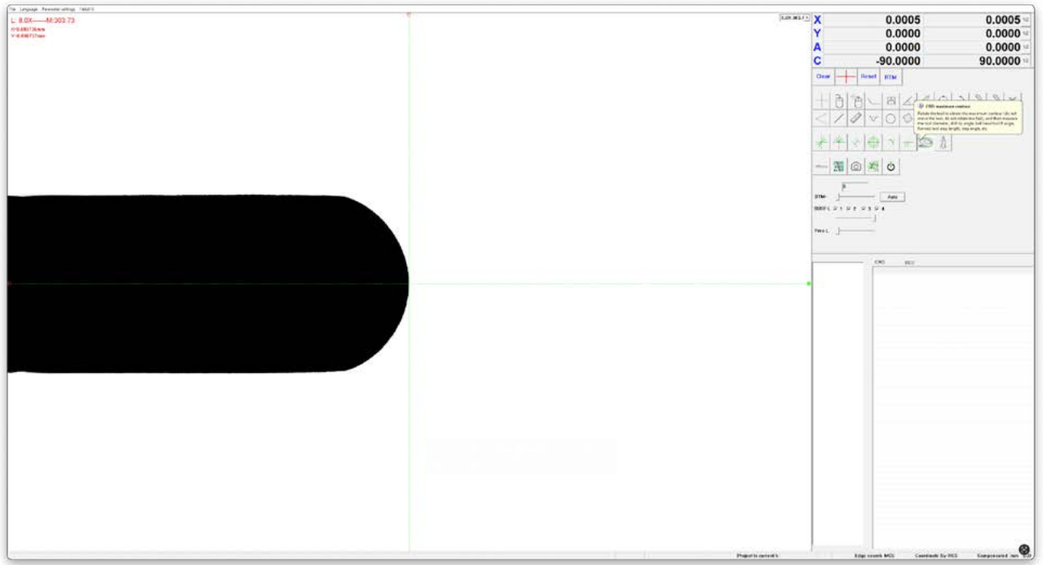
Measure Run-out

Within seconds, with the EASY – Runout function.



CRIS - contour profile

Precisely capture the contour profile of the tool.



Video

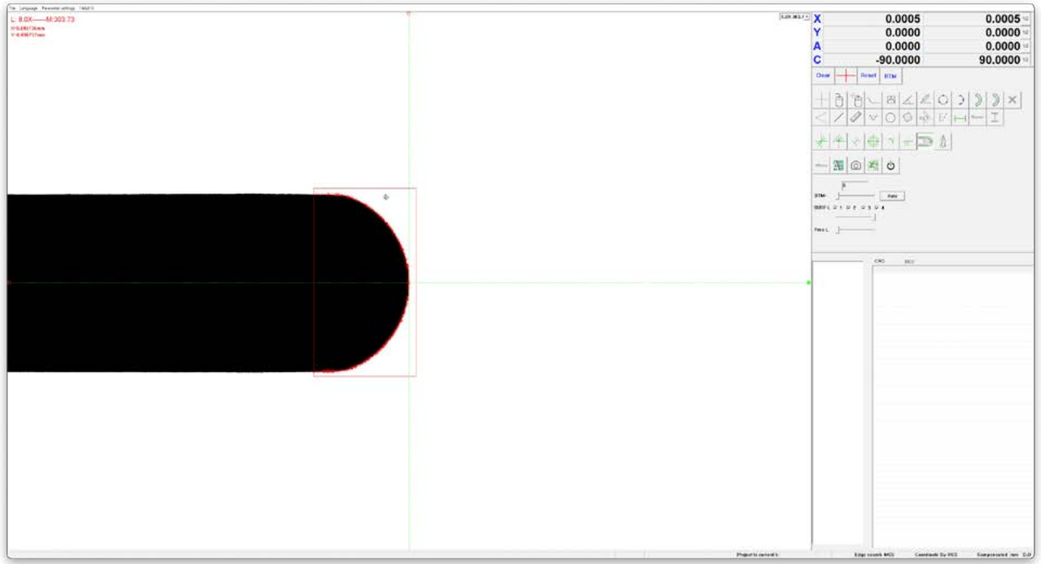
Toollense - Software

Toollense - Software

Video

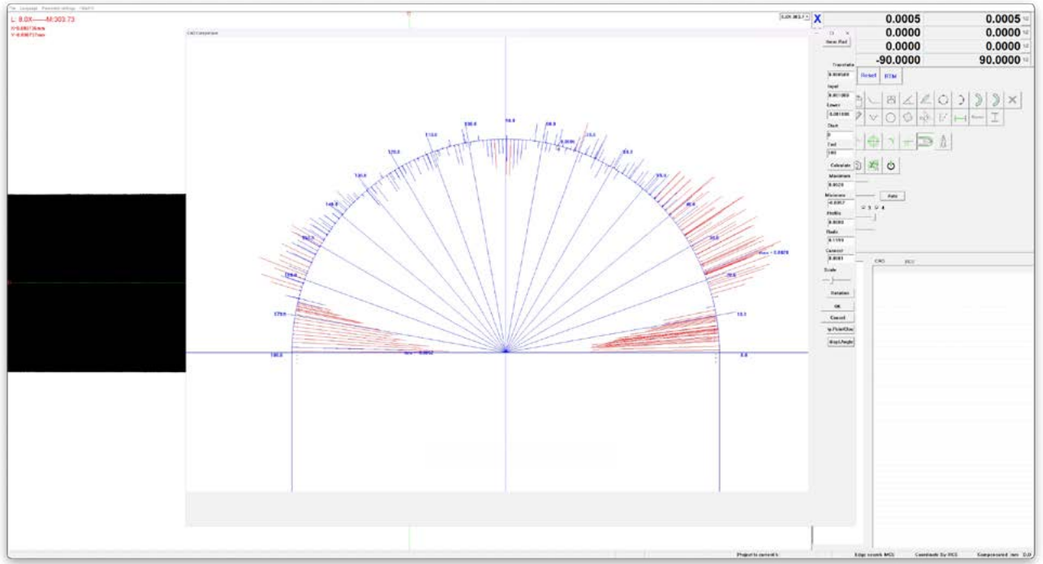
DXF - Contour

Select the search field and use the automatic edge detection to identify a cluster of DXF points.



DXF - Comparison

Here, as an example of a radius measurement. Each point is calculated based on the DXF contour and displayed in blue if within tolerance or in red if out of tolerance.



Video

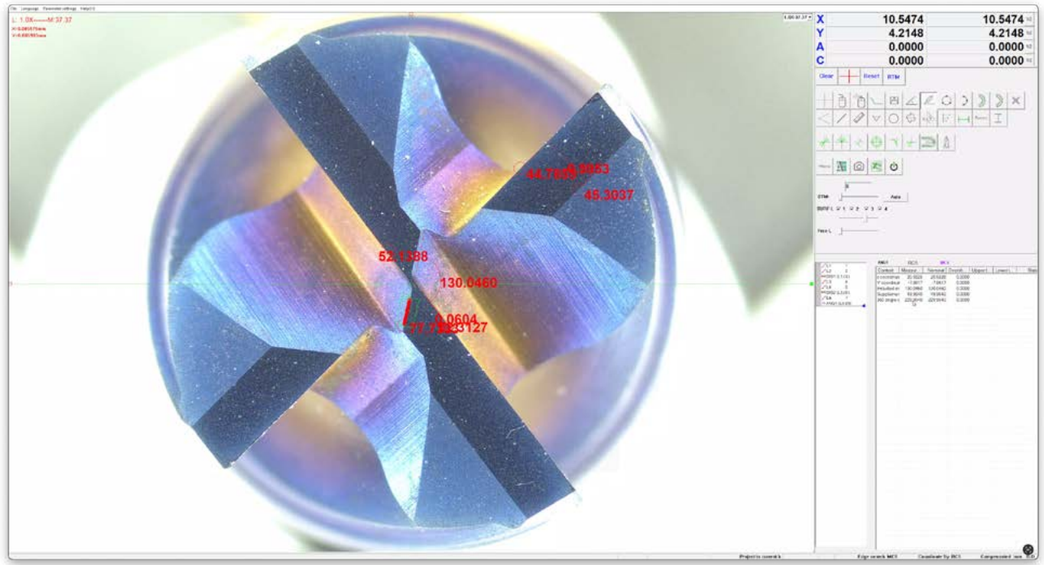
Toollense - Software

Toollense - Software

Video

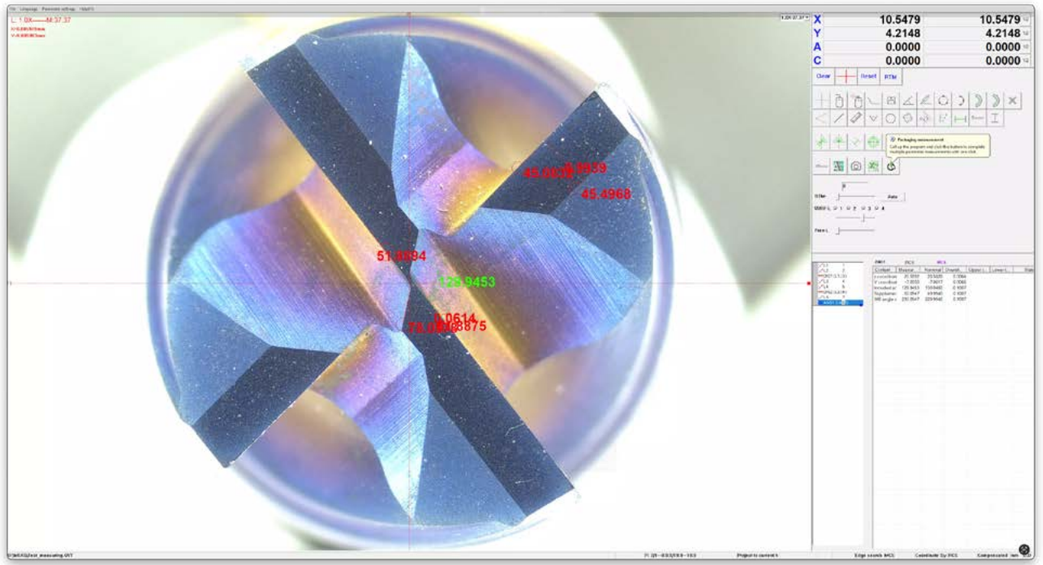
End face measurements

Radii, lines, widths, angles, and more, quickly, easily, and precisely with automatic edge detection.



1-Click Measurements

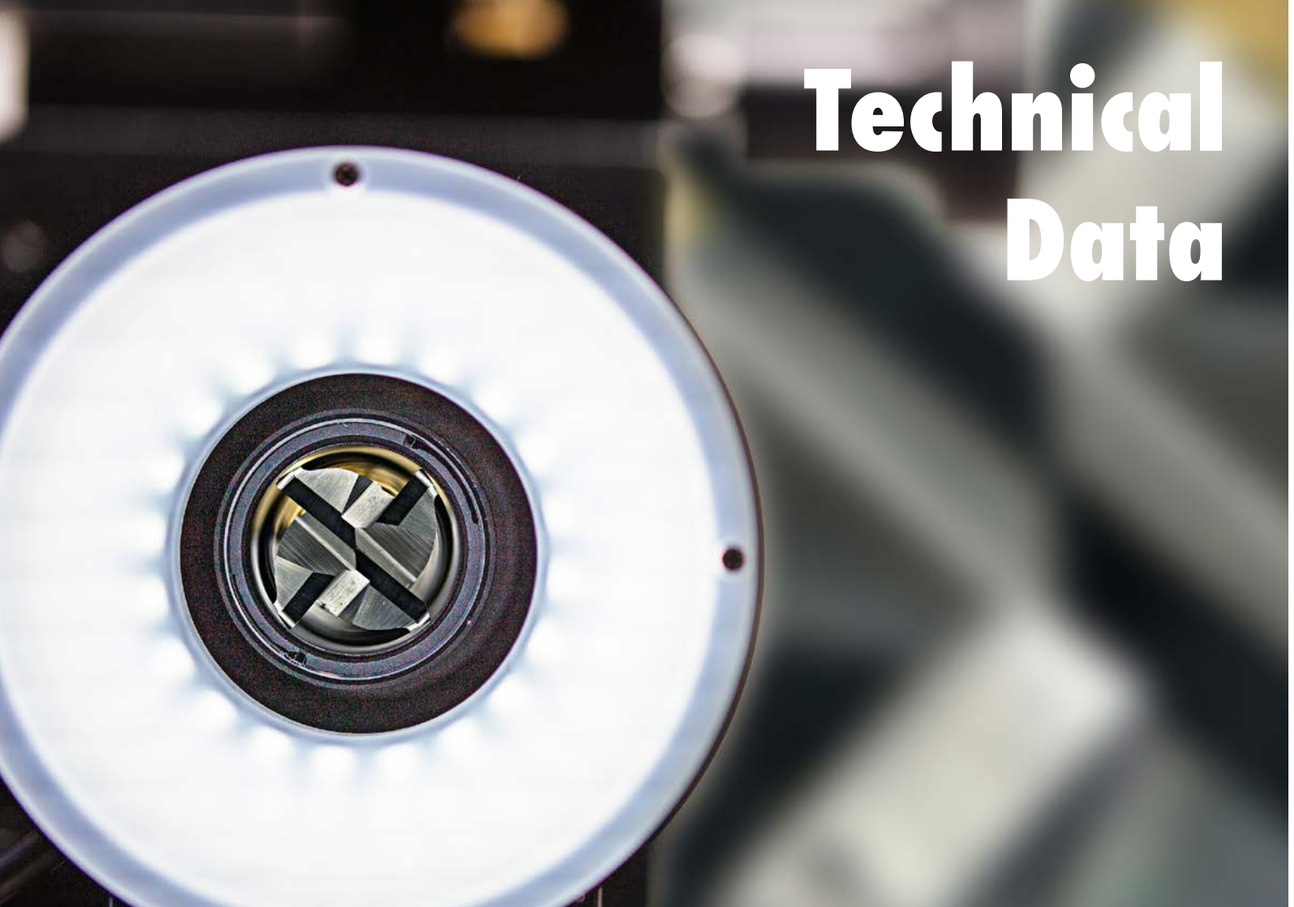
Measurements can be saved and easily executed again at any time with just one click.



Video

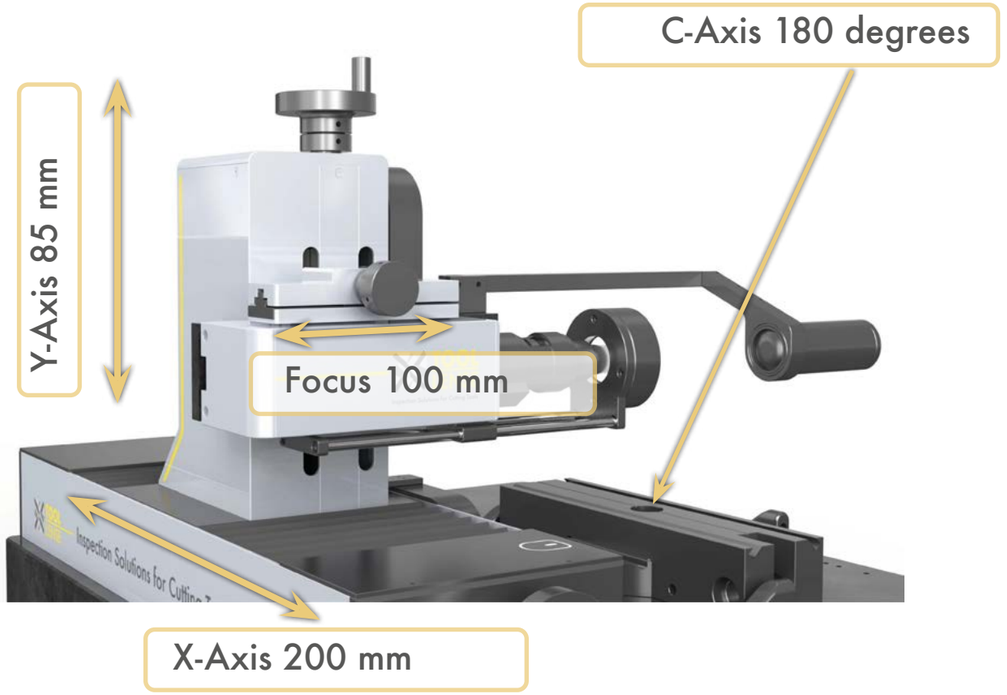
Toollense - Software

Toollense - Software



Technical Data

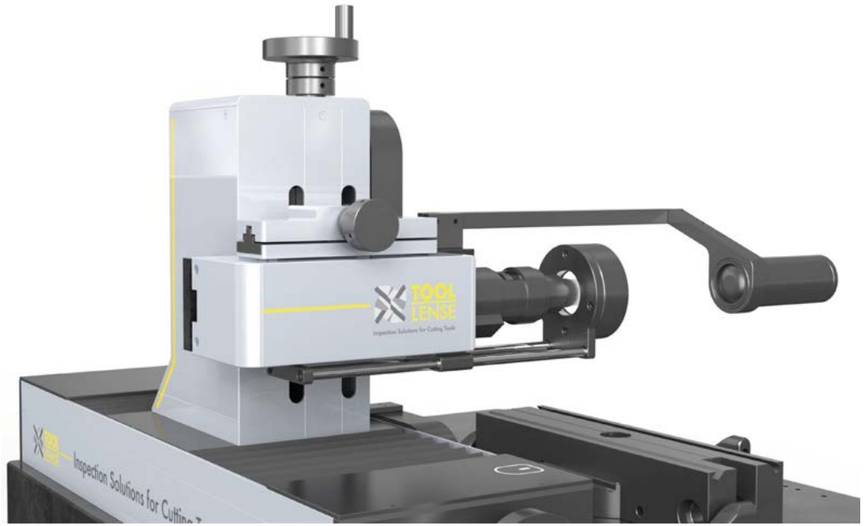
Travel Paths



Accuracy

Resolution of the axis.

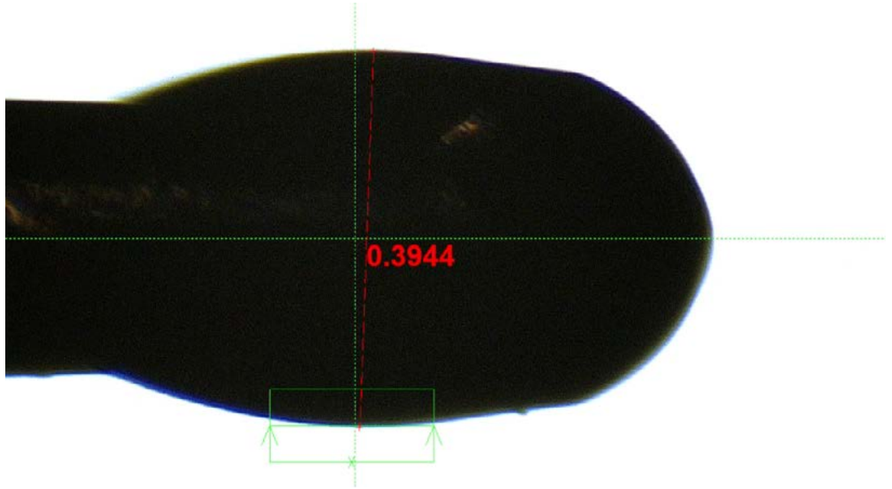
X-Axis	**0.0005 mm**
Y-Axis	**0.0005 mm**
C-Axis	**0.005 degrees**



Accuracy

Within digital image measurements.

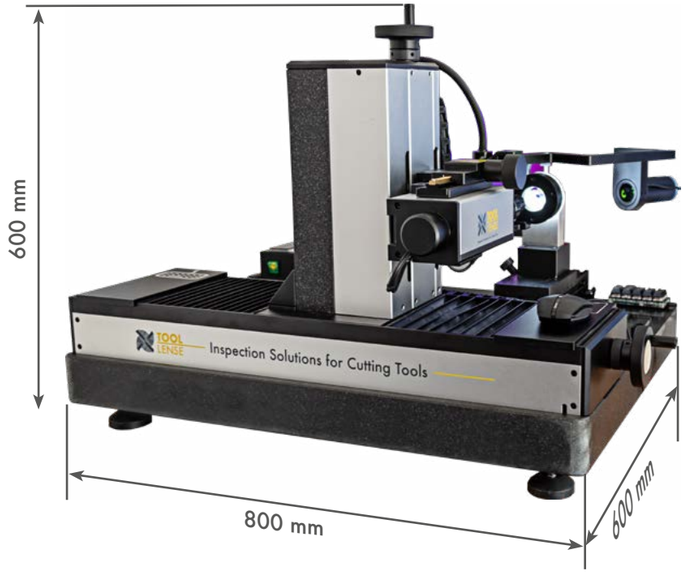
Min. Magnification	**< 0.005 mm**
Max. Magnification	**< 0.001 mm**



Technical Data

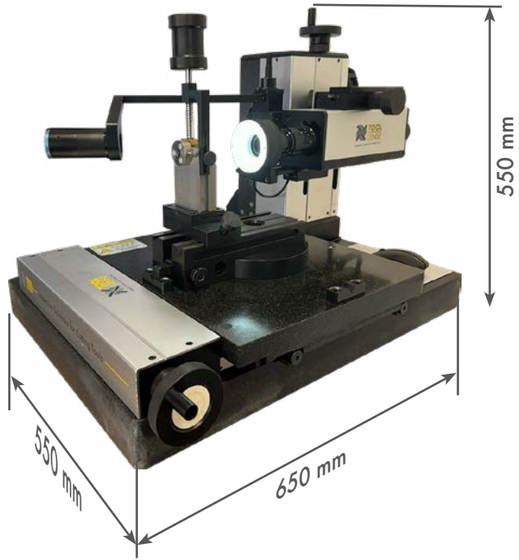
Type E (Ergonomic)

The top seller: highly ergonomic, 300x magnification
(Alternatively, 500x, 750x, or 1,000x magnification available)



Type C (Compact)

Designed to minimize space requirements as much as possible, with magnification up to 260x.



Technical Data

Service

Our machines are highly sustainable and require minimal maintenance. Should a service be necessary, we can initially provide quick support via remote maintenance to find uncomplicated solutions. If an on-site technician is needed, we can respond promptly from Stuttgart and will be with you as soon as possible. Additionally, all necessary spare parts are available from stock. With us, you have a fair and reliable partner who is always there for you and on whom you can sustainably depend.

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+49 7181 6069860

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Service

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