EZset tool presetting devices
measurably easier
measurably more precise
measurably more cost-effective

It`s easy.
It`s EZset!

www.EZset.info
Simple!
- The EZset concept: The user comes first and foremost, and is able to work efficiently on a day by day basis.
- The very latest image processing turns tool presetting into child’s play
- Fast training thanks to the intuitive EZset operating concept

Precise!
- Image processing system with dynamic crosshairs for inductive and precise tool measurement, independent of the operator
- Brand quality such as Bosch pneumatics, THK guides and Heidenhain glass scales deliver precision and a long and maintenance-free service life
- Tool holder spindle SK 50 with ultra-precise repeatability and integrated calibration edges

Economical!
- Three in one: Tools are measured, set and tested
- All-in-one turnkey solution in a package that includes the table, adapter and utensils storage tray and label printer
- Quality ‘Made in Germany’ at an unbeatable price/performance ratio
- Worldwide service

Presetting - the key to success

EZset tool presetters enable you to save time and money, putting you one very decisive step ahead of the competition. Your tools are set and measured while your machine is producing chips - without any downtime.

The right kind of tool preparation pays rich dividends
Precisely measured tools, optimized machine uptimes and longer tool service lives make sound financial sense. Your productivity will be boosted by at least 15%. EZset tool presetters pay for themselves in no time. They are easy to use, low-budget but high-performance.
Practice-proven:

At I-S-M, a company based in Brilon, prior to the acquisition of the EZset tool presetter with ImageController2, the tools were first touched-off in the machine. Stefan Brüne reports: "With EZset, we succeeded in boosting our productivity by about 15%. With about 20 – 25 tool changes a day, the IC2 paid for itself within 8 months. We decided in favor of an EZset tool presetter because it delivered the convincing combination of ‘Made in Germany’, prompt service and superlative technology".
EZset tool presetting in detail

You will find a technical description of these devices as a download at www.ezset.info on the relevant product page.
ImageController basic / ImageController 1
EZclick: turn – press – done
Operation of the ICbasic-/IC1 image processing could not be easier, thanks to the unique EZclick ‘turn & press’ button. With EZclick, you navigate through the menus on the 7” monitor, select the functions and confirm at the press of a button. Graphic symbols help you to use the tool presetter, and in addition a short explanatory text appears on screen. Every function is backed up by comprehensive online help.

ImageController 2
EZtouch: easy – finger – done
Convenient and intuitive operation of the IC2 image processor using the EZtouch 12.1” touchscreen monitor. The keys on the EZtouch monitor are content-dependent, and are graphically and explicitly designed to make touchscreen operation very simple indeed. EZset tool presetters with IC2 are technically equipped with all the functions that a tool presetter with IC1 has to offer.

ImageController 3
EZslide: slide – start – done
Modern, user-friendly and configurable IC3 image processing with EZslide 17” touchscreen operation: Thanks to its ultra-simple Touch & Slide function, the user interface is innovative, extremely accurate and is equipped with the very latest technology. In technical terms, the IC3 has all of the functions of all EZset tool presetters and many other features!

EZclick: short induction times, fast and dependable!
EZtouch: fast and incredibly easy to operate!
EZslide: modern, innovative and unachieved!
**EZset gets you into the picture lightning-fast**

With the EZset tool presetter with image processing system, the cutting edge of your tools is measured, the results are saved and documented within seconds.

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**EZgo with ImageController basic**

**Your benefits:**
- Easy to use and quick to learn with minimal training
- Fast measurement, setting and testing of tools (length and diameter)
- Various measuring programs, for example measuring of concentricity and face runout on the tool shaft
- Measuring results are quick and easy to print out
- Easy setting of tool contour with the EZmax software function

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**EZset with ImageController1**

**Your additional benefits to ICbasic:**
- Fast measurement, setting and testing of tools (radius, two cutting edge angles)
- 12-fold magnification of the cutting edge in incident light for quality control purposes
- EZnavigator compass needle – easy positioning of camera to measure nominal values on the tool
- Power-operated tool clamping

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<th>EZgo400 with ICbasic</th>
<th>EZgo600 with ICbasic</th>
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<td>Optional snap gauge*</td>
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<td>100 mm</td>
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<table>
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<th>EZset400 with IC1</th>
<th>EZset600 with IC1</th>
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<tr>
<td>Maximum tool length Z</td>
<td>400 mm</td>
<td>600 mm</td>
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</tr>
<tr>
<td>Optional snap gauge*</td>
<td>100 mm</td>
<td>100 mm</td>
</tr>
</tbody>
</table>

*Note: By selecting the option of ‘snap gauge’, the maximum tool diameter X is then limited to 300 mm
**EZset with ImageController2**

**Your additional benefits to IC1:**
- Easy and micron-precise measurement and memory storage of multi-stage tools
- Integrated tool management, for example to file nominal values and tolerances and to create setting sheets for workpiece production
- Measuring results can be output to a label, a list or directly to the CNC machine
- Measurement of rotational axis with monochrome camera
- 20-fold magnification of the cutting edge in incident light for quality control purposes

**EZset with ImageController3**

**Your additional benefits to IC2:**
- Integrated tool management for example to save nominal values and tolerances and to produce setting sheets for tool production, including graphic administration and tool management
- Autofocus (automatic focusing of the tool cutting edge)
- 40-fold magnification of the cutting edge in incident light for quality control purposes

**Efficient and economical**

Three in one! Fast measurement, setting and testing of tools – directly beside your CNC machines.

**Reliably precise results**

With projector technology, the measuring result is operator-dependent. Not so with EZset! The results are user-neutral, precise and repeatable as well as reliable.

**Easy and fast**

Time-consuming precision adjustment of yesteryear becomes a thing of the past! The dynamic crosshairs go straight to the tool cutting edge and automatically measure across the entire camera image.

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*Note: By selecting the option of 'snap gauge', the maximum tool diameter X is then limited to 300 mm*
Low budget, high performance

With EZset tool presetters, we are setting the bar high

Brand-name components such as Bosch pneumatics, THK guides or Heidenhain glass scales (in X and Z with 1 micron resolution) assure a long and maintenance-free service life. Equipped with numerous measuring functions and all required accessories, to the latest standard and based on image processing and a precise tool holder spindle, EZset positively redefines cost-effective workplace operations. The brand name product EZset offers first-class quality and an unbeatable price/performance ratio.

Easy, precise and safe operation for the user.

EZset tool presetters offer clear benefits in terms of quality and technology!
The EZset hardware

Long service life thanks to branded products such as Bosch pneumatics, five THK guides, CCD camera and Heidenhain glass scales all assure optimum quality and precision.

Long-life LED cold light illumination for cutting edge inspection all comes as standard with EZset tool presetters.

Integrated ball circulating units on the carriage guides assure quiet, easy operation of the optic carrier, all of which delivers precise and repeatable measuring results.

Label printing: Precisely, reliably and within mere seconds, you can obtain five measuring results showing length, diameter, radius and angles 1 and 2 on the tool cutting edge.

Ergonomic and user-friendly operation. EZset one-handed control concept for easy positioning of a measuring carriage by the tool cutting edge.

SK50 tool holder spindle with very accurate concentricity and integrated calibration edge.

Membrane keyboard for pneumatic actuation of 4 × 90° indexing and brake on the SK50 tool holder spindle.

Adapter and utensil support to hold items properly and safely.

**Table**
Robust, workshop-compliant, ergonomic and space-saving 'undertable' to set up directly beside the CNC machine.

**Label printer**
Label printer for the printing of measuring results.
■ Operator-independent measurement with dynamic crosshairs and automatic cutting edge shape recognition
■ Up to five measuring results: Length, diameter, radius and two angles
■ Defined nominal value input
■ Number of cutting edge shapes: 104

Software function EZmax to determine and measure the maximum contour of the tool formed by the cutting tool in the workpiece

By converting the counter, for example not absolute dimension, differential dimension and chain dimensions, distances such as step length can be measured easily and accurately

Software function for determining oversize radii, angles, concentricity and much more

Print out measuring results conveniently and quickly on a label

Measuring programs
■ Shaft measurement
■ Cutting edge measurement
■ Angle measurement
■ Radius measurement
■ Specification measurement
■ Projector mode
■ Online help

EZmax
■ Maximum contour measurement
■ Label printing

Cutting edge inspection
■ Incident light control
■ Online Help

Configuration
■ System settings
■ Print settings
■ DNC settings
■ Update/Backup
■ Language selection
■ Registration
■ Transmitted light setting
■ Protected area
■ Software information
■ Online Help

Switch off device

Online Help
■ Quit Online Help
- Tool cutting edge in incident light at 12-fold magnification to inspect the cutting edge and to check for wear and spalling on the tool
- EZset zero point monitoring for 100% precise measurements after every change of adapter
- Brightness setting via 12 long-life power LEDs
- Compass needle – simple positioning of the camera to measure nominal values on the tool

**Tool management**
- Select the tool
- Quit the menu and do not take up the tool
- Quit menu and take up the tool
- Edit the tool
- Delete the tool
- Create a new tool
- Print out the tool
- Online help
- Scroll upwards
- Scroll downwards

**Adaptor management**
- Select adapter
- Calibrate adapter
- Quit menu and take charge of adapter
- Machine the adapter
- Quit menu and do not take charge of adapter
- Fit adapter
- Cancel adapter
- Online Help

**Cutting edge shape**
- Detected cutting edge shape
- Number of cutting edge shapes: 104
- Online Help

**Cutting edge measurement**
- OK
- Print
- Online Help
- Tool selection
- Playback

**Counter mode on transverse axis**

**Counter mode on longitudinal axis**
Software ImageController2

- Operator-independent measurement with dynamic crosshairs and automatic detection of cutting edge shape
- Up to five measuring results: Length, diameter, radius and two angles on the tool cutting edge
- Nominal values and tolerances can be defined
- Number of cutting edge shapes: 104
- Conveniently print measuring results onto a label

- Tool cutting edge in incident light at 20-fold magnification to check for wear and spalling on tool
- Brightness setting via 12 long-life power LEDs
- Changeover to a manually positionable set of crosshairs
- The EZnavigator compass needle guides the operator to the nominal position where measurement should be carried out (for example on stepped tools)
- The tool cutting edge and its measuring parameters are assigned to a tool set up in the tool management function

- Control unit-compliant data output (DOP) for machine tool including format generator to create post-processors/output formats. Over 100 output formats are included in the EZset DOP library
- Standard programs for specific measuring tasks with clearly defined presentation of tool parameters and input boxes
- Measuring programs to determine oversize radii and angles, concentricity, largest and smallest cutting edge and much more
- Operator guidance for mandatory inputs
- EZmax for determining and measuring the maximum tool contour formed by the cutting tool in the workpiece
- Nominal values with tolerances can be stored, green and red markings indicate if the tool cutting edge (actual values) is inside/outside tolerance
Software ImageController3

- Operator-independent measurement with dynamic crosshairs and automatic detection of cutting edge shape
- Up to five measuring results: Length, diameter, radius and two angles on the tool cutting edge
- Nominal values and tolerances can be defined
- Number of cutting edge shapes: 112

- Tool cutting edge in incident light at 40-fold magnification to check for wear and spalling on tool
- Brightness setting via 12 long-life power LEDs
- Changeover to a manually positionable set of crosshairs

- Graphics Management: The operator can assign a graphic from the integrated standard library to the tool or to the machine tool
- Safe operation and fast tool selection are possible
- Standard graphics formats such as jpeg, bmp, dxf und dwg can be loaded
- Tool Management: Tool management for complete tools including measuring sequence nominal values, tolerances and several items of image-related information

- Control unit-compliant data output (DOP) for machine tool including format generator to create post-processors/output formats. Over 100 output formats are included in the EZset DOP library

- Standard programs for specific measuring tasks with clearly defined presentation of tool parameters and input boxes

- EZmax for determining and measuring the maximum tool contour formed by the cutting tool in the workpiece
- Nominal values with tolerances can be stored, green and red markings indicate if the tool cutting edge (actual values) is inside/outside tolerance
EZslide
Simply individual

With EZslide menu navigation, it is possible by brushing a finger across the touchscreen to find your way swiftly to the desired display dialog in the main display for a further application.

EZslide enables you quickly and easily to obtain a user-specific view of the display dialogs on the main screen.
EZset tool inspection

Micro-precision in distance measurement in incident light, for example when measuring wear or when measuring tool geometry. With IC3 and the 40-fold magnification of the cutting edge image, you rapidly obtain a set of clearly formulated results.

Child’s play - it’s that easy! Measuring of wear and cutting edge spalling.
To achieve optimum machining results, turning tools must be set to tip height, or deliberately a certain amount above or below the rotational center axis. For this purpose, EZset offers the option of an additional monochrome camera for setting the rotational center axis of tool cutting edges. The crosshairs on the camera can be moved rotationally and laterally.

Data transfer with IC2 and IC3 direct to the CNC machine
With IC2 and IC3 you can transmit all tool data directly (i.e. electronically) from the tool presetter in a control unit-compliant manner to the CNC machine. The data output package is optional.

Maintenance unit
For worry-free preparation of the compressed air supply directly to the tool presetter.

EZprotection
The guard cover on the EZset tool presetter is there to protect it from dust and dirt.

EZ spindle-protection
A guard cover precisely dimensioned to fit the spindle and to protect it from the ingress of dust and dirt.
<table>
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<tr>
<th>Function</th>
<th>Description</th>
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<th>IC1</th>
<th>IC2</th>
<th>IC3</th>
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<td>Operation of menu using rotary pushbutton</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>EZtouch</td>
<td>Operation of menu using touchscreen</td>
<td></td>
<td></td>
<td>✔️</td>
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<tr>
<td>EZslide</td>
<td>Relocation/resizing of window areas using touchscreen</td>
<td></td>
<td></td>
<td>✔️</td>
<td>✔️</td>
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<td>TFT color monitor</td>
<td>7.0&quot;</td>
<td>7.0&quot;</td>
<td>12.1&quot;</td>
<td>17.0&quot;</td>
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<td><strong>Device version</strong></td>
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<td>SK50 tool holder spindle</td>
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<td>Pneum. spindle functions</td>
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<td>For supporting adapters</td>
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<tr>
<td>Adapter support</td>
<td>Additional adapter support as required</td>
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<td>Compass needle – simple positioning of camera for gaging purposes of nominal values on the tool</td>
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<td>Control unit-compliant for CNC machine</td>
<td>Machine/control unit-compliant output of measuring values and tool data from IC2/IC3 tool administration to CNC machine</td>
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<td>✔️</td>
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<tr>
<td>Control unit-compliant into network</td>
<td>Software for tool management and transmission of measured values via separate, customer-owned PC into network</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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</tr>
</tbody>
</table>

= standard  = optional  = not available
Benefit from our superior technology at an unbeatable price!

- Precisely set tools
- Optimized machine uptime
- No scrap