Presetting and Measuring Machine »smile«

The Entry-Level for the Professional Presetting and Measurement of Standard Tools

Highlights

- High quality
  Quality guaranteed - consistent use of high-quality brand products
- Precise
  High-precision spindle SK 50, high-quality optic, leading image processing technology
- Comfortable
  Variable control unit, ergonomic single-hand operating device »eQ«, membrane keypad and freely accessible tool holder spindle
- Easy to use
  Graphical user guide in the »pilot« image processing technology
- Flexible
  Extensive hardware and software options for an individual adjustment to your production
- Networkable
  Data transmission direct to your machine control unit

Software

Modern design and even more features: The software for all-inclusive tool measurement

»pilot 4.0«

- Graphic rich, self-explanatory user interface
- All features are easily accessible
- Large click and touch areas
- Photorealistic input interface
- Dynamic crosshairs
- Self-explanatory function keys
- Automatic cutting edge shape recognition
- Automatic zero point monitoring
- Clear and precise cutting edge display and inspection
- Tool and adapter management
- Tool identification
- Test report output
- Data transfer to the machine tool and interfaces to external systems

  and many other functions and options

▶ more

Simple and Flexible Operation of the Software via Touch Screen Technology

»pilot 2 mT«

- Slide, Drag and Drop function
- Graphical user interface
- Dynamic cross-hairs
- Automatic cutting edge form and measurement range detection
- Graphic and adapter management
- Cutting edge concentricity test
- Automatic zero point monitoring
- Data transfer options to machines and interfaces to third-party systems

  and many more functions

▶ more

Quickly and Easily Preset and Measure Standard Tools

»pilot 1.0«

- Easy to use, quick in the process
- Less machine downtime
- Better productivity
- Reduced rejects

  and many other functions

▶ more

Technical data

»smile 320«

Measuring range Z	Measuring range X
350 mm (13.8 inch)	160 mm (6.3 inch)
Ø	Snap gage Ø
320 mm (12.6 inch)	0 mm

»smile 420«

Measuring range Z	Measuring range X
420 / 600* / 800* mm (31.5 inch)	210 mm (8.3 inch)
Ø	Snap gage Ø
420 mm (16.5 inch)	100 mm (3.9 inch)

»smile 620«

Measuring range Z	Measuring range X
420 / 600* / 800* mm (31.5 inch)	310 mm (12.2 inch)
Ø	Snap gage Ø
620 mm (24.4 inch)	100 mm (3.9 inch)

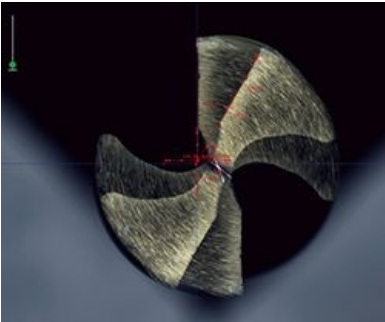*optional

Measurement programs

Vertical and Horizontal Dimensions, Radius, and Angle of Standard Cutting Tools

Measuring program for the simple measurement of vertical and horizontal dimensions, radius and angle of standard cutting tools.
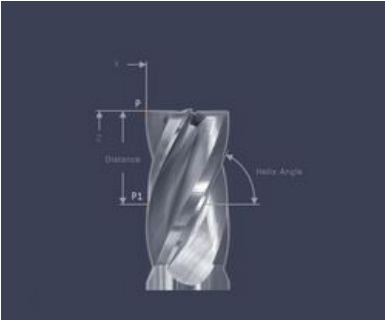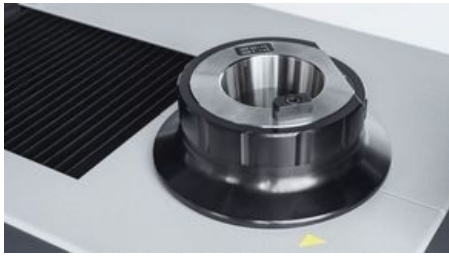

Oversize Method

Measuring program for the measurement of cylindrical reamers without support bar by oversize method.

Theoretical Tip

Measuring program for the determination of the theoretical tip at tapered cutting tools over several measuring points.

Options

Autofocus for »pilot«
Using the CNC controls for the spindle (C axis), the cutting tool edges on multi-insert cutters are also automatically approached and focused. This guarantees user-independent measuring results.

Precise/exact angle measurement
The rotation sensor positions the C axis fully automatically to the target angle. This allows the highly-precise measurement of spiral angles and divisions, as well as wobble compensation.

Manual fine setting
Hand wheels simplify the fine adjustment of the X and Z axes specifically for tool inspection.

Center height measuring
A perfectly preset rotation center increases the tool life and thus reduces your tool costs. Simultaneously, you shorten fitting times, prevent rejects and improve the quality of your workpieces.

Tool inspection For axial and radial inspection and testing of the contours of radii, angles, distances and wear and tear in incident light, with 50-times magnification of the cutting tool edge.

»zidCode« with labels With »zidCode«, data is quickly and easily printed onto labels and can be scanned directly into the CNC machine control. This means data transmission without errors.

Manual tool identification The read/write head is moved manually over the RFID chip on the tool holder. This chip can then be read and written to.

Semi-automatic tool identification The read/write unit is moved manually in the Z direction at the height of the RFID chip on the tool holder. The read/write head is moved in the X axis by the CNC controls. When the read/write unit detects the RDIF chip, it can be read and written to.

Data Transfer

»zidCode«

The efficient solution for tool identification and data transfer

RFID Chip

Fast way to the tool identification and data transfer

▶ to RFID Chip

Post Processor

Data output with DNC system prepared in a controller compatible manner

▶ to Post Processor

DataMatrix Code

Safe, quick and guaranteed error-free data transfer to your CNC machine

▶ to DataMatrix Code

Success is a Question of Attitude

ZOLLER »smile« is a must for manufacturing companies carrying out machining work: easy to operate, exclusively constructed with high-quality brand name components, comes equipped with all standard measuring functions for professionally presetting and measuring cutting tools, and suitable for difficult shop floor use thanks to its well thought-out construction.

The variable control unit, the ergonomic single-hand operating handle »eQ« and the freely accessible tool clamp make work more comfortable. In addition to quick and precise measurements, the »smile« guarantees direct transmission of tool data to your machine. There's plenty of reasons to greet the challenges that lie ahead with a smile.