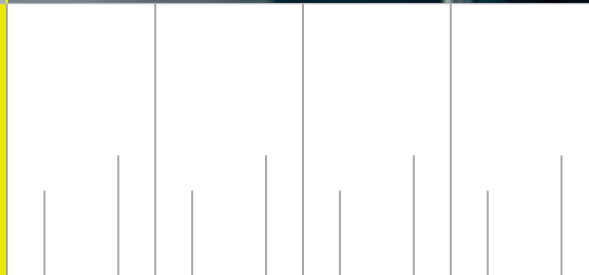
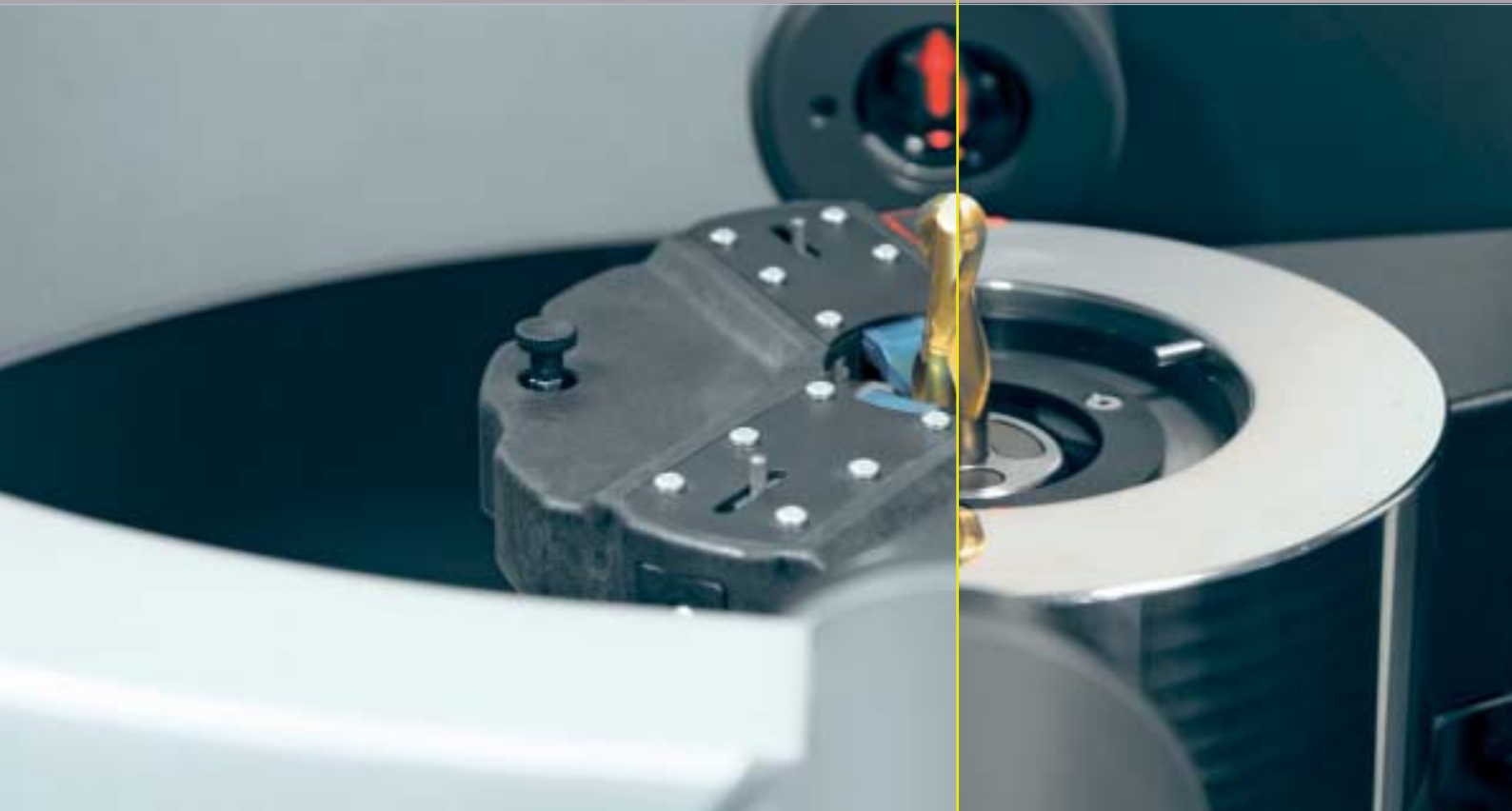


Presetting, measuring and shrinking machines  
redomatic & tribos



The universal presetting, measuring and heat-shrink machine  
»redomatic«

ZOLLER »redomatic« has been especially designed for heat-shrinking of tools to nominal length while at the same time presetting and measuring tools of all kinds.

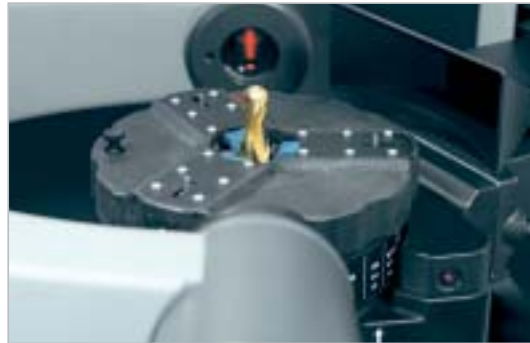
This unique combination of a presetting, measuring and shrinking machine has a modular structure, and is equipped with ZOLLER »pilot 3.0« image processing technology.

ZOLLER »redomatic« is the universal presetting, measuring and heat-shrink machine with a unique automatic length adjustment device.

With the automatic length adjustment device »ASZA« tools can be shrunk to at least  $\pm 10 \mu$  accuracy – quick, easy and automatic.

- Only 5 seconds for shrinking
- About 30 seconds for cooling

In addition, the ZOLLER »redomatic« is an "all-rounder" that perfectly masters the three disciplines of presetting, measuring and heat-shrinking of tools by being a world-class performer in every discipline on its own!



Presetting, heat-shrinking and measuring in one process – quickly and with high precision. Only the ZOLLER »redomatic« is capable of that.

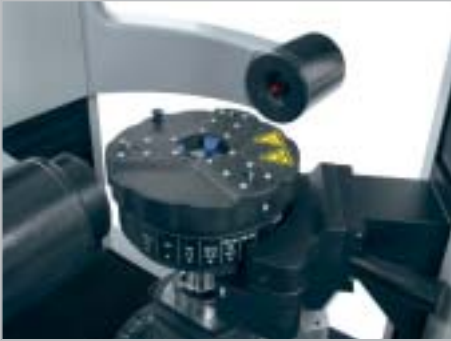
The advantages speak for themselves – turn the page and see for yourself!



»redomatic 450/6 - pilot 3.0«

## Presetting, heat-shrinking and measuring All-in-one procedure

Induction coil 13 kVA



Induction coil 13 kVA for heat-shrinking of carbide and HSS tools.

Carrier system



Side-unit supplying the heat-shrink control, cooling bodies, location holder, ZOLLER »masterPiece« and adjustment rods.

### ZOLLER »redomatic« highlights:

- CNC fine tuning and virtual joystick
- High-accuracy spindle »A.C.E.«
- Autofocus
- Electronic control unit and software »pilot 3.0«
- 17" TFT color display with QuickTouch control
- 15" satellite monitor
- Brand-name products for accuracy, trouble-free operation, long service life and low maintenance costs
- Brand-name products such as Sony cameras, Bosch pneumatics, Heidenhain measuring system, THK guides, etc.
- Induction shrink-clamping system 13 kVA
- Automatic monitoring of the shrinking length\*
- Monitoring of coolant tube\*
- Length adjustment device »ASZA«
- MQL capability\*
- Heat-shrink guidance system »s.l.s.«\*
- Gas suction device\*
- Adjustable induction coil
- No stop disks necessary
- Repeat and in-series shrinking functionality

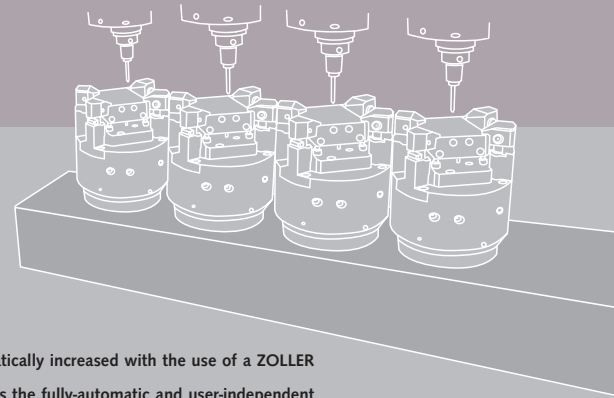
### ZOLLER vision system software

## »pilot 3.0«



- Automatic repeat heat-shrinking for highest accuracy
- Monitoring of tool clamping for steep taper, HSK, Capto tool holding fixtures, etc.
- Automatic zero point monitoring
- Unshrinking of damaged tools
- Induction technology available in 13, 20\* or 13/20 kVA version\*
- Manual quick heat-shrinking functionality

\* optional



The efficiency of multi-spindle machining is dramatically increased with the use of a ZOLLER »redomatic«. Only the ZOLLER »redomatic« offers the fully-automatic and user-independent shrink process that provides the level of accuracy required by multi-spindle applications.

### Tool identification



Tool identification with automatic height-adjustable read/write unit.\*

### High-accuracy spindle »A.C.E.«



High-accuracy spindle »A.C.E.« with universal clamping and length adjustment device »ASZA«.\*

### IPC control



IPC control with innovative cooling system, safely integrated for ease of use and accessibility



### Image processing technology with 17" color TFT monitor

For quick and easy operation with touch screen. Large buttons make the operation a child's play.



### Photo-realistic input dialog

Especially easy input of nominal data for a fully automatic heat-shrinking procedure.



### Parameters

Optimum heat-shrinking parameters with frequency, power and cooling time for carbide and HSS tools are already programmed into the system, and can be adapted and expanded by the user as required.

Only with ZOLLER  
All highlights at a glance

With ZOLLER »redomatic«, you profit from unique technologies and processes developed in-house at ZOLLER – making your work even easier while at the same time increasing safety and accuracy.

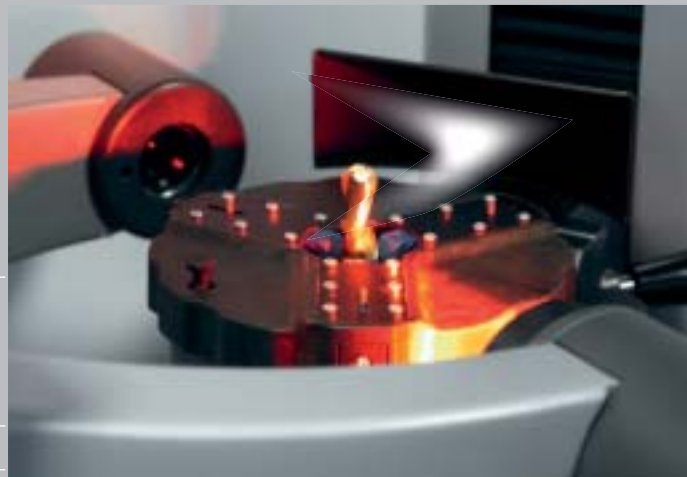
But see for yourself!

Swiveling device 13/20 kVA\*



The »redomatic« swiveling device 13/20 kVA heat-shrinks tools from  $\text{Ø } 4$  to  $\text{Ø } 50$  mm. The swiveling device itself is manually operated, the changeover from 13 to 20 kVA is performed automatically.

Gas suction device\*



The integrated gas suction device removes toxic gases directly from the heat-shrinking procedure into a filter unit. The operator's health is protected without any extra implementations.



00:00 Insert the shrink-clamping chuck



00:08 Insert »masterPiece« and tool



00:16 Automatic measurement of tool cutting edge



00:24 Remove »masterPiece«

### ZOLLER »masterPiece«: in 60 seconds precise to 10 micron

Thanks to intelligent, automatic procedures, the ZOLLER »masterPiece« enables you to heat-shrink tools of all types with the highest level of accuracy. In addition, minimized energy transfer reduces strain on the chucks and shortens the cooling and cycle times.

### Heat-shrink guidance system »s.l.s.«\*



The heat-shrink guidance system »s.l.s.« shows the operator required accessories and operating steps and provides an overview of the current shrink status.

\* optional





00:32 Induction coil moves automatically into position, heating starts



00:48 Insert tool



00:56 Cooling



00:60 Check measurement



#### Adjustable coil 13 kVA

This 13 kVA induction coil does not require any stop disks, but automatically adapts the contact diameter and the induction field to the current tool holding fixture.

The heat-shrink parameters are monitored to ensure that only the correct power parameters are being used for the shrinking process thus keeping the tool holding fixtures intact.



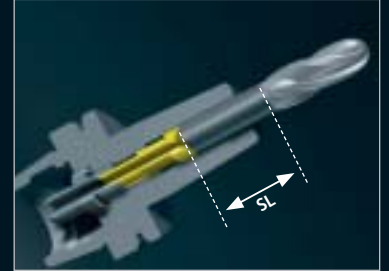


Only with the redomatic«:  
the unique new technological  
developments from ZOLLER!

## Higher safety and precision

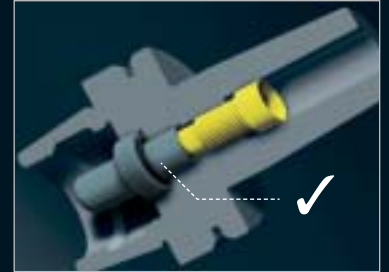
### Automatic monitoring of the heat-shrinking length

prevents damaging the clamping hole in the chuck and avoids tool breakage in the machine.



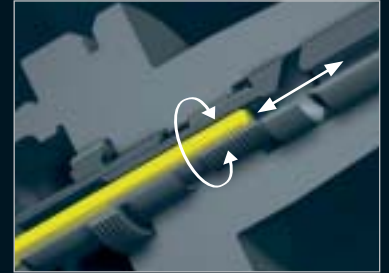
### Monitoring of coolant tube\*

Prevents passing of unsuitable shrink-clamping chucks on to the machine tool, which in turn eliminates damage of the machine spindle.

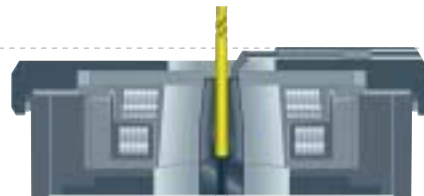
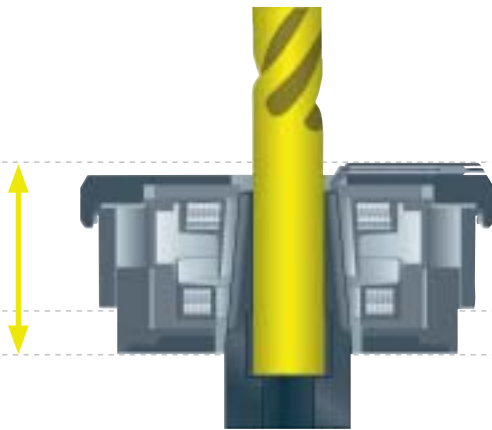


### Length adjustment device »ASZA«

Tools are preset to the nominal dimension with the linear and rotational axis, MQL screws are automatically positioned.



\* optional



The induction field automatically adapts to the current tool holding fixture.

Presetting, measuring and shrinking machine with Schunk TRIBOS clamping system

»tribos«

»tribos« presetting, measuring and shrinking machine with a modular structure and »pilot 3.0« image processing technology. Especially designed for shrinking of tools to nominal length in polygonal TRIBOS power shrink chucks as well as for presetting and measuring tools of all types.

ZOLLER »tribos« is a presetting, measuring and shrink-clamping system equipped with the Schunk TRIBOS clamping system.

The »tribos« can be used for presetting and measuring tools of all types as well as for clamping and unclamping, measuring and presetting of Schunk TRIBOS tools.

The TRIBOS clamping unit is automatically guided to the tool holding fixture and moved back into its original position after the clamping/unclamping procedure.

It doesn't get any faster, more accurate and convenient than with ZOLLER »tribos«!



»tribos 600 – pilot 3.0«

## ZOLLER vision system software »pilot 3.0«

### ZOLLER »tribos« highlights:

- CNC-controlled and virtual joystick
- High-accuracy spindle »A.C.E.«
- Autofocus
- Electronic control unit and software »pilot 3.0«
- 17" TFT color display with QuickTouch control
- Brand-name products such as Sony cameras, Bosch pneumatics, Heidenhain measuring system, THK guides, etc.
- Schunk TRIBOS clamping system
- Automatic slide unit for the TRIBOS clamping system
- Side unit for TRIBOS hydraulics and shelves
- Automatic zero point monitoring
- Automatic alignment of the TRIBOS tool holding fixture\*
- Automatic pressure transfer ZOLLER/Schunk\*
- Autonomous application of the Schunk TRIBOS clamping system

\* optional



### Automatic alignment

The Schunk tool holding fixture is automatically aligned before the clamping unit is lowered, so that the clamping surfaces on the tool holding fixture securely match the TRIBOS clamping unit.



### Automatic pressure transfer

The parameters for the TRIBOS clamping hydraulics are stored in »pilot 3.0« for each shank diameter and are automatically transferred. This avoids damage to the tool holding fixture.



### Autonomous application of the TRIBOS system

The software link to »pilot 3.0« and Schunk TRIBOS not only permits fully automatic presetting and measuring sequences but also manual usage of the TRIBOS system if desired.

**Presetting, shrinking and measuring in one process – and for the Schunk TRIBOS system. You'll only find this with ZOLLER!**

Swiveling TRIBOS clamping unit



Swiveling clamping unit for measuring and presetting larger tools without the TRIBOS system.

Side unit



For the Schunk TRIBOS hydraulics and for storing the adapter toolposts, reduction sleeves, etc.

Schunk TRIBOS automatic system



Automatic positioning of the Schunk TRIBOS clamping unit to shrinking position.

Simply unrivalled.

## ZOLLER's unique approach

Measuring and presetting with ZOLLER is easier, safer and more precise than with any other presetting and measuring machine.

- ZOLLER One-hand operating control with automatic slide clamping that is quick and easy to control. No separate mechanical axis clamping lever.
  - Membrane keyboard for power-actuated functions of the tool holding spindle, for spindle brake and 4 x 90° spindle indexing mechanism.
  - Brand-name products – including Heidenhain measuring systems, Sony cameras, Intel/Motorola processors, THK guides, NTN bearings and Bosch pneumatics - ensure long service life, high reliability, high precision and low maintenance costs.
  - Easy slide adjustment, with no stick-slip effect..
  - High-precision and universal tool holding spindles.
  - ZOLLER »compass« makes navigating to the cutting edge as easy as possible.
  - Unique automation and safety packages.
- ZOLLER »pilot 3.0« image processing technology with 17" TFT monitor and touch-screen operation.
  - Automatic cutting edge detection in all four quadrants – even for tool cutting edges > 90°.
  - Dynamic crosshairs.
  - Operator interface with user-friendly design.
  - Uncompromising and unique ergonomics.
  - Measuring programs for measuring tools of all types.
  - ZOLLER »A.E.C.« for automatic cutting edge inspection.
  - and many more

### » ZOLLER sets the bar higher.

- A financially secure, independent family enterprise in its third generation with subsidiaries worldwide.
- ZOLLER has the expertise in engineering, sales and service.
- More than 25,000 presetting and measuring machines have been sold worldwide since 1968.

### » ZOLLER is there for you – worldwide.

TRIBOS

TRIBOS is a registered trademark of Schunk GmbH & Co. KG, D-74345 Lauffen, Germany

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