

speroni®
precision by design



STP MAGIS



Ergonomically designed X axis (diameter) fine adjustment hand wheel allows for micron precise smooth adjustments throughout the system's 400mm range of travel.

A second fine adjustment hand wheel allows for micron precise smooth adjustments throughout the systems 400/500/600mm Z axis (height) range.

STP MAGIS

elegantly simple





Rapid axis movement has been designed to maximize the ease of use of the system. The operator can move the axis simultaneously or independently. Pneumatically activated for ergonomic comfort, this feature guarantees smooth and precise movement.



The integrated high precision vertical rotating spindle is designed according to Speroni's world famous standards of robustness, reliability and unmatched precision - 1µ concentricity. A pneumatically activated spindle disk brake and an ergonomic hand wheel are included for optimum focusing and adjustment of the tool cutting edge.

The MAGIS is a new line of tool presetter and measuring system & controls which revolutionizes the way one uses software in tool measuring. In today's world, software companies add screens, windows and menus in order to give the user more features. Speroni's MAGIS control for tool presetter and measuring combines all of the needed features and functions in a user friendly, clean and trouble free single screen user interface.

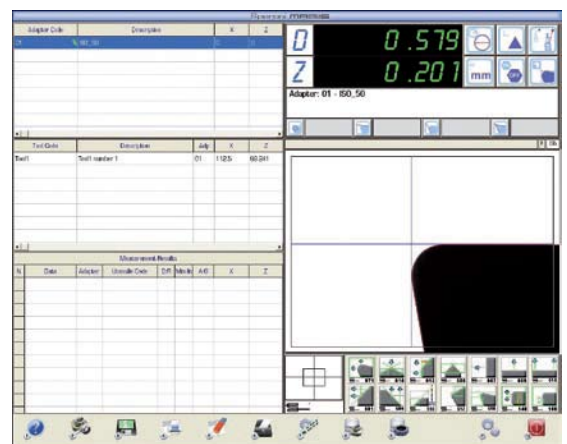
Available with optional touch screen technology, the new Speroni MAGIS will allow you to start measuring your tools accurately in less than 5 minutes of training.

True for all Speroni products, the structure is made completely of aged pearlitic cast iron in order to guarantee the best thermal stability. Contrasting most presetter designs, the homogeneous structure resolves all of the issues encountered on systems which use light alloys and/or granite, which have different and unstable reactions to changes in temperature & the environment.

Homogeneity is a key design element which has been proven on Speroni systems for over 40 years and in the metalworking field for even longer. The choice of materials for the basic structure of our systems is made in order to guarantee this fundamental design criterion.

The solid design, together with our excellence in manufacturing, eliminates the need for frequent recalibration due to changes in temperature during the work shift as well as guaranteeing the precision and repeatability of your system year after year. Due to this fact, the software compensation offered by other presetter manufacturers to compensate for misalignment is not necessary with a Speroni. The precision comes from the mechanical construction!

Start reducing your operating costs and improve your profits today!





Speroni-designed integrated Episcopy front light system allows you to see and evaluate the wear conditions of your tools before they are utilized, thus avoiding costly breakdowns in operation.

The standard cutting edge inspection feature through incident light technology - Episcopy - is provided with a powerful zoom function which allows for 120X magnification.

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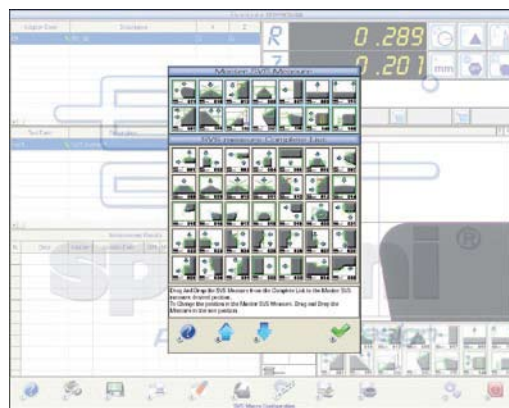
The technological and geometrical quality of tools is an element which greatly influences both the sheer quality on a single part produced and most importantly the quality applied to the quantity of parts manufactured. The tool has a primary importance in the management and achievement of an economic production process.

The structure of a quality presetter is sometimes overlooked. Speroni is a company that greatly emphasizes the importance of the structure of its systems: any great product is built from the "ground up" and the foundation is the key element.

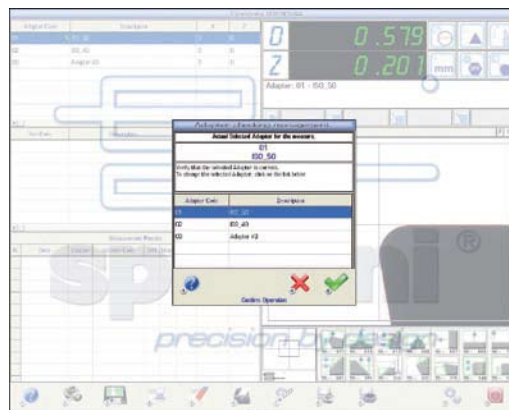
Speroni STP MAGIS is the new generation of tool presetting and measuring systems - the sound continuation of Speroni's unmatched technology resulting from over 40 years of research and development.

The STP MAGIS line of tool presetting and measuring systems are the most rugged, dependable machines in their class. Designed for shop floor use, these machines provide tool presetting, tool inspection, and tool management along with unmatched repeatability and precision.

STP MAGIS provides a complete measuring and inspection solution at an affordable price.



Over 130 specifically designed measuring icons allow for the precise and automatic measurement of all tool forms.



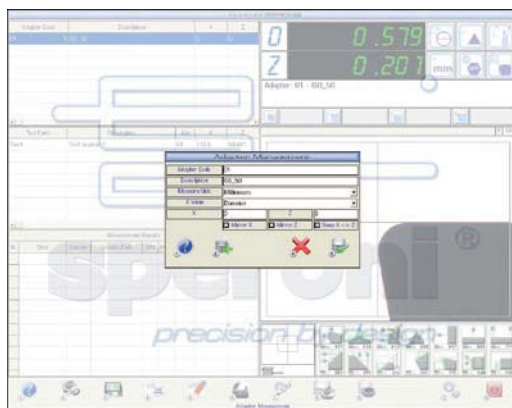
Adapter management and control includes an automatic zero point monitoring feature which helps avoid crashes, rejects and machine downtime.



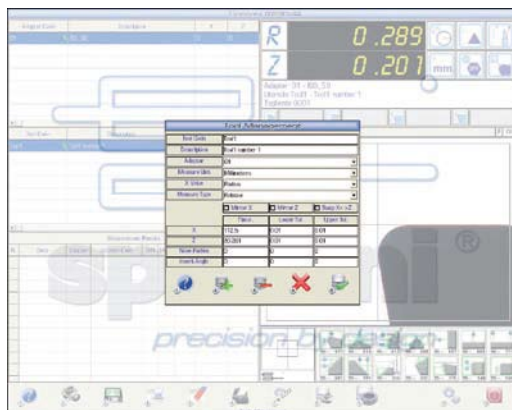
Industrial grade controls are conveniently positioned to maximize ergonomics and ease of use. The spindle disk brake system, the 4-position index and the tool clamping system are pneumatically activated. An ergonomic knob easily allows for the adjustment of the Episcopy front light system.

The MAGIS offers a precision ground integrated spindle calibration edge for the fast and easy recalibration of the system. Due to this tough gage, the system does not require the use of any external caliper or master.

Integrated adapter database management for 150 zero points.



Integrated tool management for the storage of 1,000 tool assemblies and their specific tolerances.



Modular design, optimum ergonomics and user friendliness have always been key features of Speroni tool presetting and measuring systems. The new STP MAGIS embeds all these key features in high tech and compact modern design.

A new and innovative design is applied to the new MAGIS control and software interface. The human/machine interface has been developed in order to deliver unmatched user-friendliness and ease of precise operation.

The new MAGIS PC-based control and image processing system is supplied with a brilliant and high resolution 17" TFT monitor (1,280 X 1,024) for a crisp and clear visualization of your tool data. The newly designed graphical interface makes the MAGIS control the most intuitive and easy to use vision system on the market today. A powerful online help function is also integrated in order to guarantee trouble free and secure use at any time.

As with all Speroni tool presetting and measuring systems, the new STP MAGIS is designed and fully manufactured - hardware and software - by Speroni. The software interfaces as well as the measuring algorithms are developed by Speroni software engineers in cooperation with leading universities in this field. Our design, manufacturing and development experience is coupled with some of the most prestigious components on the world market in order to deliver unmatched reliability.



Mounted directly on the system's structure, micron precise Heidenhain® glass scales, state of the art Schneberger® guideways, together with the largest and toughest recirculating ball bearing contact surface in its class, guarantee the highest precision and repeatability along the system's entire measuring range. Integrated cable carriers are present in both the X axis (base) and Z axis (column).

Ergonomically designed LCD monitor support arm provides for the best angle and work position possible in order to make your job easier and more comfortable.

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STP MAGIS 600



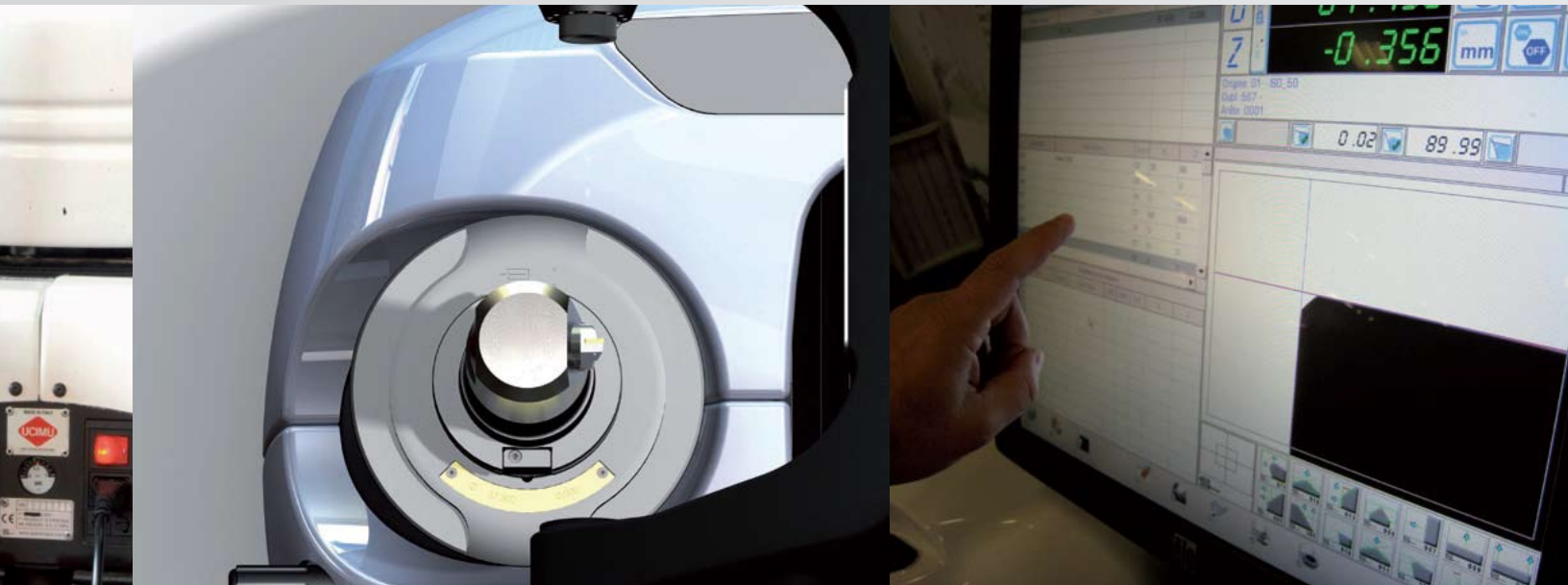
STP MAGIS 500



STP MAGIS 400

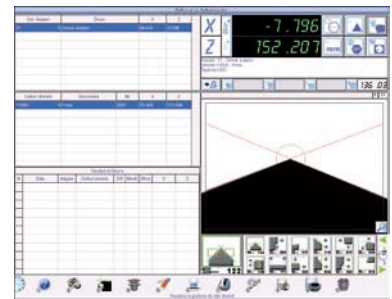
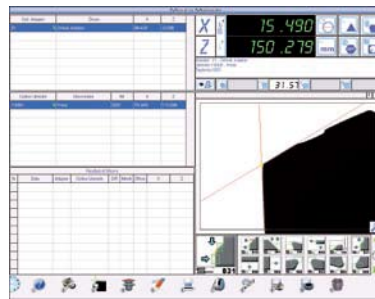
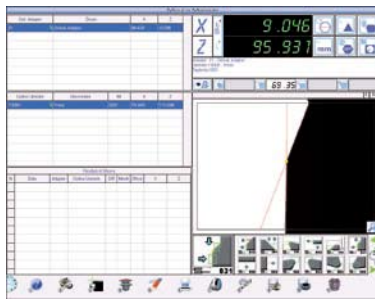
The modular design of the STP MAGIS tool presetter and measuring system allows you to customize and specifically configure a tool presetter and measuring system for your exact manufacturing needs.

STP MAGIS includes in its standard configurations key features such as a powerful pneumatically activated disk brake system, the new MAGIS PC-based control (brand name PC), LED technology Episcopy front light system - as well as many other features making the new generation Speroni STP MAGIS more economical than ever.

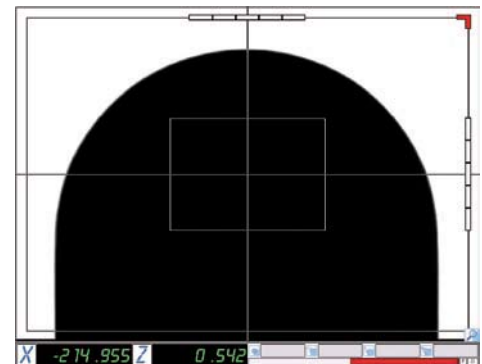
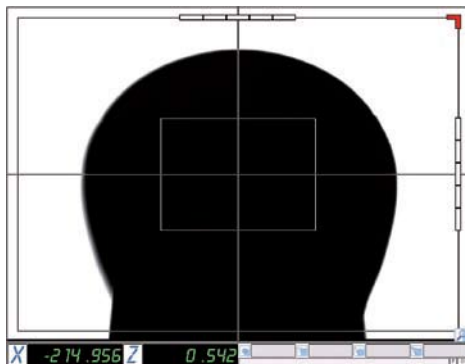


The "open spindle" design - a feature of Speroni tool presettors since 1969 - provides for the optimum loading and presetting of tools. The new MAGIS cast iron sensor carrier provides for over 170mm of access in the tool adjustment phase.

An optional 17" industrial grade touch screen monitor can be integrated with the keyboard and mouse operation for increased flexibility and ease of use.



Chamfer and step tool measurements are easily and automatically performed via the MAGIS control.



The powerful MaxP function provides an easy and user friendly method to accurately measure features such as a helicoidal ball nose radius. MaxP is designed to accurately measure a tool in its complete rotation automatically and without any programming.

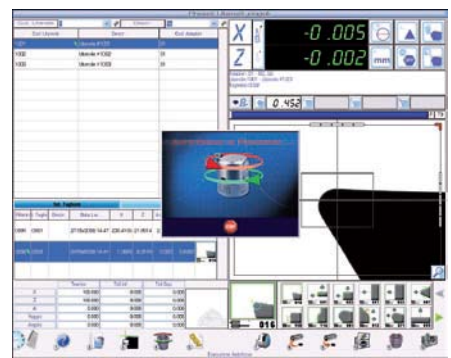
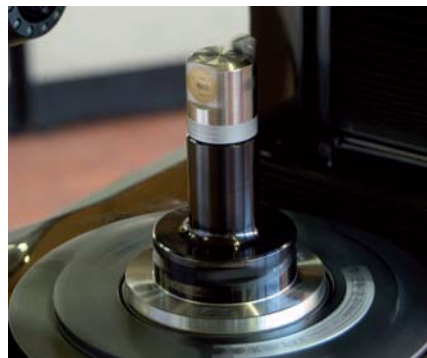


A center height camera system, complete with LED based front light technology, includes swiveling and adjustable cross-hairs and S.E.F. - Speroni Edge Finder technology - which allows for the adjustment of tool cutting edges center height.

Optional industrial grade workbench specifically designed and configured to provide a secure, solid and functional setup for the STP MAGIS system. Maple wood top, 1,525mm X 760mm, ideal for all tool-room operations.

EDGE & EDGE+

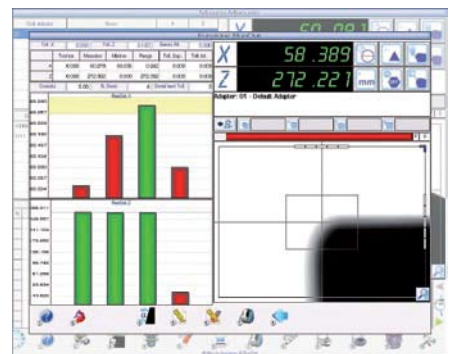
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The optional autofocus spindle and new EDGE+ control can be added in order to automate the important determination of the maximum diameter. The determination of the cutting edge's highest point is automatically measured independent of the operator and without any programming.



The new EDGE control (optional) automatic runout feature is the easiest and fastest way to determine your tool's runout without any specific programming. Coupled with the autofocus spindle system, this user friendly feature will allow you to assemble and adjust your tools effortlessly and precisely.

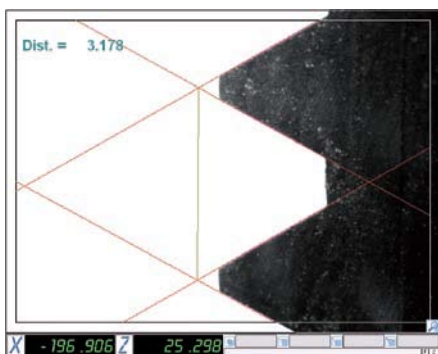




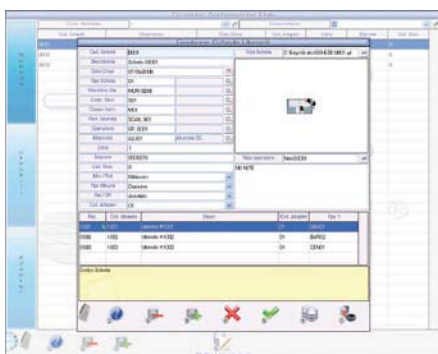
A large lockable door safely stores the PC control with room to spare. The cabinet is equipped with ventilation for optimal PC performance - industrial grade air filters prevent contamination and dirt which could affect the PC control.



Optional swing arm camera system for the measurement and inspection, via incident light, of all important tool parameters. This system is fully integrated so that the inspection is carried out during the presetting and measuring of the tool with no additional setup.

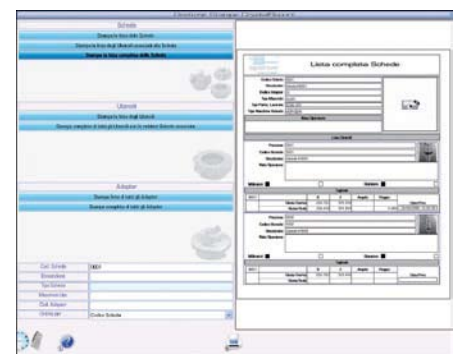


Newly designed and improved Spera Edge Finder software, together with the standard Spera Episcopy front light system, allows for the measurement of any desired parameter of the tool cutting edge such as distances, angles, radii, as well as wear indicators. A new graphical interface allows you to review and print out your measurements in their every detail.



Newly designed EDGE and EDGE+ controls are the perfect systems for those companies approaching tool management. A powerful database allows for the perfect organization of tools and kits in order to start optimizing your tool resources.

The powerful analysis and reporting feature allows for a fast and easy interrogation of your tool and kit database. Each tool and kit detail is clearly displayed, thus enabling the EDGE tool management feature to provide the right tool in the right place at the right time.





Spindle cleaners



Tool cleaning kit

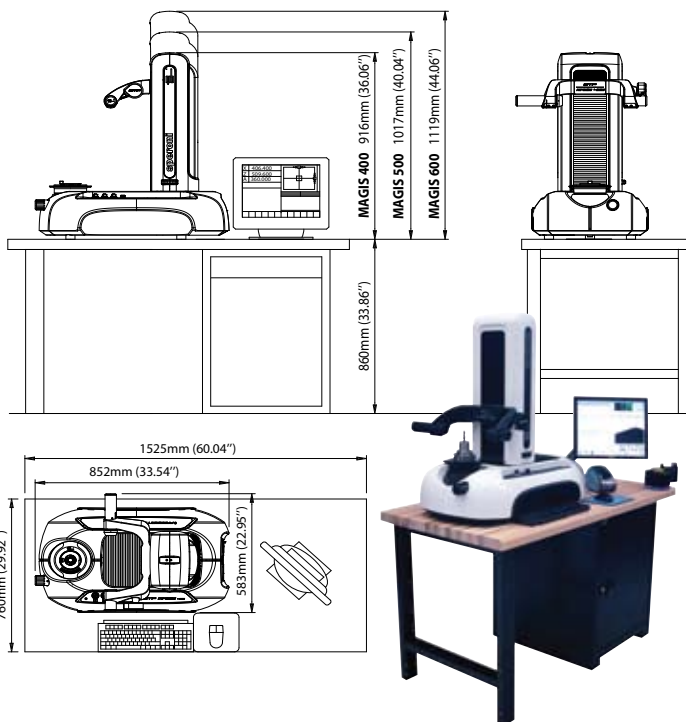


Tool Pro - a unique tool holding device for the easy and safe assembly and disassembly of your tooling.



Original design HSK reduction sleeves with mechanical clamping system.

STP equipment, models and options may vary due to specific market or legal requirements. The data in this catalog is purely indicative. For technical or commercial reasons Speroni may modify the models described at any time.



Specifications	MAGIS 400	MAGIS 500	MAGIS 600
Z Axis Travel	400mm/15.75"	500mm/19.69"	600mm/26.32"
X Axis Travel	400mm/15.75"	400mm/15.75"	400mm/15.75"
Max Ø	350mm/13.78"	350mm/13.78"	350mm/13.78"
Integral Spindle ISO 50	S	S	S
Spindle Disk Brake	S	S	S
Integrated Calibration Master	S	S	S
Autofocus	O	O	O
Pneumatically Activated Axis Movement	S	S	S
Fine Adjustment X & Z Axis	S	S	S
Tool Clamping System	O	O	O
Axis Resolution	1µ	1µ	1µ
T.I.R. @ 300mm	<5µ	<5µ	<5µ
Spindle Concentricity	1µ	1µ	1µ
Axis Positioning Repeatability [+/-]	2µ	2µ	2µ
MAGIS Control (PC Based)	S	S	S
CCD Camera	S	S	S
Episcopy Front Light System	S	S	S
Click & Drag Icon Management	S	S	S
Adapter Security Management	S	S	S
Integrated Monitor Support	S	S	S
Touch Screen 17"	O	O	O
EDGE Control (PC Based)	O	O	O
ProVision Control (PC Based)	O	O	O
Power	110V or 220V		
Consumption	<1 KVA		
Pneumatic Requirements	.5 - .7 Mpa (70 - 100 PSI)		
System Weight	200kg/440lbs	230kg/506lbs	260kg/572lbs
System Size			
Height	916mm/36.06"	1017mm/40.04"	1119mm/44.06"
Length	852mm/33.54"	852mm/33.54"	852mm/33.54"
Width	583mm/22.95"	583mm/22.95"	583mm/22.95"



Automatic clamping integral spindle for CAPTO, HSK, KM tooling.



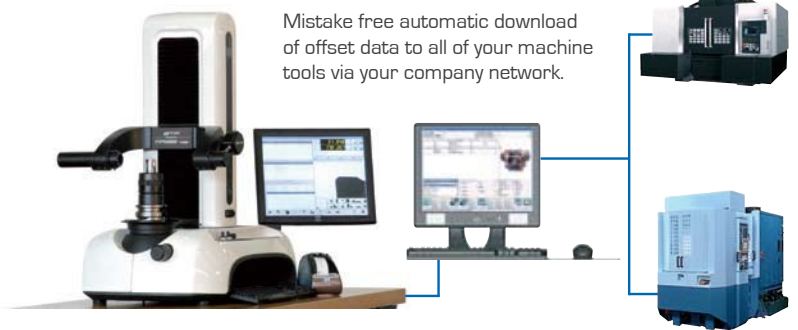
Range of reduction sleeves for ISO to ISO, ISO to VDI, ISO to KM, etc.



High precision Speroni original inspection bars & gages.



Label printers and optional customer configurable data labels.



Mistake free automatic download of offset data to all of your machine tools via your company network.



Integration via RS232 connection with your NC machine control.



Full integration with read/write tool identification systems.

Total Tool Setting Solution



The Total Tool Setting Solution offers a well-organized workspace for your employees.

This solution includes the STP MAGIS, the highest precision bench top model presetter available with its superior software and vision system.

The presetter is installed on a large workbench so that the operator has ample space to work.



In addition, the Total Tool Setting Solution from BIG Kaiser is equipped with the Tool Pro – a unique tool holding device for the assembly and disassembly of your tooling.

This Total Tool Setting Solution is efficiently organized on the workbench to improve efficiency and to increase your manufacturing productivity.



STP Esperia



The Speroni STP Esperia is the standard by which all other tool presetters are measured.

The STP Esperia is a high precision modular tool presetting system designed to increase profits and available machining time.

From the standard STP 44 to a fully optioned Shrink Fit CNC model, Speroni Esperia is in step with your ever changing tool presetting and measuring needs.

All Speroni Esperia models can achieve repeatable precision of 1 micron (0.000039") or better. All Speroni models are constructed with Pearlitic class 40 cast iron; this provides for added precision and consistency to measurements and increased system stability and durability.

The first class quality and construction of Speroni Tool Presetters are complimented by a world class service and support team.

BIG KAISER
PRECISION TOOLING INC.
641 Fargo Ave., Elk Grove Village, IL 60007
We are moving to a larger facility. Please use address below as of 11/09.
2600 Huntington Blvd., Hoffman Estates, IL 60169
Tel: 847.228.7660 • Fax: 847.228.0881
web: www.bigkaiser.com • e-mail: bigkaiser@bigkaiser.com

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