BIG KAISER

SPERONI & INNOTOOL
MEASURING INSTRUMENTS
2018-2019

MAXIMIZE YOUR
PRODUCTION CAPACITY
WITH A MEASURING INSTRUMENT

SPERONI

Ever since the beginning in 1963, Speroni has always applied a "Precision by Design" motto in all its work; each and every product that leaves the factory incorporates this philosophy. The development of the Speroni product is based on the fact that the systems are means of production and as a result they have to produce tangible economic advantages for their customers.

After more than 50 years in the development and manufacturing of tool presetting and measuring systems and of inspection robots (CMMs) for the geometrical measurement of machined parts in a shop floor environment, Speroni is convinced that they have to continue to maintain the quality and originality of their solutions guided by the needs of their customers.

The functions and solutions characteristic of the market's demand have always been dictated by the development and the importance of the tool resource in the manufacturing environment. Speroni has always supplied solutions to the specific demands before anyone else, as documented by their long history. Today, Speroni offers a vast line of products and solutions in the fields of tool preset, measurement & management and quality inspection of the manufacturing process.

In the future, Speroni wants to continue to work in close relationship with their customers all over the world in order to understand their needs and offer them the best technical and economical solutions. Solutions made using the most advanced technologies so that more and more companies around the world can benefit from the use of our Speroni systems. Speroni continues to invest towards the early "reading" of the market's needs in order to steer fundamental research and development activity in the direction that will keep delivering need-oriented innovations first.

INNOTOOL

The key competences of Innotool are the development and construction of new products. Actions needed by market changes can be taken quickly with the help of knowledgeable, flexible production. The creation and testing of prototypes, as well as low volume productions, are key ingredients of Innotool success. Assembly is another important aspect of the organization. All products will be assembled, tested and shipped from the facility in Altach, Austria. This guarantees continuous quality assurance for your precision.

- Innovative solutions for optimizing production
- High quality products at economic prices
- Development, testing, production and construction done by Innotool in Austria
- Flexible manufacturing capabilities, modern machines (YASDA, Hembrug, Mori Seiki, Enshu) and strong partners guarantee high quality machining processes
- Time savings during production thanks to zero-point clamping systems, thoughtful applications and palletized systems

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Why Preset Tools?

- Reduce tool cost — increase tool life
- More spindle uptime — no more measuring on your machine tool
- Precise and repeatable measurements
- First part precision — adjust tools to within tolerance and run your part
- Eliminate test cuts
- Increase operator and overall efficiency

Which Measuring Instrument is Best for You?

Features	DIASET	ESSENTIA	MAGIS	FUTURA	FUTURA AutoShrink
Measuring Range ø6" x 12" Length	●	●	●	●	●
Measuring Range ø12" x 16" Length	*	●	●	●	●
Measuring Range ø12" x 20" Length	*		●	●	●
Measuring Range ø12" x 24" Length	*		●	●	●
Measuring Range Greater than ø16" x 24" Length				●	●
Optical Measurement Capability	●	●	●	●	●
Label Printing	*	●	●	●	●
Creating Tool Offsets for Machine Tool Control	●	●	●	●	●
Tool Clamping			●	●	●
RFID Capability			●	●	●
Integrated Shrink Fit System					●

*Available upon request, non-stock item

BENCH TOP TOOL MEASURING INSTRUMENTS

BASIC MODELS

The DIASET provides a stable measuring column and a solid base made out of mineral cast. These features guarantee high rigidity as well as excellent temperature resistance for repeatability and accuracy of measurements. Precision scales, solid guideways and a digital display (which includes new standard functions) are making the measuring process easier and offering maximum measuring capabilities at an affordable price. The DIASET is available with either integral ISO50 or ISO40 taper spindles and has reduction adapters available for other common interfaces (ISO, HSK, KM, Polygon, etc.)

- High precision rotating spindle
- Maximum allowable runout: .0008" (.020mm) T.I.R.
- Fine-adjust hand-wheels (X & Z axis)
- Pneumatic locking mechanism (X & Z axis)

- Positioning accuracy of ±.0007" (.018mm)
- Dial indicator with digital readout
- Serial printer port

INNOVATIVE SOLUTIONS FOR OPTIMIZING PRODUCTION

DIASET

### High Quality Products at Affordable Prices

- Precision scales, solid guides and a digital display — making the measuring process easier
- Stable measuring column and a solid base made out of mineral cast
- Guaranteed high rigidity as well as excellent temperature resistance for high repeatability and accuracy of measurements
- Hardened and precision ground guideways are present on the horizontal (X) and vertical (Z) slides
- A single dial indicator for ease of calibration and measurement, with a camera option now available
- A large multi-function readout, or new LCD touch screen for use with camera
- High precision rotating spindle
- Pneumatic locking mechanism (X & Z axis)
- Serial printer port (printing option requires option to post process)

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## DIASET INDICATOR TYPE
2-Axis Indicator & Display

The DIASET's 2-axis indicator has an ultra-sensitive embedded mechanic carbide touch probe to detect the slightest measuring pressures. A large, digital display unit was designed to support the newest technical requirements of today's manufacturers. The display unit is conveniently located right behind the spindle to keep everything in a clear field of view.
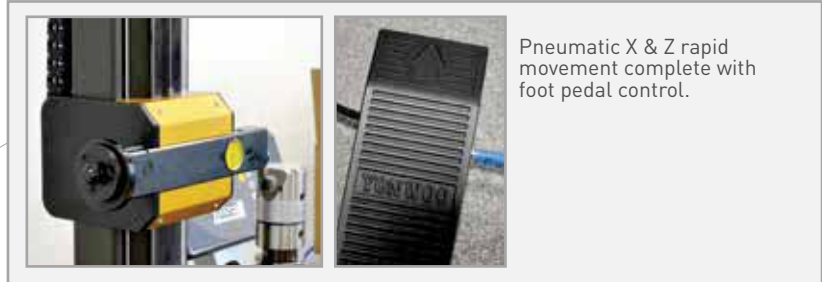
Pneumatic X & Z rapid movement complete with foot pedal control.

A variety of adapters available for common shanks.
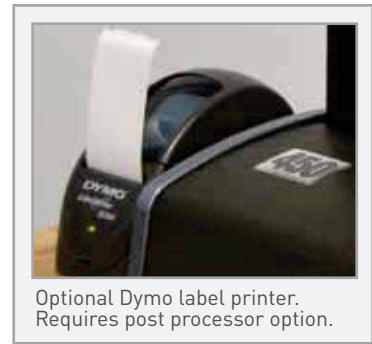
Optional Dymo label printer. Requires post processor option.

Catalog Number	Description	Measurement Method	Spindle Size	Max ø	Max Length	Positioning Accuracy	Power Requirements
31.110.200	DIASET TS 240	Indicator	ISO40	8.5 (220mm)	14.0 (360mm)	±.0007 (.018mm)	110V/60Hz/.5A
31.110.201	DIASET TS 250	Indicator	ISO50				
31.110.202	DIASET TS 241	Indicator	ISO40		18.0 (460mm)		
31.110.203	DIASET TS 251	Indicator	ISO50				
31.110.204	DIASET TS 450*	Indicator	ISO50	16.0 (410mm)	18.0 (460mm)		
31.110.205	DIASET TS 451*	Indicator	ISO50		22.0 (560mm)		
31.110.206	DIASET TS 452*	Indicator	ISO50		26.0 (660mm)		
31.110.207	DIASET TS Post Processor**	—	—	—	—	—	—

*Available upon request, non-stock item
**Requires HDMI monitor, keyboard & mouse, must be ordered separately

ACCESSORIES

**LABEL PRINTER
PG. 11**

**ADAPTERS
PG. 48**

BENCH TOP VISION BASED

DIASET CAMERA TYPE
Camera & LCD Touch Screen Option Available

- Measures angle, radius, length and diameter geometries with one touch

- Save data externally via USB for quick input into your machine control or printing to a label

- Inspect cutting edges for built up edge, flank wear, or fractures using the optional incident light for live picture

Pneumatic X & Z rapid movement complete with foot pedal control.

A variety of adapters available for common shanks.

Optional Dymo label printer. Requires post processor option.

A 5.7" color touch screen.

Catalog Number	Description	Measurement Method	Spindle Size	Max ø	Max Length	Positioning Accuracy	Power Requirements
31.110.210	DIASET TS 240	Camera	ISO40	7.0 (180mm)	14.0 (360mm)	±.0007 (.018mm)	110V/60Hz/.5A
31.110.211	DIASET TS 250	Camera	ISO50		14.0 (360mm)		
31.110.212	DIASET TS 241	Camera	ISO40		18.0 (455mm)		
31.110.213	DIASET TS 251	Camera	ISO50		18.0 (455mm)		
31.110.214	DIASET TS 450*	Camera	ISO50	14.0 (360mm)	18.0 (455mm)		
31.110.215	DIASET TS 451*	Camera	ISO50		21.0 (550mm)		
31.110.216	DIASET TS 452*	Camera	ISO50		25.0 (645mm)		
31.110.217	DIASET TS Post Processor**	—	—	—	—	—	—
31.110.218	DIASET TSC Incident Light for Live Picture	—	—	—	—	—	—

*Available upon request, non-stock item
**Requires HDMI monitor, keyboard & mouse

ACCESSORIES

LABEL PRINTER PG. 11

ADAPTERS PG. 48

BENCH TOP ACCESSORIES

WORKBENCH

Consists of a black steel cabinet with a 30x30 maple top. Comes with a hinged, lockable door. The workbench is equipped with a steel shelf that is height adjustable and excellent for the storage of accessories.

Catalog Number	Description	Length	Width	Height
32.100.016	DIASET Modular Workbench	30	30	34

• Other custom bench configurations available

DUST COVER

Place this custom vinyl cover over your tool measuring instrument, when it is not in use, to protect your investment from dust particles and other contaminants.

Catalog Number	Description
31.325.010	Dust Cover - DIASET

LABEL PRINTER

For quick and error free output of tool measurements and data on an label. Tool diameter/length and tool holder code may be output.

Catalog Number	Description
32.300.011	Dymo Label Writer - Printer*

*TS model requires post processor option to allow printing of label

BENCH TOP & STAND ALONE TOOL MEASURING INSTRUMENTS
ADVANCED MODELS

WHY SPERONI?
Precision by Design — The Foundation of All Speroni Tool Presetting & Measuring Systems

speroni
precision by design

Modularity: The modular design allows for a variety of configurations — offering customized solutions in standard products, and guaranteeing compatibility with future upgrades

Repeatability: The pearlitic cast iron design provides thermal stability — guaranteeing precision and repeatability, and eliminating the need for frequent recalibration

Longevity: Over fifty years of experience manufacturing future-proof technology through product evolution — so you can be sure your machine will never be obsolete

Unparalleled Accuracy: The combination of carefully selected components like the Heindenhain® scales, height precision guideways, Sony® CCD Camera, Dell® PC all function together to guarantee +/-.00008" precision

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Variety: Speroni offers products and solutions in the fields of tool preset, measurement and management, and quality inspection of the manufacturing process

All Encompassing: Speroni is not an assembly company, it is directly involved in all phases, so choosing Speroni means no proprietary companies, which allows you to go straight to the source for future service

Prestigious Customers: Speroni customers speak for the products — and whether in aerospace, automotive, energy, medical, agriculture, etc., the Speroni name can be found worldwide

STP ESSENTIA
Symmetric and Captivating Design for Maximum Ergonomics

The all new SPERONI STP ESSENTIA is our new entry-level Tool Presetting and Measuring system. Its robust structure and user-friendly software interface allow customers to benefit from a basic, essential unit with a tangible, long-lasting performance.

Equipped with micron precise glass scales, state of the art guideways and the largest and toughest recirculating ball bearing contact face in its class. Guarantees the highest precision and repeatability along the whole system's measuring range.

Efficiently measure tools, easily and independently of the operator achieving full machining productivity. Robust, space-saving, and long-lasting, ready to deliver quality results right beside your CNC machine

SPERONI high precision 50 taper rotating spindle with integrated calibration edge.

- The structure of the ESSENTIA is made completely of aged pearlitic cast iron in order to guarantee the best thermal stability

- Equipped with a 5 guideway system and spindle brake

- Touch control LED front light allows manual inspection of tool tips/inserts

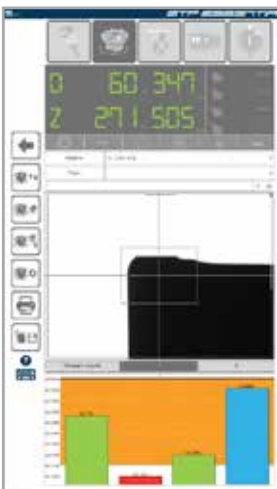Clear, concise and easy-to-use control specifically designed in order to optimize all tool presetting & measuring operations. An attractive multi-touch display efficiently complements STP ESSENTIA's design and ergonomics. Tool presetting essence delivered on a Windows™ OS PC-based display & sensor system with high-definition camera.
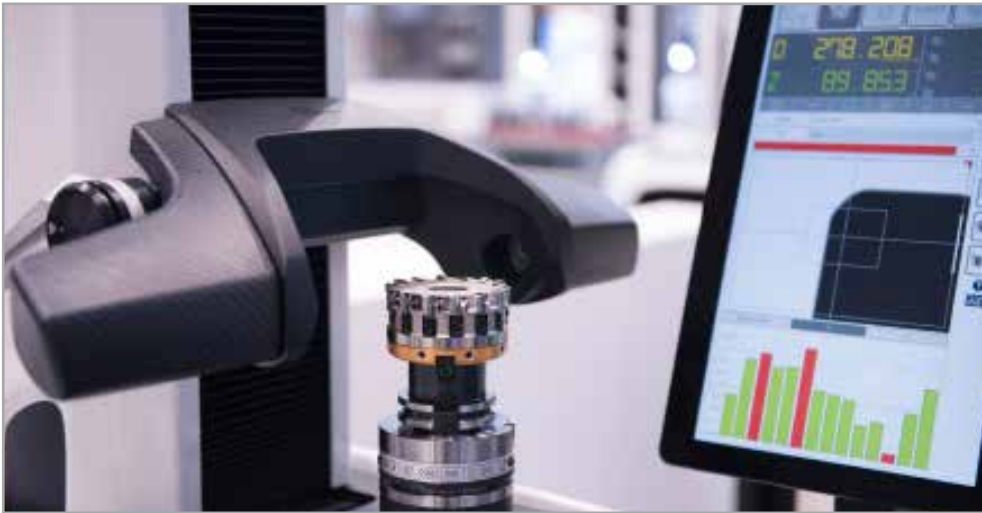
Manual Measurement

Runout Function

Measuring Icons Library
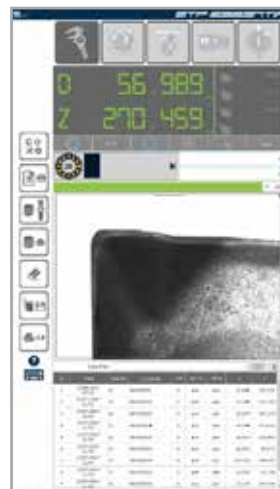
Incident Light

Post Processor

ACCESSORIES

LABEL PRINTER
PG. 53

ADAPTERS
PG. 48
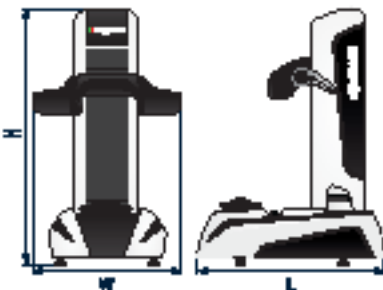
Catalog Number	Description	X Axis Max ø	Z Axis Max Length	Axis Resolution	L	W	H	Weight
32.123.0LH	ESSENTIA Left Hand	11.8 (300mm)	15.75 (400mm)	1um	33.5 (715mm)	23.0 (565mm)	36.0 (935mm)	200 lbs (90 kg)
32.123.0RH	ESSENTIA Right Hand							
32.123.000	ESSENTIA Fine Adjust Kit X&Z	—	—	—	—	—	—	—

MAGIS OVERVIEW
No Better or Easier Way to Improve Your Process

The STP MAGIS generation of tool presetting and measuring systems has revolutionized the value of entry-level tool measurement with unmatched ergonomic solutions. The innovative SIMPLE VISION control delivers all of the needed measuring features and functions in a user-friendly, clean and trouble-free single-screen user interface.

Rapid axis movement pneumatically activated. Independent and simultaneous buttons guarantee smooth and precise movement.

Industrial grade controls are conveniently positioned for ease of use. The pneumatically activated spindle disc brake system allows for locking at any point in the 360º rotation.

Front light (episcopy) allows for the manual inspection of the tool tip/insert detecting wear or cracks.

Precision ground integrated spindle with calibration edge for the fast and easy recalibration. Taper angle tolerance AT1. No need for an external caliper or master.

Equipped with micron precise Heidenhain® glass scales, height precision guideways and the largest and toughest recirculating ball bearing contact face in its class. Guarantees the highest precision and repeatability along the system's entire measuring range.

X & Z-axis fine adjustment hand wheels allow for micron precise smooth adjustments.

- The structure of the MAGIS is made completely of aged pearlitic cast iron in order to guarantee the best thermal stability
- The solid design eliminates the need for frequent recalibration, guaranteeing the precision and repeatability of your system
- High frequency sub-pixel analysis delivers a 45x standard optical magnification
- Integrated high precision vertical rotating spindle for robustness, reliability and unmatched precision — T.I.R .0003" at 400mm

MAGIS
The Most Intuitive and Easy to Use Vision System on the Market Today

The new SIMPLE VISION PC-based control and image processing system is supplied with a brilliant high resolution 22" monitor for a crisp and clear visualization of your tool data.

The newly designed graphical interface and a powerful online help function guarantees a trouble-free and secure experience.

MAGIS 400   **MAGIS 500**   **MAGIS 600**
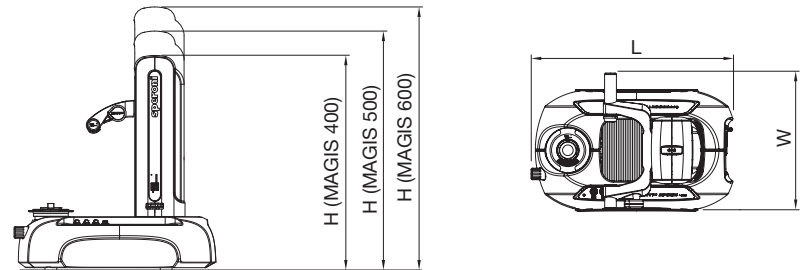
Catalog Number	Description	X Axis Max ø	Z Axis Max Length	Power	Consumption	Pneumatic Requirements	L	W	H	Weight
32.105.040	MAGIS 400		16.0 (400mm)				33.5 (852mm)	23.0 (583mm)	36.0 (916mm)	440 lbs (200 kg)
32.105.050	MAGIS 500	-2.0" to +14.0" (-30mm to350mm)	20.0 (500mm)	110V (60Hz up to 5 AMPs)	1...2 cfm	70-100 psi (5-7 bar)	33.5 (852mm)	23.0 (583mm)	40.0 (1017mm)	505 lbs (230 kg)
32.105.060	MAGIS 600		24.0 (600mm)				33.5 (852mm)	23.0 (583mm)	44.0 (1119mm)	570 lbs (260 kg)

- Standard integral spindle is ISO 50 taper, other options available
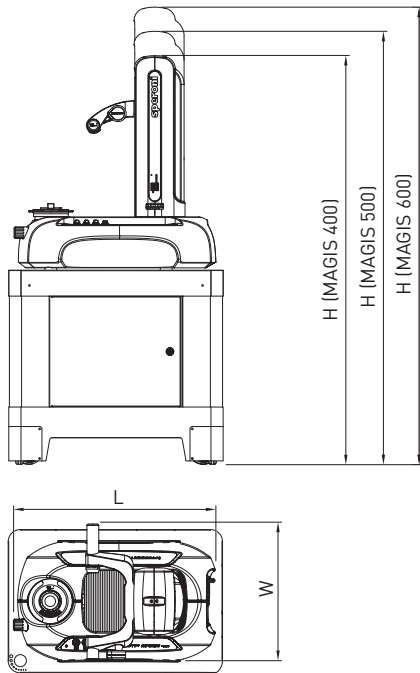- Standard control software is SIMPLE VISION, other upgrades available

ACCESSORIES

INTEGRAL SPINDLES
PG. 22

SOFTWARE OPTIONS
PG. 38

ADAPTERS
PG. 48

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MAGIS CNC
Now Available in a CNC Version for Operator Independent Measuring Results

Speed, precision and ease of use allows for fast and precise positioning of the axes. The combination of the CNC spindle and the CNC X & Z axis control delivers a full CNC MAGIS. You can now automatically execute measuring cycles, adding speed and precision to your measurements. The unmatched repeatability and quality will further increase efficiency and profitability in your operation.

Speroni designed black and white steel workbench provides enough working area for all presetting requirements.

H (MAGIS 400)
H (MAGIS 500)
H (MAGIS 600)

L

W

Industrial grade controls are conveniently positioned for ease of use.

Catalog Number	Description	X Axis Max ø	Z Axis Max Length	Power*	Consumption	Pneumatic Requirements	L	W	H	Weight
32.105.041	MAGIS 400 CNC		16.0 (400mm)				37.0 (940mm)	29.0 (737mm)	67.5 (1716mm)	505 lbs (230 kg)
32.105.051	MAGIS 500 CNC	-2.0" to +14.0" (-50mm to +350mm)	20.0 (500mm)	110V (60Hz up to 5 AMPs)	1...2 cfm	70-100 psi (5-7 bar)	37.0 (940mm)	29.0 (737mm)	71.5 (1817mm)	550 lbs (250 kg)
32.105.061	MAGIS 600 CNC		24.0 (600mm)				37.0 (940mm)	29.0 (737mm)	75.5 (1919mm)	595 lbs (270 kg)

- Standard integral spindle is ISO 50 taper, other options available
- Standard control software is EDGE 2.0, other upgrades available

ACCESSORIES

INTEGRAL SPINDLES
PG. 22

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AUTOMATIC MECHANICAL CLAMPING SYSTEM

The proprietary design of this automatic system allows for a high repeatability and accuracy in the measurement of the tool. All of this is achieved without adding or removing any component on the machine. Guarantees correct unclamp and immediate release of the taper.

3 SEC.
MAXIMUM CLAMPING TIME

BT   HSK   CAPTO   KM   VDI   ISO

CLAMPING FORCE 200KG

Catalog Number	Description
32.105.202	MAGIS ISO50 Automatic Mechanical Clamping System
32.105.203	MAGIS ISO40 Automatic Mechanical Clamping System
32.105.204	MAGIS ISO30 Automatic Mechanical Clamping System

Catalog Number	Description
32.110.037	HSK-32A/C Integral Spindle w/ Automatic Clamping
32.110.038	HSK-40A/C Integral Spindle w/ Automatic Clamping
32.110.039	HSK-50A/C Integral Spindle w/ Automatic Clamping
32.110.040	HSK-63A/C Integral Spindle w/ Automatic Clamping
32.110.041	HSK-100A/C Integral Spindle w/ Automatic Clamping

Catalog Number	Description
32.110.056	C3 Integral Spindle w/ Automatic Clamping
32.110.057	C4 Integral Spindle w/ Automatic Clamping
32.110.058	C5 Integral Spindle w/ Automatic Clamping
32.110.059	C6 Integral Spindle w/ Automatic Clamping
32.110.064	C8 Integral Spindle w/ Automatic Clamping

CAUTION ⚠

These systems are guaranteed for the following standard knobs: DIN 69872, ISO 7388/2A, ISO 7388/2B, MAS 403 BT, MAS 403 BT ANSI Type, ANSI 5.50 CATERPILLAR, BT (JIS 6339).

4 POSITION INDEX SYSTEM

The 90º spindle indexing system enables you to fix in four precise positions.

Catalog Number	Description
32.105.200	4 Position Index System

REDUCTION ADAPTERS
Automatic Integrated Clamping

This adapter will simultaneously clamp to the tool as it is clamped to the spindle. The adapter has an integrated calibration notch with calibration values etched onto the side plate.

Catalog Number	Description
32.310.100	ISO50 / ISO40 Speroni Original Reduction Adapter - A.I.C.
32.310.101	ISO50 / ISO30 Speroni Original Reduction Adapter - A.I.C.
32.310.102	ISO50 / ISO45 Speroni Original Reduction Adapter - A.I.C.
32.310.103	ISO40 / ISO30 Speroni Original Reduction Adapter - A.I.C.
32.310.110	ISO50 / HSK-40A/C Speroni Original Reduction Adapter - A.I.C
32.310.111	ISO50 / HSK-50A/C Speroni Original Reduction Adapter - A.I.C
32.310.112	ISO50 / HSK-63A/C Speroni Original Reduction Adapter - A.I.C.
32.310.114	ISO50 / HSK-80A/C Speroni Original Reduction Adapter - A.I.C.
32.310.116	ISO50 / HSK-80FM Speroni Original Reduction Adapter - A.I.C.
32.310.119	ISO50 / C3 Speroni Original Reduction Adapter - A.I.C
32.310.120	ISO50 / C4 Speroni Original Reduction Adapter - A.I.C
32.310.121	ISO50 / C5 Speroni Original Reduction Adapter - A.I.C
32.310.122	ISO50 / C6 Speroni Original Reduction Adapter - A.I.C

TOOL ID CHIP

While allowing for the reading & writing of tools equipped with an ID chip, tools can be automatically recognized and the measured data can be automatically written.

Catalog Number	Description
32.105.120	MAGIS Read/Write Balluff Hardware & Software Model BIS C - 650
32.105.122	MAGIS Tool Indentification Balluffs - Handle For Read/ Write Head

• P&F, Mazak and other systems available

CAUTION ⚠

Requires EDGE 2.0 Control Software.

AUTOMATIC CNC SPINDLE MOVEMENT

For the automatic research of the tool's maximum diameter. This feature provides a totally automatic determination of the tool assembly's maximum focus and greatly aids the operator in the measurement and inspection of the tool assembly. A powerful disc brake system locks the spindle at any point in the 360º rotation.

Catalog Number	Description
32.105.101	Automatic (CNC) Axis - Autofocus

• The spindle axis can also be rotated manually

Holders available for Reduction Sleeves & Accessories

WORKBENCH

Consisting of a black steel cabinet and 30x60 maple top work area. The closed workbench comes complete with PC storage shelf, one lower shelf excellent for accessories storage and a hinged lockable door. This area is ventilated for optimal PC performance.

Catalog Number	Description	Length	Width	Height
32.100.015	Modular Workbench - MAGIS	60	30	34

• Various options available to mount monitor and hand tools.

SPERONI ORIGINAL WORKBENCH

Prevent dirt and debris from corrupting your measuring instrument PC with this enclosed and ventilated workbench. Complete with storage area and lockable door to prevent any tampering. The Speroni designed black and white steel workbench provides enough working area for all presetting requirements. Reduction pockets can be purchased separately depending on tapers needed.

Catalog Number	Description	Length	Width	Height
32.105.175	Speroni Original Workbench - MAGIS	37	29	31

DUST COVER

Protect your investment with a custom vinyl cover. Place over the tool measuring instrument while not in use, to protect it from dust particles and other contaminants.

Catalog Number	Description
32.100.110	Dust Cover - MAGIS

FUTURA OVERVIEW
Unparalleled Precision, Repeatability and Longevity

The all new Speroni FUTURA line is the result of over 50 years of experience in the design and production of tool measuring and presetting systems. The FUTURA product line represents the most advanced and complete line of vertical tool presetting & measuring machines in its class.

reddot award 2014
winner

One hand rapid axis movement has been designed so the operator can move the axis simultaneously or independently. Because it's pneumatically activated, this feature guarantees smooth and precise movement of the linear axis.

Industrial grade controls for the spindle disc brake system, the 4-position index, the mechanical tool clamping and all other controls are conveniently positioned on the new cockpit system.

Integrated X and Z axis fine adjustment hand-wheels allow for smooth micron adjustments throughout the system's range of travel.

New high precision 50 taper vertical rotating integral spindle fully manufactured by Speroni provides the highest precision in its class (T.I.R. max 4μ at 300mm). Taper angle tolerance AT1.

New integrated adapter support is conveniently located in a drawer making them readily available and protected from the environment.

- The structure of the FUTURA is completely made of aged pearlitic cast iron in order to guarantee the best thermal stability

- Micron precise Heidenhain® glass scales, height precision guideways and the largest and toughest recirculating ball bearing contact face in its class, guarantees the highest precision and repeatability along the system's entire measuring range

- The solid design eliminates the need for frequent recalibration, guaranteeing the precision and repeatability of your system

- High frequency sub-pixel analysis delivers a 45x standard optical magnification

- Integrated high precision vertical rotating spindle — robustness, reliability and unmatched precision — 1μ concentricity and T.I.R @ 300mm of less than 5μ

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FUTURA
Fully Customizable Operator Working Position

As a manufacturer, it is Speroni's constant aim to push the boundaries of tool presetting & measurement. The challenges faced encompassed aspects such as safety, ease of use and design. Ergonomics is sometimes used just as a marketing slogan, but the FUTURA definitely sets the bar, becoming the benchmark in that department. While maintaining the unsurpassed open spindle design, and introducing a completely new and redesigned cockpit solution, FUTURA allows each operator to fully customize their working position.
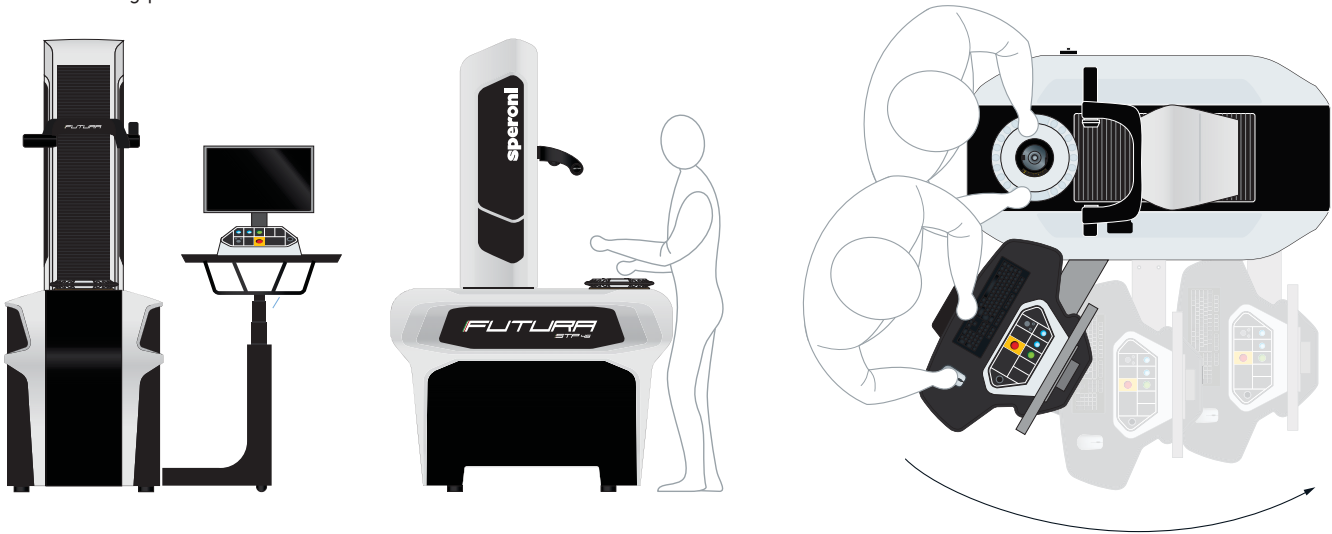
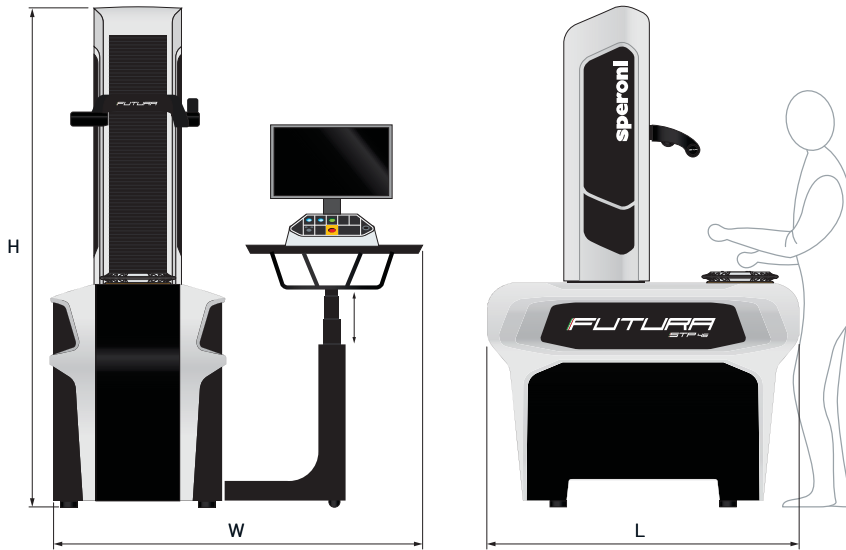

+/- .002mm GUARANTEED

| FUTURA STP 44 | FUTURA STP 46 | FUTURA STP 48 | FUTURA STP 612 |

STAND ALONE VISION BASED

Catalog Number	Description	X Axis Max ø	Z Axis Max Length	Power*	Consumption	Pneumatic Requirements	L	W	H	Weight
32.220.000	FUTURA STP 44	16.0 (400mm)	16.0 (400mm)				51.0 (1295mm)	63.0 (1600mm)	74.0 (1880mm)	1215 lbs (550 kg)
32.220.011	FUTURA STP 46	16.0 (400mm)	24.0 (600mm)				51.0 (1295mm)	63.0 (1600mm)	82.0 (2082mm)	1260 lbs (570 kg)
32.220.012	FUTURA STP 48		32.0 (800mm)				51.0 (1295mm)	63.0 (1600mm)	90.0 (2286mm)	1300 lbs (590 kg)
32.220.013	FUTURA STP 64	24.0 (600mm)	16.0 (400mm)				51.0 (1295mm)	63.0 (1600mm)	74.0 (1880mm)	1300 lbs (590 kg)
32.220.014	FUTURA STP 66		24.0 (600mm)				51.0 (1295mm)	63.0 (1600mm)	82.0 (2082mm)	1345 lbs (610 kg)
32.220.015	FUTURA STP 68		32.0 (800mm)				51.0 (1295mm)	63.0 (1600mm)	90.0 (2286mm)	1390 lbs (630 kg)
32.220.016	FUTURA STP 612		48.0 (1200mm)	100V (60Hz up to 5 AMP's)			51.0 (1295mm)	63.0 (1600mm)	106.0 (2692mm)	1435 lbs (650 kg)
32.220.017	FUTURA STP 84	32.0 (800mm)	16.0 (400mm)	110V (60Hz up to 5 AMP's)	1...2 cfm	70-100 psi (.05-.07 bar)	53.0 (1345mm)	63.0 (1600mm)	74.0 (1880mm)	1345 lbs (610 kg)
32.220.018	FUTURA STP 86		24.0 (600mm)	220V (50Hz up to 3 AMP's)			53.0 (1345mm)	63.0 (1600mm)	82.0 (2082mm)	1410 lbs (640 kg)
32.220.019	FUTURA STP 88		32.0 (800mm)				53.0 (1345mm)	63.0 (1600mm)	90.0 (2286mm)	1455 lbs (660 kg)
32.220.020	FUTURA STP 812		48.0 (1200mm)				53.0 (1345mm)	63.0 (1600mm)	106.0 (2692mm)	1500 lbs (680 kg)
32.220.021	FUTURA STP 124	48.0 (1200mm)	16.0 (400mm)				61.0 (1550mm)	63.0 (1600mm)	74.0 (1880mm)	1585 lbs (720 kg)
32.220.022	FUTURA STP 126		24.0 (600mm)				61.0 (1550mm)	63.0 (1600mm)	82.0 (2082mm)	1630 lbs (740 kg)
32.220.023	FUTURA STP 128		32.0 (800mm)				61.0 (1550mm)	63.0 (1600mm)	90.0 (2286mm)	1675 lbs (760 kg)
32.220.024	FUTURA STP 1212		48.0 (1200mm)				61.0 (1550mm)	63.0 (1600mm)	106.0 (2692mm)	1765 lbs (800 kg)

*Please specify power supply choice of 100V, 110V or 220V when ordering
• Standard integral spindle is ISO 50 taper, other options available
• Standard control software is SIMPLE VISION, other upgrades available

ACCESSORIES

SPINDLE OPTIONS
PG. 31

SOFTWARE OPTIONS
PG. 38

ADAPTERS
PG. 48

FUTURA AUTOSHRINK — Fully Automatic and Easy-to-Use, Preset, Measure & Shrink Fit System

Speroni was the first company to develop an integrated presetting and shrink fit system. While already considered top-of-the-line in terms of functionality, total accuracy and safety — the FUTURA AutoShrink is also the only hands-off fully automatic solution on the market.

The fully Integrated and hands-off automatic positioning coil for heating and cooling of the tool holders.

SAME FEATURES AS THE STANDARD FUTURA

Through pin is mounted inside the spindle body and allows for the fully automatic setting of all shrink fit tooling. Achieve the highest level of precision requiring no adjustment after the tool is shrunk.

Cockpit conveniently holds all setting and cooling sleeves as well as provides a rest position for the cutting tools to be assembled and disassembled.

- 1 micron resolution, positioning to +/- 2.5 microns, drive-pin becomes a true axis and allows for the highest level of precision
- Shrink fit any kind of tool including HSS tools ranging from ø6-32mm in diameter, additional quick-change coil is available for ø32-50mm
- Large range of diameter and taper degree in setting and cooling sleeves

Catalog Number	Description
32.220.071	AutoShrink Kit - 400mm & 600mm for FUTURA
32.220.072	AutoShrink Kit - 800mm for FUTURA
32.220.073	Automatic Fume & Gas Extractor for AutoShrink Kit

• Catalog numbers are an add-on option only and must be combined with a FUTURA catalog number
• Also available as AUTOTRIBOS
• Standard control software is EDGE PRO

ACCESSORIES

SPINDLE OPTIONS PG. 31

SHRINK OPTIONS PG. 35

TOOL ID CHIP

While allowing for the reading & writing of tools equipped with an ID chip, tools can be automatically recognized and the measured data can be automatically written. This software allows for the reading of the code field from the chip in order to automatically select the tool from the system database.

After the measurement/presetting of the cutting edge(s), it also allows for the writing of the actual measured data and possible nominal tool life information, as well as other data present within the Speroni.

An off-line feature allows for the complete reading and writing of the chips by typing the desired values from your keyboard. These values will automatically be checked for congruence.

Catalog Number	Description
32.220.083	Mechanical Slide for Read/Write Head - Automatic
32.220.084	Bar Code Reader - Uniscan C2R
32.220.085	Read/Write Balluff Hardware & Software Model BIS C - 650
32.220.087	Tool Identification Balluffs - Handle For Read/ Write Head

- P&F, Mazak and other systems available

CAUTION ⚠️

Requires EDGE 2.0 Control Software.

CNC CONTROL UNIT

Electronic micrometric movements allow for accurate and repetitive positioning of the X & Z axes. The positioning certainty of these two linear axis is 1 micron or .000039". This feature, together with the optional automatic CNC spindle movement, makes the measurement and inspection of the tool assembly completely operator independent. The mastering and recalibration of the system is a simple one step operation, which can be carried out on any of the Speroni original adapters stored in the database.

+/- .002mm
GUARANTEED

Micrometric hand-wheel, joystick and independent axes selection integrated in the control's cockpit for maximum ease of use and ergonomics.

BIG KAISER

AUTOMATIC CNC MOVEMENT

For the automatic research of the tool's maximum diameter, X & Z axes. This provides a totally automatic determination of the tool assembly's maximum focus and greatly aids the operator in the measurement and inspection of the tool assembly. A powerful disc brake system locks the spindle at any point in the 360° rotation.

Catalog Number	Description
32.220.008	Automatic (CNC) Axis - Autofocus
32.220.007	Automatic (CNC) Axis - X & Z
32.220.009	Automatic (CNC) Axis - Micrometric Handwheel

• All axis can also be moved manually
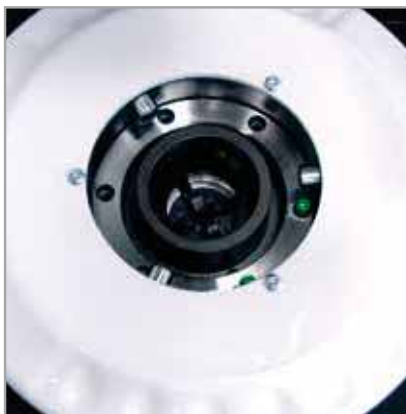
HIGH PRECISION UNIVERSAL VERTICAL ROTATING SPINDLE

The uniquely designed spindle construction includes the hyper static, simultaneous fit clamping system for standard and special tooling adapters. The massive construction of the Speroni universal spindle ensures that its intrinsic accuracy is maintained throughout the life of the system. The accuracy and T.I.R of the complete system is unmatched in both absolute terms and durability.

Catalog Number	Description
32.220.025	High Precision Universal Vertical Rotating Spindle

MECHANICAL CLAMPING SYSTEM

The pneumatically activated universal retention knob clamping system is a proprietary design of this system and is unique in the industry. It allows for the mechanical clamping of any standard size knob applying a draw of about 300 kg (550 lbs) to ensure a high repeatability and accuracy in the measurement of the tool. All of this is achieved without adding, removing or exchanging any component on the machine. Guarantees a correct and repeatable clamp, unclamp and immediate release of tool holders.

3 SEC.
MAXIMUM CLAMPING TIME

Catalog Number	Description
32.220.027	F-20 Tool Holder Mechanical Clamping System

QUICK CHANGE ADAPTER

Manually activated system allows the change of adapters in under 8 seconds, guaranteeing unmatched precision and accuracy not only within the spindle and adapter assembly, but also along the entire Z axis travel. The locking and unlocking of the adapters is carried out by rotating the multi-function spindle hand-wheel.

8 SEC.
MAXIMUM ADAPTER CHANGE TIME

Catalog Number	Description
32.220.026	Adapter Quick Change System

ISO 50 > C...   ISO 50 > HSK...   ISO 50 > ISO...

VDI   HSK   ISO   C3 ÷ C10

Many More Adapters Available

BIG KAISER is able to make adapters to your specific needs.

ISO10 TO ISO60 ADAPTERS

The taper is supplied complete with zeroing/calibration data etched on the adapter itself.

Catalog Number	Description
32.300.110	ISO30 Taper Q/C Adapter
32.300.111	ISO35 Taper Q/C Adapter
32.300.112	ISO40 Taper Q/C Adapter
32.300.113	ISO45 Taper Q/C Adapter
32.300.114	ISO50 Taper Q/C Adapter
32.300.115	ISO20 Taper Q/C Adapter
32.300.116	ISO25 Taper Q/C Adapter
32.300.117	ISO60 Taper Q/C Adapter

• All ISO adapters are manufactured by Speroni in accordance to the following standards: ISO 7388.1, DIN 69871, ANSI B 5.50, MAS/BT 403, DIN 2080, ISO 1947/1973 (E) & Taper Angle Tolerance AT1

C3 TO C8 ADAPTERS

The simultaneous fit and the automatic clamping mechanism supplied with this adapter allows for a secure and repetitive measurement of your polygon tooling. The clamping is carried out automatically via the optional F-20 mechanical clamping system.

Catalog Number	Description
32.300.170	C3 Manual Clamp Quick Change Adapter
32.300.170.1	C3 Auto Clamp Quick Change Adapter
32.300.171	C4 Manual Clamp Quick Change Adapter
32.300.171.1	C4 Auto Clamp Quick Change Adapter
32.300.172	C5 Manual Clamp Quick Change Adapter
32.300.172.1	C5 Auto Clamp Quick Change Adapter
32.300.173	C6 Manual Clamp Quick Change Adapter
32.300.173.1	C6 Auto Clamp Quick Change Adapter
32.300.174	C8 Manual Clamp Quick Change Adapter
32.300.174.1	C8 Auto Clamp Quick Change Adapter

HSK-25 TO HSK-160 ADAPTERS

The unique simultaneous fit design of the Speroni adapters deliver unmatched T.I.R. specs no matter the age of your presetting and measuring system.

• All HSK adapters are manufactured in accordance to the following standards: DIN 69893 /Type A/B/C/D/E/F

Catalog Number	Description
32.300.212	HSK-25E Quick Change Adapter
32.300.214	HSK-32A/C Quick Change Adapter
32.300.216	HSK-32E Quick Change Adapter
32.300.218	HSK-40A/C Quick Change Adapter
32.300.219	HSK-40B/D Quick Change Adapter
32.300.220	HSK-40E Quick Change Adapter
32.300.221	HSK-40F Quick Change Adapter
32.300.222	HSK-50A/C Quick Change Adapter
32.300.223	HSK-50B/D Quick Change Adapter
32.300.224	HSK-50E Quick Change Adapter
32.300.225	HSK-50F Quick Change Adapter
32.300.226	HSK-63A/C Quick Change Adapter
32.300.227	HSK-63B/D Quick Change Adapter
32.300.228	HSK-63E Quick Change Adapter
32.300.229	HSK-63F Quick Change Adapter
32.300.230	HSK-80A/C Quick Change Adapter
32.300.231	HSK-80B/D Quick Change Adapter
32.300.232	HSK-80E Quick Change Adapter
32.300.233	HSK-80F Quick Change Adapter
32.300.234	HSK-100A/C Quick Change Adapter
32.300.235	HSK-100B/D Quick Change Adapter
32.300.236	HSK-100E Quick Change Adapter
32.300.237	HSK-100F Quick Change Adapter
32.300.238	HSK-125A/C Quick Change Adapter
32.300.239	HSK-125B/D Quick Change Adapter
32.300.240	HSK-125E Quick Change Adapter
32.300.241	HSK-125F Quick Change Adapter
32.300.242	HSK-16A/C Quick Change Adapter
32.300.243	HSK-160B/D Quick Change Adapter
32.300.244	HSK-160E Quick Change Adapter
32.300.245	HSK-160F Quick Change Adapter
32.300.246	HSK-63F/M Quick Change Adapter
32.300.247	HSK-80F/M Quick Change Adapter

VDI16 TO VDI80 ADAPTERS

Simultaneous fit and the lateral manual clamp supplied with this adapter allows for a secure and repetitive measurement of your VDI tooling.

Catalog Number	Description
32.300.118	VDI30 Quick Change Adapter
32.300.119	VDI40 Quick Change Adapter
32.300.120	VDI50 Quick Change Adapter
32.300.121	VDI60 Quick Change Adapter
32.300.122	VDI80 Quick Change Adapter

PNEUMATIC COCKPIT HEIGHT ADJUSTMENT

Adjust the cockpit pneumatically to the most comfortable operating height with an adjustment range of 200mm.

Catalog Number	Description
32.220.036	Pneumatic Cockpit Height Adjustment

LABEL PRINTER SUPPORT

Support to place the Speroni defined label printer directly on the control arm of the machine.

Catalog Number	Description
32.220.047	Label Printer Support

PRINTER SHELF

Attached shelf to place the A4 printer directly at the machine.

Catalog Number	Description
32.220.048	Printer Support

SETTING SLEEVES

Available in metric and inch, setting sleeves are offered in a large range of diameters depending on the tool holder's size and tool shank size. Each sleeve is precision ground and marked for easy recognition.

INCH

Catalog Number	Description
32.316.201	Inch Shrink Fit Setting Sleeve Complete Set (9 pcs.)

Includes the Following Sizes:
3/16", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1¼"

METRIC

Catalog Number	Description
32.316.000	Metric Shrink Fit Setting Sleeve Complete Set (10 pcs.)

Includes the Following Sizes:
6mm, 8mm, 10mm, 12mm, 14mm, 16mm, 18mm, 20mm, 25mm, 32mm

COOLING SLEEVES

Available in metric and inch, cooling sleeves are offered in a large range of diameters and taper degree depending on the tool holder's size and tool shank size.

3°

Catalog Number	Description
32.316.110	Complete 3° Shrinker Cooling Sleeve Set

Includes the Following Sizes:
Metric — 5mm, 6mm, 8mm, 10mm, 12mm, 14mm, 16mm, 18mm, 20mm, 25mm
Inch — 3/16", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1¼"
• Extra large cooling sleeves available upon request.

4.5°

Catalog Number	Description
32.316.111	Complete 4.5° Shrinker Cooling Sleeve Set

Includes the Following Sizes:
Metric — 6mm, 8mm, 10mm, 12mm, 14mm, 16mm, 18mm, 20mm
Inch — 1/4", 3/8", 1/2", 5/8", 3/4", 7/8"
• Extra large cooling sleeves available upon request.

INDUSTRIAL POWER TRANSFORMER

Convert your plant's 220, 440, 460 or 480 volt 3 phase power to the 400 volt 3 phase power that is required for Speroni Futura AutoShrink.

| Catalog Number	Description
32.316.900	Power Transformer

BENCH TOP & STAND ALONE TOOL MEASURING INSTRUMENTS
CONTROL SOFTWARE

New and innovative designs have been applied to the Speroni control and software interfaces. 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.

WHICH SOFTWARE IS BEST FOR YOU?
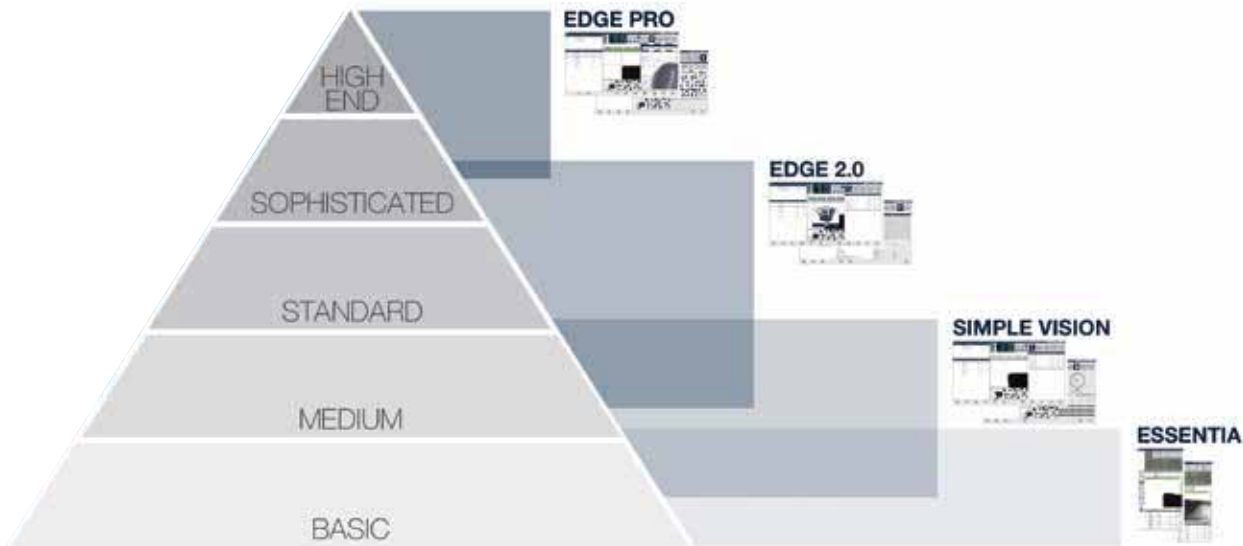
ESSENTIA Control Software

The new ESSENTIA control software is clear, concise and easy to use specifically designed in order to optimize all tool presetting & measuring operations. An attractive multi-touch display efficiently complements STP ESSENTIA's design and ergonomics. Tool presetting essence delivered on a Windows™ OS PC based display & sensor system with high definition camera.

SIMPLE VISION Control Software

The SIMPLE VISION PC-based control software and image processing system is supplied with a brilliant high resolution monitor for a crisp and clear visualization of your tool data.

The newly designed graphical interface and a powerful online help function guarantees a trouble-free and secure experience.

EDGE 2.0 Control Software

The new EDGE 2.0 control software is the complete control for tool management, user management, tool inspection and CAD interfacing.

The EDGE 2.0 system is ready to implement RFID solutions for improved tool management.

EDGE PRO Control Software

The new EDGE PRO control software is the complete control for manual and full CNC systems. The powerful database allows for the cataloging of tool jobs, assemblies, zero-points and adapters, as well as single components. Additionally, integrates with CAM software.

Together with the CNC axes, EDGE PRO provides an easy interface for the automatic measurement of all your tools.
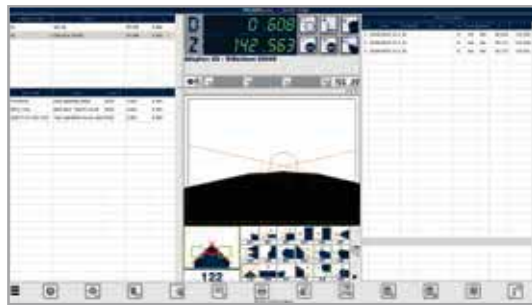
FLYING CROSS-HAIR

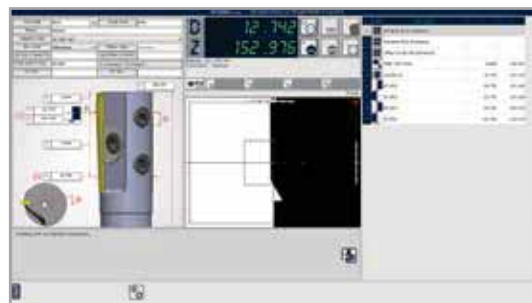Automatic measurement of height, diameter, angles and nose radius.
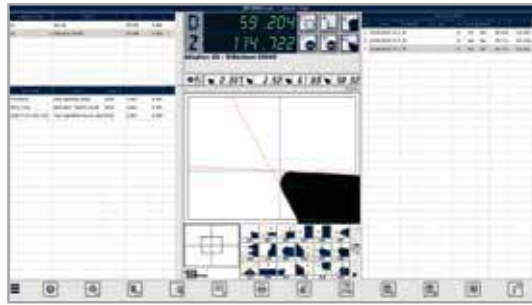
STEP TOOLS

Step tool measurements are easily and automatically performed.
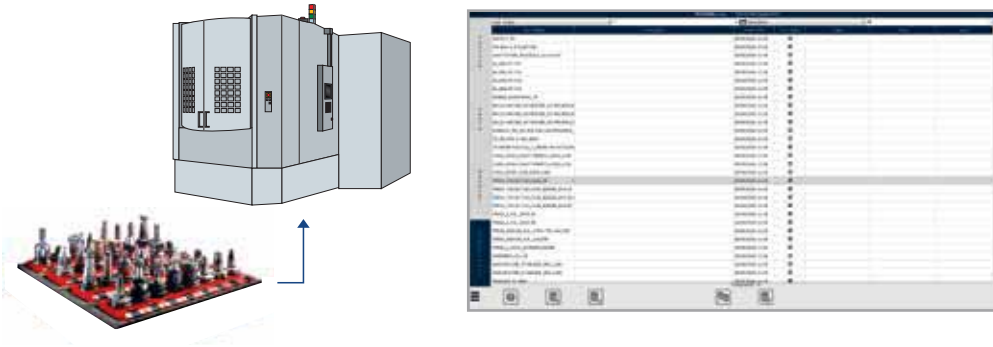
REAMERS

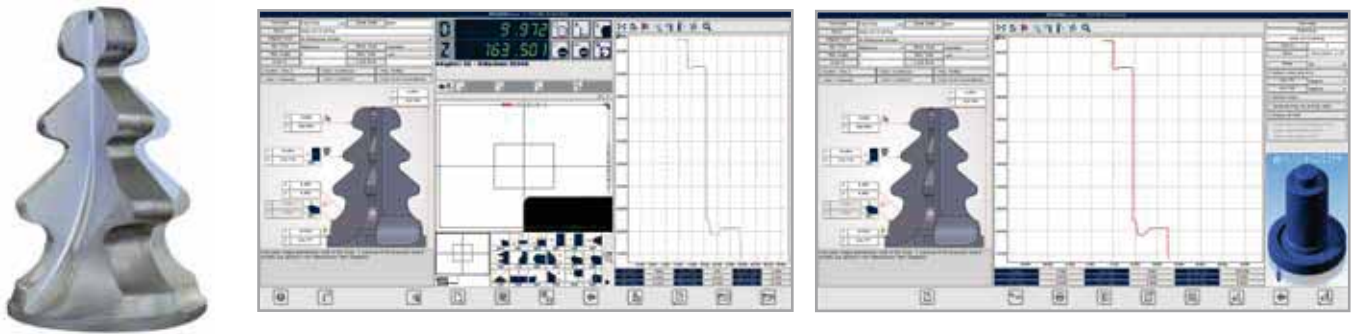Measurement and setting of reamers without any data entry.

JOB COMPARISON & TPL

Tool preparation list module allows you to easily and seamlessly prepare your tools for the next job.
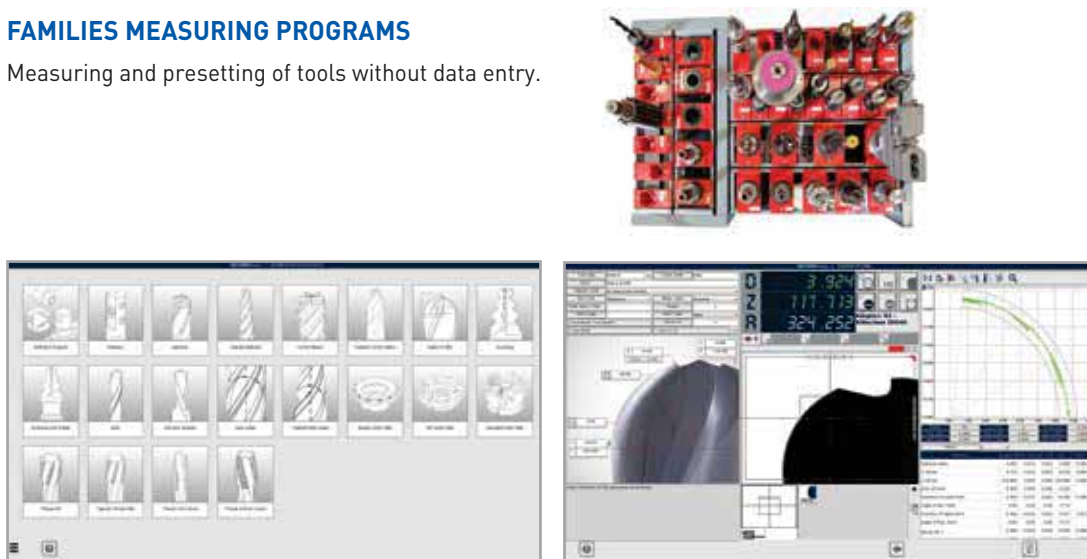

SCANNING FUNCTION

Measuring program for the measurement and scan of any tool contour.

FAMILIES MEASURING PROGRAMS

Measuring and presetting of tools without data entry.

3D RECONSTRUCTION AND MEASUREMENT

Automatic 3D generation and dimensioning of acquired features.

THREAD MILLS

Easy programming and accurate measurement of pitch length, pitch diameter, etc.

SIMPLE VISION

This newly designed interface is the standard software offered with a Speroni tool measuring instrument.

- Single window graphical interface
- Flying cross-hair
- 45x standard magnification
- Over 150 measuring icons
- Tool management for 1,000 tools
- Adapter & zero-point management
- Print management
- Dial indicator and runout functions
- MaxP function
- Full screen function and zoom to 120x
- Base post processor
- Data backup function
- Optional auto-focus function

STANDARD FOR MAGIS & FUTURA

TOOL & ADAPTER MANAGEMENT

Integrated tool management for the storage of 1,000 tool assemblies and their specific tolerances. Adapter management and control includes an automatic zero-point monitoring feature which helps avoid crashes, rejects and machine downtime.

AUTOFOCUS SPINDLE

Autofocus spindle can be added in order to automate the important determination of the maximum diameter as well as the execution of the runout function. The cutting edge's highest point is automatically measured independent of the operator and without any programming.

RUNOUT FUNCTION

Automatic runout feature is the easiest and fastest way to determine your tool's runout without any specific programming.

- Standard control software for MAGIS and FUTURA is SIMPLE VISION, other upgrades available

BIG KAISER

EDGE 2.0

The new EDGE 2.0 PC based control and image processing system is the complete control for tool management, user management, tool inspection and CAD interfacing. Rapid and always up to date traceability of all of the operations that are being carried out on the tool presetting and measuring system.

- All the features of SIMPLE VISION
- Full tool management
- Pictures and graphics management
- Autofocus management
- Quick report management

- History tracking
- Automatic data backup
- Jobs management option
- Full post processor option
- User management option

STANDARD
FOR MAGIS CNC

DATABASE AND STEP PROGRAMMING

Catalog and program all your tools in seconds either on line or off line via the optional EDGE 2.0 RDL system.

TOOL JOBS MANAGEMENT

Easily generate group lists of specific tool assemblies needed for specific machining cycles on your machine tools.

USER MANAGEMENT

Configure your system for multi-user access and different levels of use. Each operator autonomously defines a specific user ID and relative password and access level.

Catalog Number	Description
32.105.102	EDGE 2.0 - MAGIS
32.220.005	EDGE 2.0 - FUTURA

• Standard control software for MAGIS CNC is EDGE 2.0, other upgrades available

BIG KAISER

EDGE PRO

The new EDGE PRO PC-based control and image processing system is the complete control for manual and CNC configurations.

STANDARD
FOR FUTURA CNC &
FUTURA AUTOSHRINK

- All features of EDGE 2.0
- User management
- Jobs management
- Components management
- Manual & full CNC management
- Automatic measuring cycles (optional)
- Dedicated measurement cycles
- Interface to external TMS (optional)
- Interface to CAM systems (optional)
- Shrink management (optional)

The powerful database allows for the cataloging of tool jobs, tool assemblies, zero-points and adapters as well as single components.
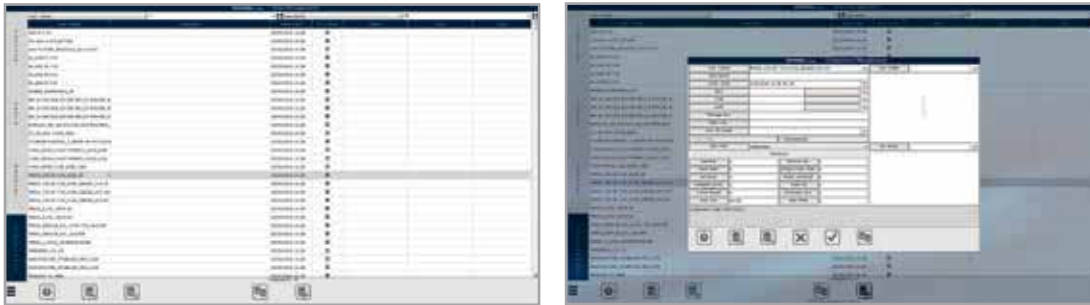
Together with the CNC axis, EDGE PRO provides an easy interface for the automatic measurement of all your tools.

SELF-TEACH PROGRAMMING

Powerful, flexible and extremely simple to use, the EDGE PRO self-teach programming allows you to freely program any simple or complex tool your way. The generation of a detailed and customizable inspection certificate is also a built-in feature.
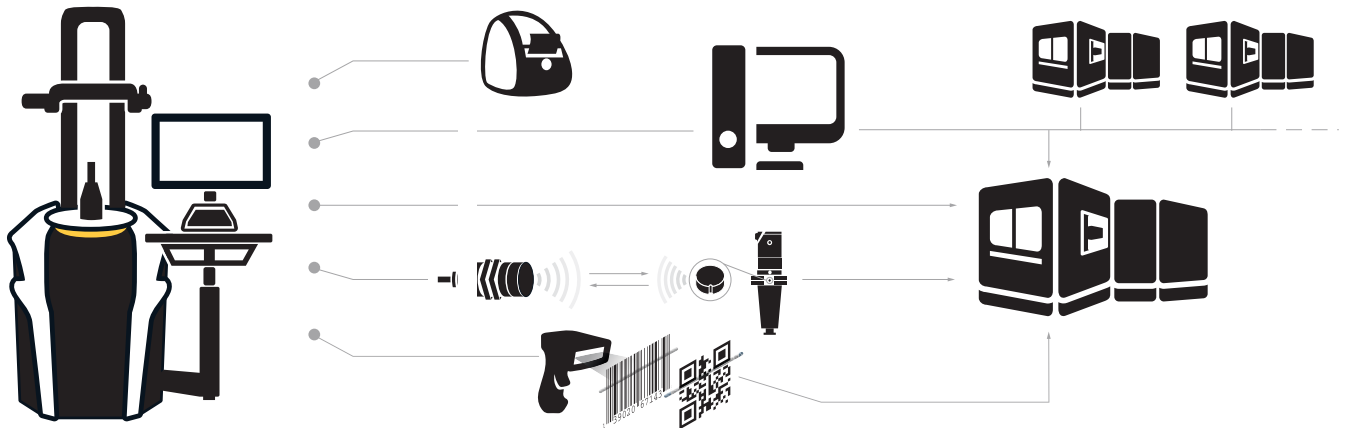

Catalog Number	Description
32.105.104	EDGE PRO - MAGIS
32.220.006	EDGE PRO - FUTURA

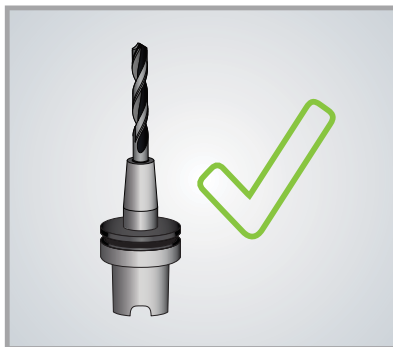• Standard control software for FUTURA CNC and FUTURA AutoShrink is EDGE PRO
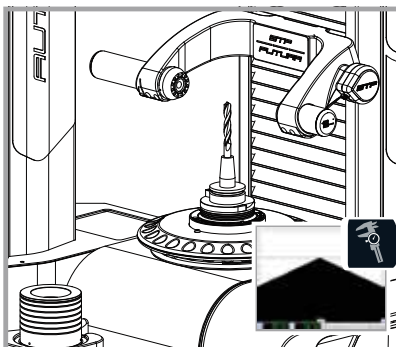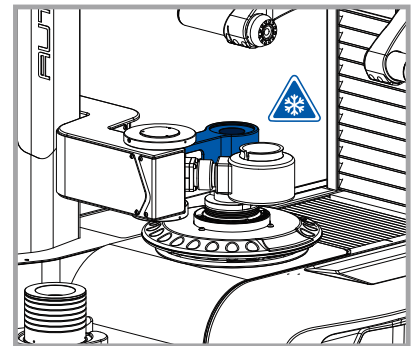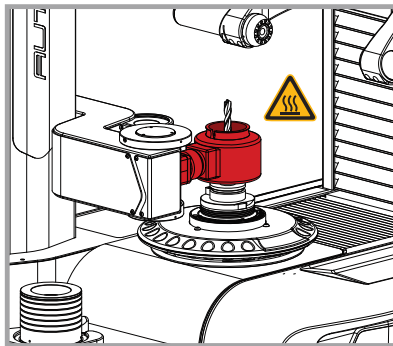
CONNECTIVITY TO RFID SYSTEMS

The EDGE 2.0 system is ready to implement RFID solutions at any time for improved tool management and data communication.

AUTOSHRINK DEDICATED SOFTWARE MODULE

Easy step-by-step and mistake-free dedicated software module guides the operator in the correct setting of any shrink tool assembly. Each step of the assembly and disassembly process is guided by clear graphics as well as text instructions for maximum user friendliness.

BENCH TOP & STAND ALONE TOOL MEASURING INSTRUMENTS
ACCESSORIES

SPERONI ISO TO ISO ADAPTERS

Designed with a precision ground notch and calibration tag stamped with values for quick referencing. A full taper allows for more spindle contact when inserted into the Speroni's ground integral spindle. Simple drop-in design used for accurately measuring Z (length).

Catalog Number	Description
32.310.094	ISO50 / ISO25 Speroni Original Reduction Adapter Sleeve
32.310.095	ISO50 / ISO30 Speroni Original Reduction Adapter Sleeve
32.310.096	ISO50 / ISO35 Speroni Original Reduction Adapter Sleeve
32.310.097	ISO50 / ISO40 Speroni Original Reduction Adapter Sleeve
32.310.098	ISO50 / ISO45 Speroni Original Reduction Adapter Sleeve

Precision Ground Taper Angle Tolerance AT1

ISO TO ISO ADAPTERS

Designed with zeroing/calibration data etched on the sleeve itself. Simple drop-in design used for accurately measuring Z (length).

Catalog Number	Description
31.330.002	ISO50 / ISO25 Reduction Adapter Sleeve
31.330.003	ISO50 / ISO30 Reduction Adapter Sleeve
31.330.004	ISO50 / ISO35 Reduction Adapter Sleeve
31.330.005	ISO50 / ISO40 Reduction Adapter Sleeve
31.330.006	ISO50 / ISO45 Reduction Adapter Sleeve

ISO taper according to DIN 69871

BIG DAISHOWA ISO TO POLYGON ADAPTERS

Designed with a rear access locking mechanism to allow for manual clamping of your polygon taper tooling. Must be actuated using an allen wrench — not supplied with adapter. Adapter must be referenced on face of adapters for accurate Z (length) readings.

Catalog Number	Description
BBT50-C5-40	BIG Daishowa Original Rear Clamping Adapter ISO50 / C5
BBT50-C6-50	BIG Daishowa Original Rear Clamping Adapter ISO50 / C6
BBT50-C8-70	BIG Daishowa Original Rear Clamping Adapter ISO50 / C8

• Allen wrench not included

ADAPTERS

SPERONI ISO TO HSK ADAPTERS

Speroni's adapter sleeve unique design includes an integrated clamping system which delivers unmatched T.I.R specs and ensures secure and repetitive clamping of your HSK tooling. The design allows for tool holder clamping without having to remove the coolant tube. Supplied with a precision ground notch and calibration gage with stamped values for quick referencing.

PRECISION GROUND TAPER ANGLE TOLERANCE AT1

Catalog Number	Description
32.110.001	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-32A/C
32.110.001.1	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-32E
32.110.002	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-32F
32.110.003	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-40A/C
32.110.004	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-40B/D
32.110.005	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-40E
32.110.006	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-40F
32.110.007	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-50A/C
32.110.008	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-50B/D
32.110.009	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-50E
32.110.010	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-50F
32.110.011	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-63A/C
32.110.012	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-63B/D
32.110.013	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-63E
32.110.014	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-63F
32.110.019	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-100A/C
32.110.020	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-100B/D
32.110.021	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-100E
32.110.022	Speroni Original Manual Side Clamping Adapter ISO50 / HSK-100F

BIG DAISHOWA ISO TO HSK ADAPTERS

Designed with a lateral access locking mechanism to allow for manual clamping of your HSK tooling. Must be actuated using an allen wrench (not supplied). Also contains internal access hole for coolant-through HSK tooling. Adapter must be referenced on face of adapters for accurate Z (length) readings.

Catalog Number	Description
BT50-TPA/HSK32E-100	BIG Daishowa Original Side Clamping Adapter ISO50 / HSK-32E
BT50-TPA/HSK40-100	BIG Daishowa Original Side Clamping Adapter ISO50 / HSK-40A/E
BT50-TPA/HSK50-100	BIG Daishowa Original Side Clamping Adapter ISO50 / HSK-50A/E
BT50-TPA/HSK63-100	BIG Daishowa Original Side Clamping Adapter ISO50 / HSK-63A
BT50-TPA/HSK63F-100	BIG Daishowa Original Side Clamping Adapter ISO50 / HSK-63F

• Allen wrench not included

INNOTOOL ISO TO HSK ADAPTERS

Designed with zeroing/calibration data etched on the sleeve itself. Simple drop-in design used for accurately measuring Z (length).

Catalog Number	Description
31.330.024	ISO50 / HSK-63A/C/E Adapter Sleeve
31.330.027	ISO50 / HSK-50A/C/E Adapter Sleeve
31.330.052	ISO50 / HSK-40A Adapter Sleeve
31.330.053	ISO50 / HSK-80A Adapter Sleeve
31.330.054	ISO50 / HSK-100A Adapter Sleeve
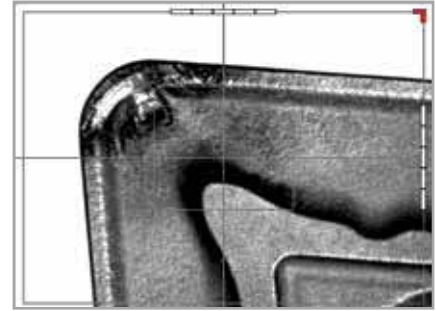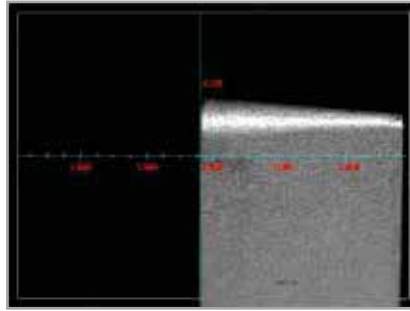
SECOND CCD CAMERA

The fixed second CCD Camera is also equipped with a dedicated inspection light. Field of view is 6mm x 4.5mm and has a visual magnification of 45x with a zoom function of 120x magnification.

This additional camera is completely independent from the optic that comes with the S.V.S. vision system. It is used to determine the center height of lathe and turning tools, as well as for the frontal radial inspection of any tool type.

The software edge finder allows for the manual measurement of radii, angles and distances on the illuminated cutting tool surface. This analysis is displayed on the same screen surface as the S.V.S. vision system and it can easily be activated via the symbols of the vision system.

Catalog Number	Description
32.105.212	Center Height Camera - MAGIS
32.220.061	Center Height Camera - FUTURA

• The maximum space between the optic carrier is 220mm

CAUTION ⚠️

This option requires EDGE 2.0 or EDGE PRO software module.
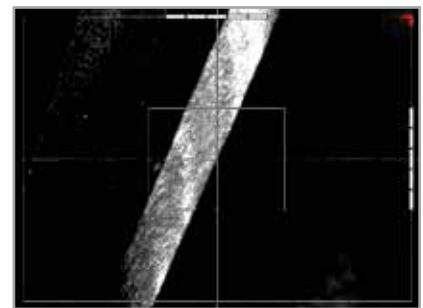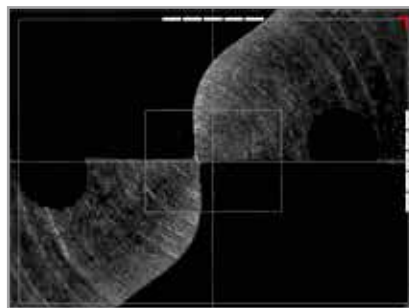
SECOND CCD CAMERA WITH SWING ARM

This option offers the same advantages and functions as above, except the camera is on a swing arm rather than being fixed.

The swing arm has two fixed positions at 0º and 90º. Between -30º and 120º, the position can be manually adjusted.

Catalog Number	Description
32.105.215	Swing Arm Camera - MAGIS
32.220.062	Swing Arm Camera - FUTURA

• The maximum space between the optic carrier is 220mm

CAUTION ⚠️

The maximum measurable diameter at horizontal camera position is 356mm and at a vertical camera position is 240mm. This option requires EDGE 2.0 or EDGE PRO software module.
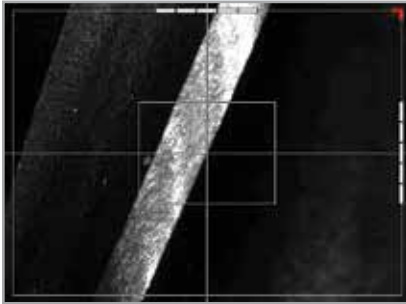
DEDICATED OPTICS

View micro tools with increased magnification.

Catalog Number	Description
32.299.157	Dedicated Optics, 1.5mm x 1mm
32.299.164	Dedicated Optics, 3mm x 2mm

ARM EXTENSION

This extension allows for the camera system to go across the spindle center line.

50mm
The measuring capacity of the X axis will be reduced 100mm in diameter & 50mm in radius.

100mm
The measuring capacity of the X Axis will be reduced of 200mm in diameter & 100mm in radius. Tool clearance between the optic carrier will be 220mm maximum.

Catalog Number	Description
32.220.054	Arm Extension 50mm – Snap Gage Principle
32.220.055	Arm Extension 100mm – Snap Gage Principle

• The maximum space between the optic carrier is 220mm

TOUCH SCREEN

The touch screen technology upgrade allows you to easily access and operate all of the Speroni software features without using the keyboard or mouse.

Catalog Number	Description
32.300.037	Touch Screen Monitor - Magis
32.220.056	Touch Screen Monitor - Futura

DATA CLIP

Secures around the flange for easy labeling of tools.

Catalog Number	Description
32.300.010.3	Data Clip - 30 Taper
32.300.010.4	Data Clip - 40 Taper, HSK-63, C6, KM63
32.300.010.5	Data Clip - 50 Taper
32.300.010.1	Data Clip Labels - 1" x 2 1/8" (500 Per Roll)

BIG KAISER

CLEANING PUTTY

Keep your measurements accurate by wiping away dust particles, oil or coolant from your tools. One package includes 6 units of cleaning putty.

Catalog Number	Description
32.400.049	Tool Cleaning Putty – 2oz.

LABEL PRINTER

Allows the printing of text labels and bar code labels (for PC based controls).

Catalog Number	Description
32.300.011	Thermal Alphanumeric Label Printer - MAGIS
32.220.042	Thermal Alphanumeric Label Printer - FUTURA

LASER PRINTER

For printing black & white laser-quality lists and inspection certificates.

Catalog Number	Description
32.220.043	Laser Printer A4

TOOL PRO

The Tool Pro is a unique tool holding device for the assembly and disassembly of tooling systems. Depressing the large gold button permits the adapter to rotate 360º and lock in 45º increments, allowing convenient access for all operations in one setup. Tightening torque for tool clamping can be applied in a downward motion allowing the Tool Pro to be installed on tool carts. Tools are simply lowered into the tool pot and automatically clamped into place with a spring loaded pin that locates precisely into the tool holder. With the Tool Pro, you reduce damage to your expensive tool holders, shanks and machine spindles while providing a safe working environment for your tool assembly operators—advantages which pay off very quickly!

STEEP TAPER

Taper Size	Catalog Number
30	31.300.001
35	31.300.000
40	31.300.002
45	31.300.003
50	31.300.004
60	31.300.020

HSK TAPER

Taper Size	Catalog Number
32A	31.300.017
40A	31.300.015
50A	31.300.008
63A	31.300.006
100A	31.300.005
125A	31.300.029

- HSK Type E/F, VDI and Polygon taper also available

VARIO

Quick-change system uses one permanently mounted base unit and multiple adapters for different types and sizes of tool shanks.

STEEP TAPER

Taper Size	Catalog Number
30	31.300.110
35	31.300.111
40	31.300.112
45	31.300.113
50	31.300.114

HSK TAPER

Taper Size	Catalog Number
32A	31.300.130
40A	31.300.131
50A	31.300.132
63A	31.300.133
80A	31.300.134
100A	31.300.135

POLYGON TAPER

Taper Size	Catalog Number
C3	31.300.153
C4	31.300.154
C5	31.300.155
C6	31.300.156
C8	31.300.158

- Base unit must be ordered separately (Catalog Number **31.300.100**)
- HSK Type E/F and VDI also available

SPIN

360º radial tool rotation, while clamped, permits easy access to large diameter tools making it ideal for changing inserts on large face mills without removing the tool from the drive keys. Tools can be locked at increments of 30º by engaging an index pin. The adapter can also be locked into increments of 45º.

STEEP TAPER

Taper Size	Catalog Number
40	31.300.202
50	31.300.204
60	31.300.206

HSK TAPER

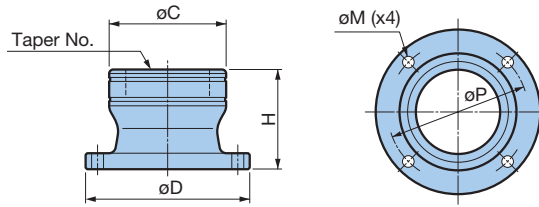| Taper Size	Catalog Number
63A	31.300.214
100A	31.300.216
125A	31.300.217

- Polygon taper also available
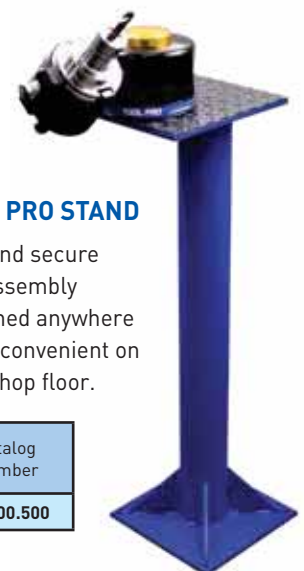
TOOL PRO STAND

Safe and secure tool assembly stationed anywhere that's convenient on your shop floor.

Catalog Number
31.300.500

KOMBI GRIP

Innovative two way clutch and needle roller clamping system assures secure clamping at the tool flange periphery. Safe design eliminates any possibility of damage to the shank taper during the tightening process.


CAUTION ⚠️

Kombi Grip must be securely fixed to a bench with 4 mounting bolts.

Catalog Number	HSK No. (Form A/E/F)	Polygon Taper No.	øC	øD	H	øP	øM
KG25R	25	—	1.890	3.110	2.559	2.441	.276 M6 or UNC 1/4
KG32R	32	C3	2.165	3.346	2.559	2.717	.276 M6 or UNC 1/4
KG40R	40	C4	2.480	3.661	2.756	3.031	.276 M6 or UNC 1/4
KG50R	50	C5	2.953	4.134	2.756	3.504	.276 M6 or UNC 1/4
KG63R	63	C6	3.465	4.862	2.953	4.154	.354 M8 or UNC 5/16
KG80R	80	C8	4.213	5.591	3.543	4.882	.354 M8 or UNC 5/16
KG100R	100	—	5.000	6.378	3.937	5.669	.354 M8 or UNC 5/16

• Mounting bolts (4 pcs.) must be ordered separately

TOOLING MATE
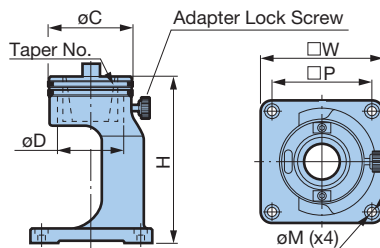
REPLACEABLE ADAPTER
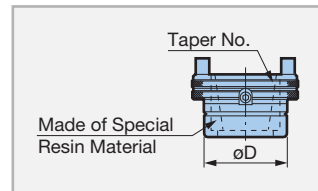
Catalog Number	CV/BT No.	øC	øD	H	øW	øP	øM	Adapter Model
TMS40-30	30	2.992	2.362	5.906	4.331	3.543	.276 M6	TMA40-30
TMS40-40	40	2.992	2.362	5.906	4.331	3.543	.276 M6	TMA40-40
TMS50-40	40	4.134	3.465	7.480	6.299	5.118	.354 M8	TMA50-40
TMS50-50	50	4.134	3.465	7.480	6.299	5.118	.354 M8	TMA40-50

• 1 adapter is included
• Adapters can be ordered individually
• Adapter Lock Screw is available as a spare part (Model: RTM0615)
• Mounting bolts (4 pcs.) must be ordered separately

CAUTION ⚠️

Tooling Mate must be securely fixed to a bench with 4 mounting bolts.
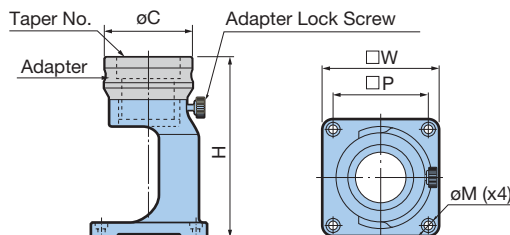
Catalog Number	HSK No.	Polygon Coupling No.	øC	H	øW	øP	øM	Adapter Model
TMS40-32R	32	C3	2.992	6.496	4.331	3.543	.276 M6 or UNC 1/4	TMA40-32R
TMS40-40R	40	C4	2.992	6.496	4.331	3.543	.276 M6 or UNC 1/4	TMA40-40R
TMS40-50R	50	C5	2.992	6.496	4.331	3.543	.276 M6 or UNC 1/4	TMA40-50R
TMS40-63R	63	C6	3.425	6.772	4.331	3.543	.276 M6 or UNC 1/4	TMA40-63R
TMS50-80R	80	C8	4.488	8.465	6.299	5.118	.354 M8 or UNC 5/16	TMA50-80R
TMS50-100R	100	—	4.882	8.622	6.299	5.118	.354 M8 or UNC 5/16	TMA50-100R

BIG KAISER

BIG KAISER

SPINDLE CLEANERS

The unbeatable tool to ensure absolute cleanliness of tapered spindles, which maintains the precision and prolongs the life of your expensive machine tools, cutting tools and tool holders.

- Robust construction with high oil and grease resistance
- Plastic injection molded core with fluted locations for cleaning strips ensures accurate sizing and cleaning efficiency
- Cleaning strips will maintain adhesion to the taper core due to inset location even under scrubbing action
- Cleaning strips positioned at well spaced intervals to remove even large residual particles
- A quality control product

ISO TAPER (WITH PULL STUD RECESS)

Catalog Number	Description	Taper No.
20.580.220	ISO Spindle Cleaner	ISO 20
20.580.230	ISO Spindle Cleaner	ISO 30
20.580.240	ISO Spindle Cleaner	ISO 40
20.580.245	ISO Spindle Cleaner	ISO 45
20.580.250	ISO Spindle Cleaner	ISO 50

MORSE TAPER

Catalog Number	Description	Taper No.
20.580.001	Morse Taper #1 Spindle Cleaner	MT1
20.580.002	Morse Taper #2 Spindle Cleaner	MT2
20.580.003	Morse Taper #3 Spindle Cleaner	MT3
20.580.004	Morse Taper #4 Spindle Cleaner	MT4
20.580.005	Morse Taper #5 Spindle Cleaner	MT5
20.580.006	Morse Taper #6 Spindle Cleaner	MT6

HSK TAPER

Catalog Number	Description	Taper No.
20.580.025	HSK25 Spindle Cleaner	HSK25
20.580.032	HSK32 Spindle Cleaner	HSK32
20.580.040	HSK40 Spindle Cleaner	HSK40
20.580.050	HSK50 Spindle Cleaner	HSK50
20.580.063	HSK63 Spindle Cleaner	HSK63
20.580.080	HSK80 Spindle Cleaner	HSK80
20.580.100	HSK100 Spindle Cleaner	HSK100
20.580.125	HSK125 Spindle Cleaner	HSK125

POLYGON TAPER

Catalog Number	Description	Taper No.
SC-C3	Polygon Taper C3 Spindle Cleaner	C3
SC-C4	Polygon Taper C4 Spindle Cleaner	C4
SC-C5	Polygon Taper C5 Spindle Cleaner	C5
SC-C6	Polygon Taper C6 Spindle Cleaner	C6
SC-C8	Polygon Taper C8 Spindle Cleaner	C8

SERVICE & PREVENTIVE MAINTENANCE

Speroni measuring instruments are designed ready for the future. In fact, most new technologies can be applied to the main construction of every Speroni machine. This makes the purchase of a Speroni Measuring instrument less of a purchase, and more of an investment. Maintaining your investment and ensuring a long healthy life for your measuring instrument is very important and we would like to help in guaranteeing its life. Arrange an annual preventive maintenance checkup and know that your machine is running accurately and consistently.

SERVICES INCLUDED:

- Clean, inspect and lubricate all applicable parts of the machine
- Inspect and adjust bearing preloads on X and Z axis slide assemblies
- Verify spindle total indicator runout (T.I.R.) and that the column is square to spindle centerline, done using a NIST-traceable certified bar
- Clean and adjust mechanical and optical assemblies
- Performance evaluation and verification of all functions
- Verification and repeatability and zero-point calibration
- Free two hours of onsite training

UPGRADE/RETROFIT

Looking for a cost effective alternative to completely replacing your existing measuring instrument? Ask one of our BIG KAISER representatives what it will take to upgrade or retrofit your existing BIG KAISER measuring instrument system with today's top technology. Not only can you extend the life of your current measuring instrument several years, you also get the satisfaction that your measuring instrument continues to meet ISO certification.

• BIG KAISER recommends annual maintenance and certification contracts. To find out more, please ask your BIG KAISER representative for a detailed quotation.