

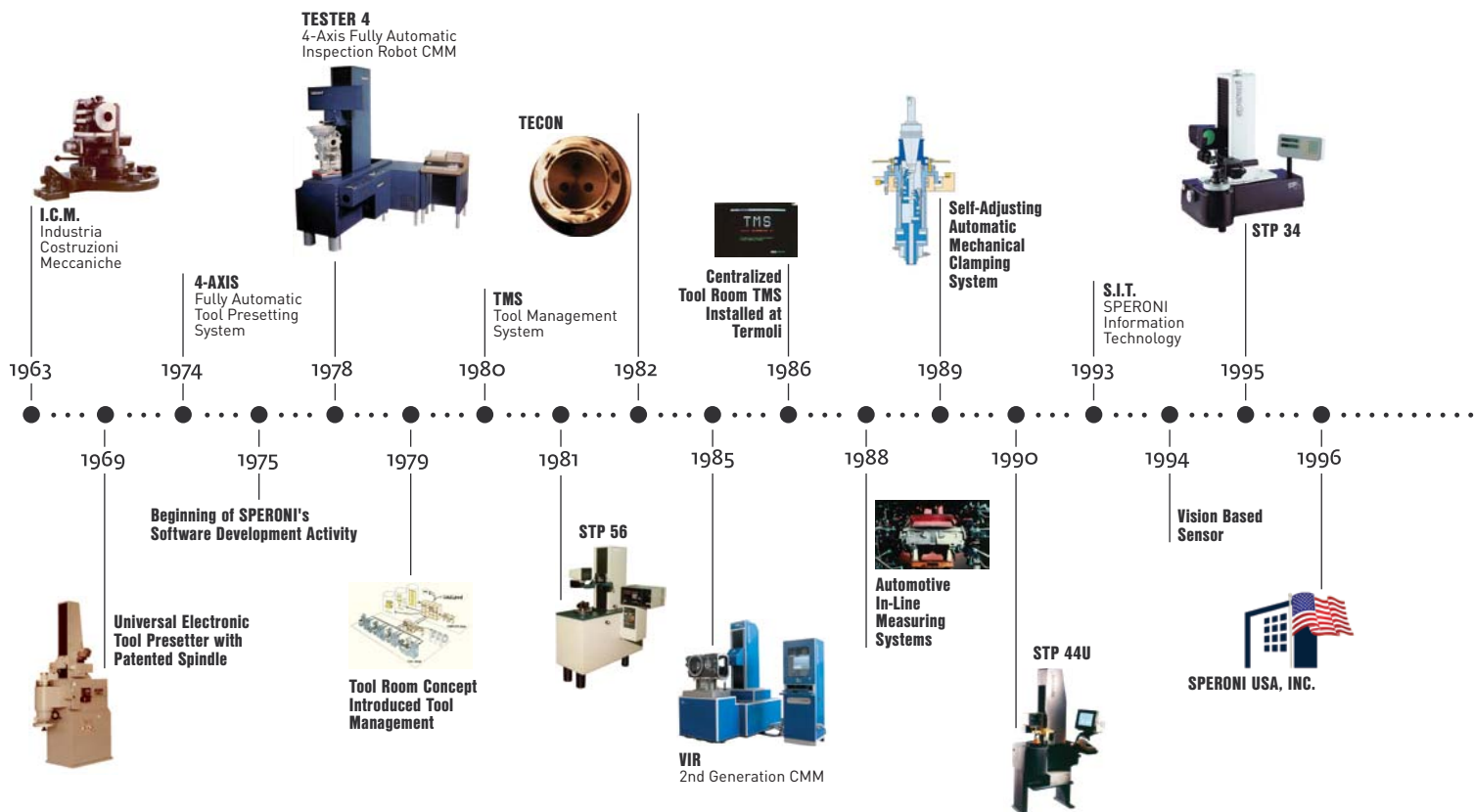
TOOL PRESETTING, MEASURING & MANAGEMENT SOLUTIONS

VOL. 3





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Our mission is to deliver high-quality, state-of-the-art solutions in tool presetting, measuring and tool management for increasing our customers' manufacturing productivity. The SPERONI brand provides quality solutions that add value to manufacturing operations for companies all over the world.

Modularity

The modular design supports multiple configurations, delivering customized solutions using standard products and guaranteeing seamless compatibility with future upgrades.

Repeatability

The pearlitic cast iron design provides thermal stability, guaranteeing precision and repeatability while eliminating the need for frequent recalibration.

Longevity

With more than 50 years of experience manufacturing future-proof technology so your machine evolves with you.

Unparalleled Accuracy

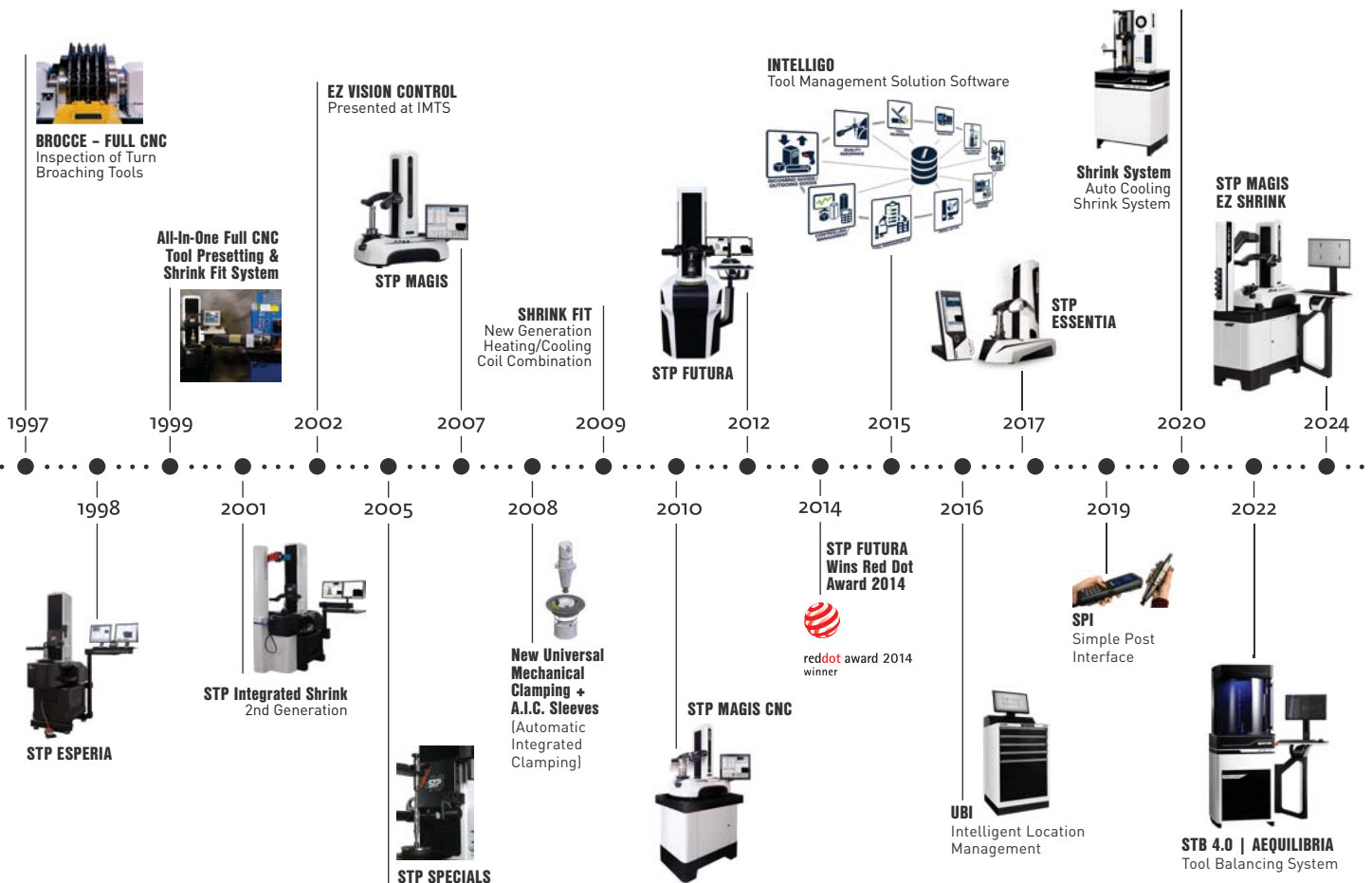
The combination of carefully selected components, including HEIDENHAIN scales, high-precision guideways, a Sony® CCD camera and an industrial Windows PC, functions together to guarantee $\pm 0.00008''$ precision.

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 directly involved in all phases of the manufacturing process.



TOOL MANAGEMENT

A.1



A

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TOOL MANAGEMENT

INTELLIGO

Tool Management Solution Software

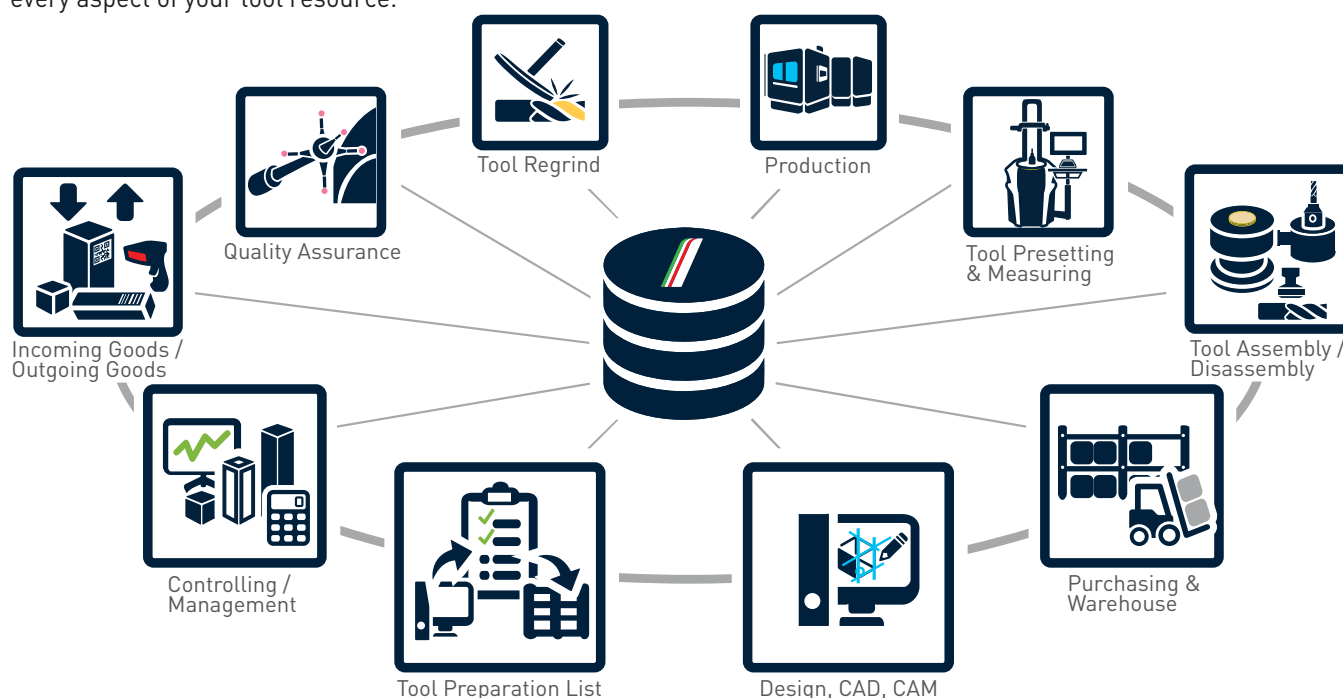
The INTELLIGO solution offers various features such as warehouse management, location management, cost management, tool assembly/disassembly management and post-processor management. Additionally, it provides a central database to manage tool assemblies, individual components, tool jobs and kits. This eliminates the need for duplicate data and ensures better organization.

Features

- Manage your warehouse and streamline manufacturing processes
- Organize every facet of your tool resources
- Optimize tool resources and have the right tool in the right location at the right time
- Knowledge center organizes all information in a single place

The Intelligent Tool Room For Industry 4.0

Effectively manage your warehouse, optimizing production processes and easily organizing every aspect of your tool resource.



ease of use



smart



integrated



user friendly



upgradable



assistance



customer care



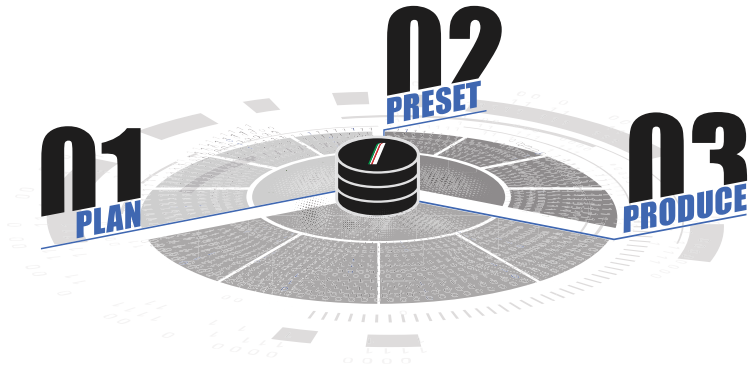
connected



modular

Manage Your Tools and Optimize Your Production Processes

Streamline your process and increase efficiency with these three simple steps: plan, preset and produce.



01

PLAN: Plan and organize your workflow to maximize efficiency

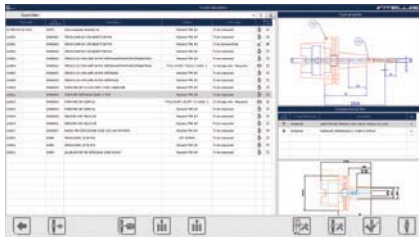
02

PRESET: Preset your tools and digitalize your data simply, accurately and mistake-free.

03

PRODUCE: Transfer your tools' offset data to the cnc machine and begin your production

Features



Tool Assembly/Disassembly



Tool Room Layout



Reporting & Business Intelligence



Tool Preparation List



Purchasing & Warehouse Management



Tool Job/Kit Management

Tool Management System Since 1982

In 1982, together with FIAT (currently FCA - Fiat Chrysler Automobiles), SPERONI took the centralized Tool Room and Tool Management System application to the next level.

The on-time delivery every day of the right tool to the right machine when running 5,000-6,000 different cutting-tool assemblies on scores of machine tools on five automotive-engine-machining lines is quite an achievement. These are the contributions of a computerized tool presetting and management system to the smooth running of Fiat's Termoli 3 engine plant.

SPI (SIMPLE POST INTERFACE)

Transfer Your Tool Offsets Simply, Accurately and Mistake-Free

SPI is the simplest and safest way to transfer your tools' offsets to your CNC machine, as well as to keep your tool data under control. SPERONI SPI is the simplest step toward digitalizing your tool management processes.



SPI | SCANNER (SIMPLE POST INTERFACE)

The Solution to Keep Your Tool Data Managed and Under Control

Features

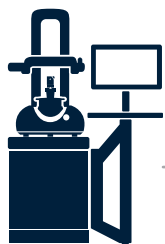
- A single device interfaced with all your numeric controls
- Additional functionality when integrated with the intelligo tool management solution
- Optional UBI collection / deposit functions

Digitalizing Your Production Can Be Easy

SPERONI SPI is the cost-effective solution for tool identification and data transmission. You will benefit from correct and complete tool data being transmitted to your machine controllers. SPI Scanner is extremely flexible and can be coupled with SPERONI's UBI and INTELLIGO solutions for complete management of your tool room and production.

Catalog Number	Description
32.230.201	SPI Server Software
32.230.202	SPI License
32.230.205	SPI PC Hardware for INTELLIGO Station
32.230.212	SPI Scanner
32.230.213	SPI Client
32.230.221	SPI NC Format — Fanuc
32.230.222	SPI NC Format — Heidenhain
32.230.223	SPI NC Format — Siemens
32.230.224	SPI NC Format — Mitsubishi
32.230.225	SPI NC Format — OKUMA
32.230.226	SPI NC Format — HAAS
32.230.227	SPI NC Format — MAZAK

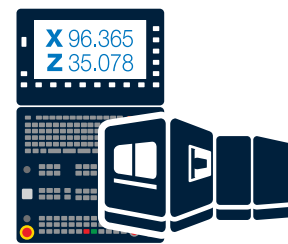
- Requires a network interface



Preset / Measure / Save



SPI Scanner Loads Offsets



TOOL MANAGEMENT

SPI | SCANNER (SIMPLE POST INTERFACE)

List Function

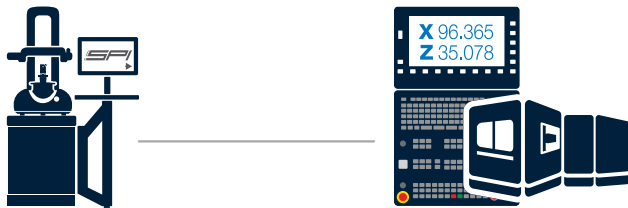
All Your Tool Offsets Can Be Loaded With One Simple Scan

Measure all the needed tool assemblies with your SPERONI Tool Presetter and print a single QR code. Scan the QR code using your SPI Scanner to load all your tool offset data in the appropriate fields on your numeric control. Efficient and mistake-free.



SPI Direct

Your Tool Data Into the NC without Additional Hardware



SPI Client

Install This App in Any PC and Transfer Your Tool Data



SPI | LITE (SIMPLE POST INTERFACE)

Easy - Accurate - Safe

Features

- Easy transfer of offset data measured from your tool presetter to the machine control
- Configure SPI post formats for any control with ease
- Intuitive and easy-to-use graphic interface
- Customizable to meet workflow requirements



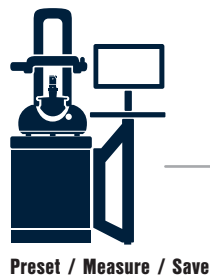
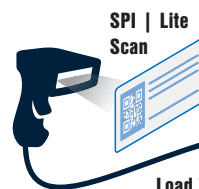
Transferring Tool Offsets to Your CNC Machine is Simple and Quick

Measure your tool assemblies with your SPERONI Tool Presetter, print a label with a QR code and scan it with SPI Lite to enter the correct data in the appropriate field on your numeric control.

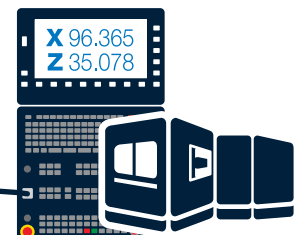
Eliminates manual data entry and human input errors.

Catalog Number	Description
32.230.300	SPI Lite Scanner
32.230.301	SPI Lite License

- Requires a USB or Serial port on the NC control



Load Tool Offsets



UBI

Easily Locate Tools

The electronically controlled UBI station gives maximum flexibility to allocate and manage all tool components and tool assemblies.

The required INTELLIGO software will allow and manage access to the entire cabinet, individual drawers or drawer compartments for your specific UBI module.

Features

- LED lights indicate storage location
- Control system for safe withdrawal of any component
- Large variety of drawer sizes to fit different components
- Direct interface to SPERONI INTELLIGO tool management system
- Real-time stock status



Large Variety of Customizable Drawer and Compartments Sizes



Simple and Direct User-Friendly Graphic Interface



LED Lights Indicate Storage Location



Catalog Number	Description	Drawer Qty.	Cabinet Dimensions		
			L	W	H
32.230.500	UBI - Module A	7	28.5 (725mm)	28.3 (718mm)	43.3 (1100mm)
32.230.501	UBI - Module B	9			
32.230.502	UBI - Module C	11			
32.230.503	UBI - Module D	6			
32.230.504	UBI - Module E	9			

- Requirements for UBI module A, B, C, D or E: Industrial Brand Windows PC-based control with 24" touch screen monitor, keyboard and mouse configured with INTELLIGO for UBI module
- For module configurations see pg. 15
- Components can be purchased separately; see pg. 16

UBI

Module A

Drawer Height	Drawer Qty.	No. of Compartments	Compartment Dimensions		
			L	W	H
3.0 (75mm)	1	54	1.6 (40.5mm)	3.9 (98.0mm)	1.4 (36.0mm)
	1	36	2.9 (74.5mm)	3.9 (98.0mm)	1.4 (36.0mm)
3.9 (100mm)	1	24	4.8 (123.0mm)	3.9 (98.0mm)	2.4 (61.0mm)
	1	16	4.8 (123.0mm)	5.8 (147.5mm)	2.4 (61.0mm)
	1	12	6.8 (172.5mm)	3.9 (98.0mm)	2.4 (61.0mm)
5.9 (150mm)	1	8	4.8 (123.0mm)	11.7 (296.5mm)	2.4 (61.0mm)
11.8 (300mm)	1	Configurable individual pockets for tool assemblies			

- Electronic locking drawer system included

Module B

Drawer Height	Drawer Qty.	No. of Compartments	Compartment Dimensions		
			L	W	H
3.0 (75mm)	2	54	1.6 (40.5mm)	3.9 (98.0mm)	1.4 (36.0mm)
3.9 (100mm)	3	24	4.8 (123.0mm)	3.9 (98.0mm)	2.4 (61.0mm)
	2	16	4.8 (123.0mm)	5.8 (147.5mm)	2.4 (61.0mm)
	1	12	6.8 (172.5mm)	3.9 (98.0mm)	2.4 (61.0mm)
5.9 (150mm)	1	8	4.8 (123.0mm)	11.7 (296.5mm)	2.4 (61.0mm)

- Electronic locking drawer system included

Module C

Drawer Height	Drawer Qty.	No. of Compartments	Compartment Dimensions		
			L	W	H
3.0 (75mm)	1	54	1.6 (40.5mm)	3.9 (98.0mm)	1.4 (36.0mm)
	7	36	2.9 (74.5mm)	3.9 (98.0mm)	1.4 (36.0mm)
3.9 (100mm)	1	24	4.8 (123.0mm)	3.9 (98.0mm)	2.4 (61.0mm)
	2	12	6.8 (172.5mm)	3.9 (98.0mm)	2.4 (61.0mm)

- Electronic locking drawer system included

Module D

Drawer Height	Drawer Qty.	No. of Compartments	Compartment Dimensions		
			L	W	H
5.9 (150mm)	6	The internal configuration is customizable with optional components.			

- Electronic locking drawer system included

Module E

Drawer Height	Drawer Qty.	No. of Compartments	Compartment Dimensions		
			L	W	H
3.9 (100mm)	9	The internal configuration is customizable with optional components.			

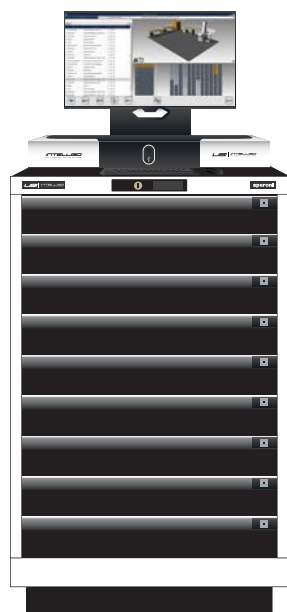
- Electronic locking drawer system included

SI

Control & Software for UBI Station

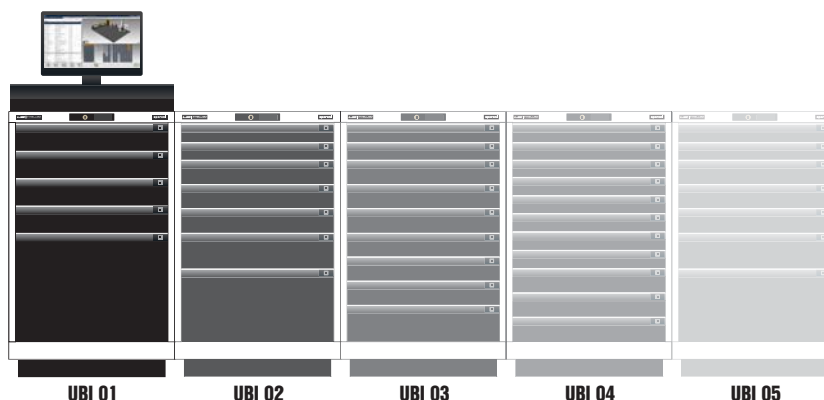
Features

- User and password management
- Location ID assignment and management
- Drawer configuration
- Expandable and upgradeable



Integrated Control

Integrated enclosure containing a Windows PC-based control with 22" monitor, keyboard and mouse configured with INTELLIGO for UBI module.



Catalog Number
32.230.525

- Requires at least one SPERONI UBI Hardware Configuration

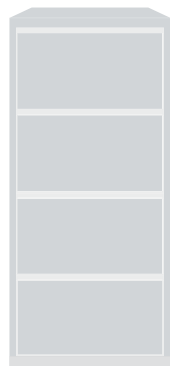
Free-Standing Control

Free-standing Windows PC-based control with 22" monitor, keyboard and mouse configured with INTELLIGO for UBI module for drawers/shelves management.



Catalog Number
32.230.526

+
Your Drawers / Shelves



Software Module

INTELLIGO for UBI software-only module to be installed on customer-provided PC for drawers/shelves management.



Catalog Number
32.230.527

+
Your PC



+
Your Drawers / Shelves





SHRINKING & BALANCING

A.2



PRO SHRINK 20-23

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PRO SHRINK



SPERONI PRO SHRINK TUBECHILLER 1100

**Shrink Range: $\varnothing$.118"-1.260" ($\varnothing$ 3-32mm) for Carbide Shanks
 $\varnothing$.236"-1.260" ($\varnothing$ 6-32mm) for HSS Shanks**

SPERONI PRO SHRINK TUBECHILLER is a combination shrink and cooling system. The temperature of the shrink fit chuck is continuously measured during the inductive heating process and maintained at a predefined limit, eliminating the potential to overheat the tool.

Features

- Manual operation with power button or automatic operation with parameters
- Automatic shrinking with pyrometer (temp control)
- Addition of a unit to set up the length
- Pedal switch for hands-free use I4.0 device functions
- Tool data reading through RFID chip, data matrix code or QR code
- Integrated USB and RS 242 data interfaces for network integration
- Data transfer for statistical evaluations and documentation

Comes Standard With Pyrometer Technology Coil

The pyrometer technology in the shrinking unit ensures that only the necessary temperature is applied during the shrinking process. The temperature of the shrink chuck is continuously measured during inductive heating. As soon as the shrink chuck reaches the predefined temperature, it is maintained at that temperature. Overheating of the tool holder is impossible. Shrink holders can be shrunk multiple times without affecting runout, clamping force or accuracy.



*Height gage available as an option



Cooling Process is Automatic, Safe and Fast



The Pyrometer Technology Coil Enables Automatic and Direct Temperature Control of the Tool Holder During Heating

Catalog Number	Max Shrink Length	Integrated Cooling
32.250.103	20.0 (500mm)	Included

AUTO-COOLING SHRINK SYSTEM

Heating And Cooling Process

After the shrink process, the enclosed tube of the chiller automatically lifts from the unit's base, encompassing the tool. As the tube rises, it fills with coolant to cool down the hot tool. While the tube is moving up, the coil moves back to the start position.



The High Frequency Coil Heats Up the Tool Holder



Once the Heating is Done, the Tool Cooling Process Begins



The Body of the Chiller Cools the Tool Down Uniformly

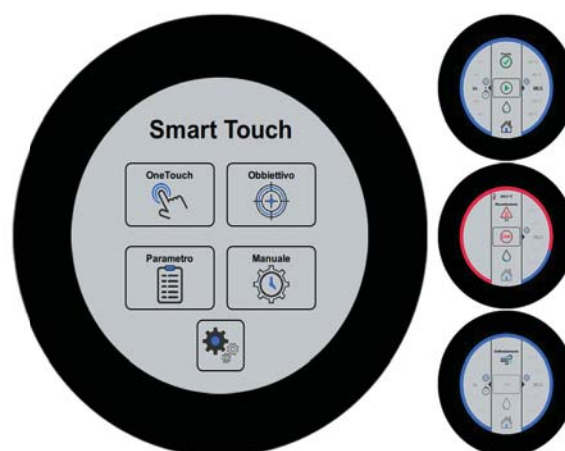
Control

Start the Shrinking Process With One Touch

Browsing the menu and inserting the parameters is simple and intuitive with the touch display system. The graphical visualization of the shrinking and cooling processes is customizable.

Features

- Navigation menu
- Graphic visualization of the shrinking and cooling process
- Simple parameter input with USB
- Operator-defined parameter lists
- Avoid operating errors through individual menu configuration
- Industry 4.0 ready through ethernet interface and data exchange



PRO SHRINK Accessories

Tool Adapters

For safe holding of tapers during the cooling process.

Catalog Number	Type	
	Taper	Size
32.250.253	ISO	30
32.250.254		40
32.250.255		50
32.250.258	HSK	25
32.250.259		32
32.250.260		40
32.250.261		50
32.250.262		63
32.250.263		80
32.250.264		100
32.250.266	C	4
32.250.267		5
32.250.268		6
32.250.269		8
32.250.270	ER	11
32.250.271		16
32.250.272		20
32.250.273		25
32.250.274		32



Height Gage

Length adjustment device available with dial gage and fixed stop.

Catalog Number	Description
32.250.201	Fixed Stop
32.250.202	Dial Gage



AEQUILIBRIA
TOOL BALANCING SYSTEM

SHRINKING & BALANCING
A.2



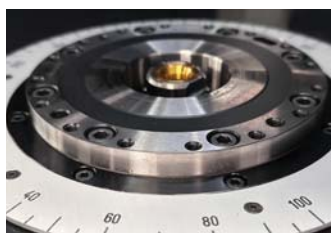
SPERONI AEQUILIBRIA

The STB line of tool balancing systems is built on decades of expertise in integrated measurement and balancing technology. Precise tool balancing is essential for achieving consistent quality and accuracy, reducing vibration and bearing loads to protect CNC machines and extend spindle life. At the same time, it lowers production costs through reduced downtime and increased process reliability.



Features

- Exceptional balancing precision
- Optimal damping for accurate measurements
- High precision locking adapters
- Faster balancing process
- Quick change adapters
- Laser marker
- Status indications via lights
- Ergonomic door opening
- Quick and flexible tool change
- Dedicated user friendly software



Goniometer



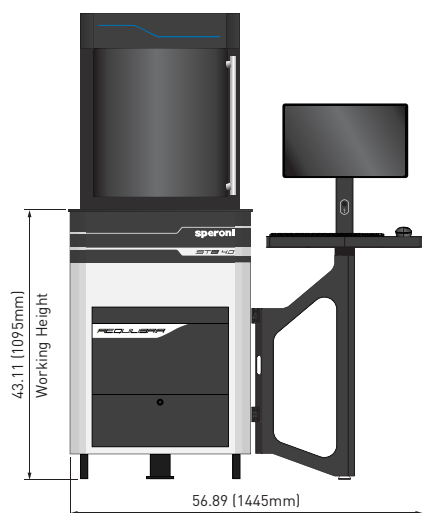
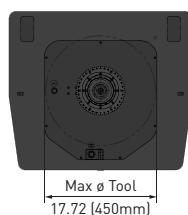
Laser Pointer for Precision



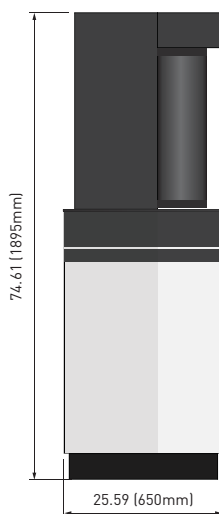
Ergonomic Door with Automatic Opening



Integrated Cockpit with Touch-Screen Monitor



Maximum Weight of the Rotor Including the Adapter:
66.2 lbs (30 kg)



Machine Weight:
1697.9 lbs (770 kg)

Catalog Number	Description	Balancing Speed	Repeatability of Balancing Measurements (1 Plane)	Repeatability of Balancing Measurements (2 Planes)	Measuring Accuracy	Drive Power	Power Supply
32.STB-SIMPLE	STB Aequilibria Simple	600-2400 rpm	<0.3 gmm	<0.5 gmm	10 mg	820 W	230 V
32.STB-PRO	STB Aequilibria Pro						

SPERONI AEQUILIBRIA



SIMPLE

Hardware Options

Catalog Number	Description	STB AEQUILIBRIA	
		SIMPLE	PRO
—	Base unit without drawers	●	●
—	Integrated cockpit with 21,5" touch screen monitor	●	●
—	Goniometer for intuitive visual orientation	●	●
—	Laser indicator	●	●
32.B-FUN-6000	Spindle lock for adapter change	○	●
32.B-FUN-6001	Internal light - white	●	●
32.B-FUN-6002	Internal light - multicolor status function	○	●
32.B-FUN-6003	Automatic door	○	●
32.B-FUN-6004	Integrated scale for tools	○	○
32.B-FUN-6005	Integrated scale for balancing material	○	○
32.B-CAL-7000	Rotor caliber - complete	○	○
32.B-SCR-6000	Balancing screws set - complete	○	○
32.B.00.1020.51	Cockpit drawer for balancing screws	○	●
32.B.00.0412.00	Label printer / Dymo 550	○	○
32.B.00.LPS	Label printer support	○	●



PRO

Software Options

Catalog Number	Description	STB AEQUILIBRIA	
		SIMPLE	PRO
—	Single plane balancing	●	●
—	Material density function	●	●
—	Radial drilling / milling function	●	●
32.E.BM.0001.00	STB Software maintenance	○	○
32.E.BM.0002.00	Two planes balancing software module	○	●
32.E.BM.0003.00	Label printer software module	●	●
32.E.BM.0004.00	Database for different materials	●	●
32.E.BM.0005.00	Balance by weight shift software module	○	●
32.E.BM.0006.00	Balance by screws software module	●	●
32.E.BM.0007.00	Axial drilling/milling software module	○	●
32.E.BM.0008.00	Contour Milling program software module	○	●
32.E.BM.0009.00	User & Password software module	○	●
32.E.BM.0010.00	Certificate software module - PDF, DIN A4	○	●
32.E.BM.0011.00	Scale weight measurement auto-transfer	○	●
32.E.BM.0012.00	Spindle automatic positioning module	○	●
32.E.BM.0013.00	Tool error mode module	●	●
32.E.BM.0014.00	Red Zone management module	○	●
32.E.BM.0015.00	Alternative position management module	○	●
32.E.BM.0016.00	Intelligo TMS / SDS connection module	○	○

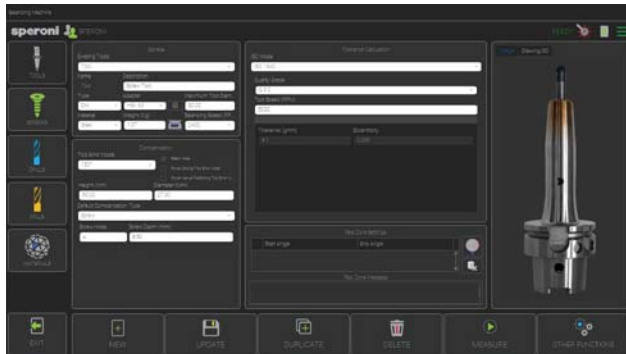
● = Standard ○ = Optional

SPERONI AEQUILIBRIA

Software Interface

Simple Balancing Process For All Operators

Fully designed and developed by SPERONI, STB Aequilibria software offers an advanced, reliable tool balancing solution. Intuitive interfaces simplify configuration, monitoring and control, ensuring maximum efficiency and precision.



SPERONI AEQUILIBRIA Accessories

Balancing Adapters



Catalog Number	Base Taper Type	Pullstud Form
32.B-ADP-9001	HSK25	—
32.B-ADP-9002	HSK32	
32.B-ADP-9003	HSK40	
32.B-ADP-9004	HSK50	
32.B-ADP-9005	HSK63	
32.B-ADP-9006	HSK80	
32.B-ADP-9007	HSK100	
32.B-ADP-9008	ISO30	M12 Thread
32.B-ADP-9009		JIS/DIN
32.B-ADP-9010		ASME
32.B-ADP-9011		MAS Type 2 (30°)
32.B-ADP-9012		MAS Type 1 (45°)
32.B-ADP-9013	ISO40	M16 Thread
32.B-ADP-9014		DIN/JIS
32.B-ADP-9015		ASME
32.B-ADP-9016		MAS Type 2 (30°)
32.B-ADP-9017		MAS Type 1 (45°)
32.B-ADP-9018	ISO50	M24 Thread
32.B-ADP-9019		ASME
32.B-ADP-9020		MAS Type 2 (30°)
32.B-ADP-9021		MAS Type 1 (45°)
32.B-ADP-9022		DIN/JIS

SPERONI AEQUILIBRIA Accessories

Balancing Masters



Catalog Number	Description
32.B-CAL-7001	DIN 69871 SK30
32.B-CAL-7002	DIN 69871 SK40
32.B-CAL-7003	DIN 69871 SK50
32.B-CAL-7004	HSK20 E
32.B-CAL-7005	HSK25 A\C\E, HSK32 F
32.B-CAL-7006	HSK32 A\C\E, HSK40 F
32.B-CAL-7007	HSK40 A\C\E, HSK50 F
32.B-CAL-7008	HSK50 A\C\E, HSK63 F
32.B-CAL-7009	HSK63 A\C\E, HSK80 F
32.B-CAL-7010	HSK80 A\C\E, HSK100 F
32.B-CAL-7011	HSK100 A\C\E, HSK125 F

Calibration Rotor



Catalog Number	Description
32.B-CAL-7000	Calibration Master

- Adapter with predefined positions for attaching weights to calibrate the machine



Balancing Screw Set

Catalog Number	Description
32.B-SCR-6000	Balancing Screw Set

Set Contains:

180 Balancing Screws
 20 pcs. M6x4/.43g
 20 pcs. M6x4.5/.52g
 20 pcs. M6x5/.6g
 20 pcs. M6x5.25/.67g
 20 pcs. M6x6/.77g
 20 pcs. M6x6.5/.86g
 20 pcs. M6x7/.93g
 20 pcs. M6x7.2/1.03g
 20 pcs. M6x8/1.09g

Spare Screws to Replenish the Balancing Screw Set

Catalog Number	Description
32.B-SCR-6001	Balancing Screws – 20 pcs. M6x4/.43g
32.B-SCR-6002	Balancing Screws – 20 pcs. M6x4.5/.52g
32.B-SCR-6003	Balancing Screws – 20 pcs. M6x5/.6g
32.B-SCR-6004	Balancing Screws – 20 pcs. M6x5.25/.67g
32.B-SCR-6005	Balancing Screws – 20 pcs. M6x6/.77g
32.B-SCR-6006	Balancing Screws – 20 pcs. M6x6.5/.86g
32.B-SCR-6007	Balancing Screws – 20 pcs. M6x7/.93g
32.B-SCR-6008	Balancing Screws – 20 pcs. M6x7.2/1.03g
32.B-SCR-6009	Balancing Screws – 20 pcs. M6x8/1.09g

SPERONI AEQUILIBRIA Accessories

Scale for Weights



Catalog Number	Description
B-FUN-6005	Integrated Scale for Balancing Material

Scale for Tools



Catalog Number	Description
B-FUN-6004	Integrated Scale for Tools

Balance Standards

New Balancing Standard ISO 16084 – We Can Apply It

ISO 1940

- The generally-known balancing standard ISO 1940 promises simple and fast tolerance measurement.
- Required data is: grade g, rotational speed of the tool holder and the weight.
- Partial values not suitable for practical use.
- Does not take into account the interface rigidity, measurement error of the machine, etc.

Example

HSK 40 tool holder, permissible residual unbalance .29 gmm > corresponds to .0145g (14 milligram). Such values are easy to achieve in theoretical terms, but unfortunately not in practice, because the worker has to work to 14 milligram accurate drilling.

ISO 16084

New adapted balancing standard ISO 16084 for high-speed tool holders takes more variables into account for the calculation.

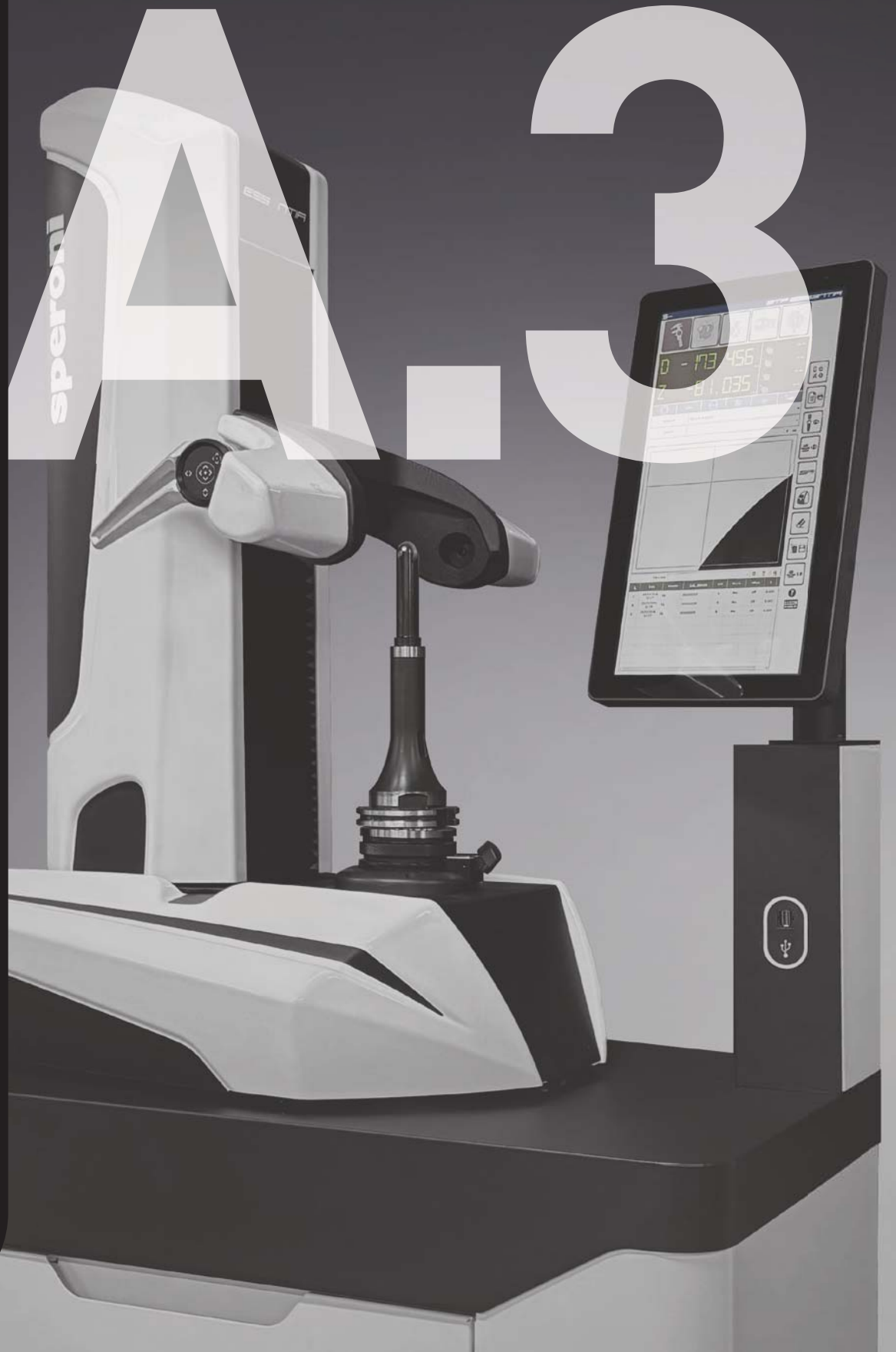
- Stiffness interface parameters (bearing load, bearing distance, inaccuracy of shank, etc.)
- Mass center of gravity
- Consideration of measurement errors of own balancing machine and customer's machine
- Decision whether static or dynamic balancing is necessary
- Provides unbalance values for each plane during dynamic balancing

Example

HSK 40 tool holder, permissible residual unbalance, 1.88 gmm (with 15% safety)

- Corresponds to a material removal accuracy of "only" .094g customer tolerance >2.54 gmm.
- Tool holder may be statically balanced. Drill to milligram accuracy.

PRESETTING & MEASURING



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	ESSENTIA	MAGIS	MAGIS CNC	
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SIZE

Height Range	15.75 (400mm)	16.0/24.0 (400mm/600mm)	16.0/24.0 (400mm/600mm)	
Diameter Range	11.8 (300mm)	13.8/-1.97 (350mm/-50mm)	13.8/-1.97 (350mm/-50mm)	

OPERATION

Manual	●	●	●	
Autofocus Spindle		○	●	
Fully Automatic CNC			●	

SPINDLE

Integral (ISO 50-40)	●	●	●	
Integral (ISO, HSK, BIG CAPTO)		○	○	
Universal Quick Change Spindle				
Automatic Mechanical Retention Knob Clamping		○	○	
Spindle Brake	●	●	●	

SPINDLE ADAPTERS

Reduction Sleeves (ISO, HSK, Polygon, KM, ABS, VDI)	○	○	○	
Auto Clamping Reduction Sleeves (ISO, HSK, Polygon, KM, ABS, VDI)		○	○	
Universal Quick Change Adapters				

INSPECTION AND OPTICS

Visual Inspection Light	●	●	●	
45X Magnification Optics	●	●	●	
150X Micro Magnification Optics		○	○	
Custom Multi-Camera System		○	○	
90° Indexing		○	●	

DISPLAY

15" Touch Screen	●			
22" View Screen		●	●	
24" View/Touch Screen		○	○	
27" View/Touch Screen		○	○	

CONTROL

	ESSENTIA	SIMPLEVISION/EDGE (PRO)	EDGE/EDGE PRO	
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● = Standard ○ = Optional

PRESETTING & MEASURING



	MAGIS EZ SHRINK	FUTURA	FUTURA CNC	FUTURA AUTOSHRINK
--	-----------------	--------	------------	-------------------

	16.0/24.0 (400mm/600mm)	16.0-48.0 (400-1200mm)	16.0-48.0 (400-1200mm)	16.0-31.5 (400-800mm)
	13.8/-1.97 (350mm/-50mm)	16.0-48.0 (400-1200mm)	16.0-48.0 (400-1200mm)	16.0-23.6 (400-600mm)

	●	●	●	●
	○	○	●	○
	●		●	○

	●	●	●	●
	○			
		○	○	○
	○	○	○	○
	●	●	●	●

	○	○	○	○
	○	○	○	○
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	●	●	●	●
	●	●	●	●
	○	○	○	○
	○	○	○	○
	●	○	●	○

	●	●	●	●
	○	○	○	○
	○	○	○	○

	EDGE/EDGE PRO	SIMPLEVISION/EDGE/EDGE PRO	EDGE/EDGE PRO	EDGE/EDGE PRO
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ESS ^{STP} **NTIA**



PRESETTING & MEASURING

ESSENTIA

Designed for Maximum Ergonomics

The ESSENTIA is an entry-level tool presetting and measuring system. The robust structure and software interface allow customers to benefit from an entry-level unit.

With an ESSENTIA, efficiently measure tools, easily and independently of the operator to achieve full machining productivity. Deliver results right next to your CNC machine.

Features

- Ultra-light axis adjustment
- Highest precision and repeatability along the entire system's measuring range
- Structure is made completely of aged pearlitic cast iron for thermal stability
- Standard ISO 50 reduction system (ISO 40 option)
- Touch-control LED front light allows manual inspection of tool tips/inserts
- Sensor system with high-definition camera
- Micron-precise scales & state-of-the-art guideways
- Largest recirculating ball bearing contact face in its class
- Multi-touch display
- Windows PC-based control



Rapid X & Z Axes Movement



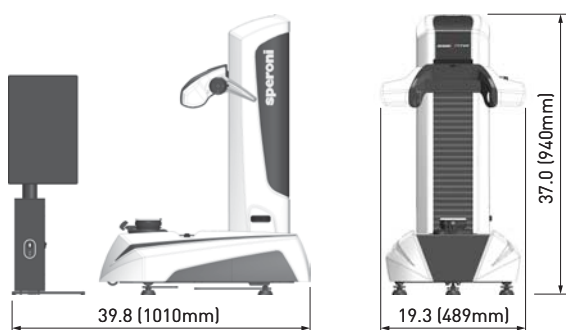
High Precision ISO 50 Spindle



**Hi-Res Camera with
45x Magnification Optics**



**Aged Pearlitic Cast Iron
Guarantees Maximum Isostaticity**



Catalog Number	X-Axis Max ø	Z-Axis Max Length	Spindle Taper	Weight
32.E44R	11.8 (300mm)	16.0 (400mm)	ISO40	200 lbs (90kg)
32.E45R			ISO50	
32.E45RF				

- Use of battery backup is recommended

ACCESSORIES



PRESETTING & MEASURING

ESSENTIA Control

Optimize All Tool Presetting and Measuring Operations

The ESSENTIA control is designed and developed entirely by SPERONI exclusively for the STP ESSENTIA.

The vertical graphic interface makes an intuitive solution for all tool measurement and management needs.

Features

- Vertical touch-screen
- Sensor system with high-definition camera
- Run-out function
- Maximum profile function
- Base post processor
- Tool data base
- Windows PC-based control
- Online help function



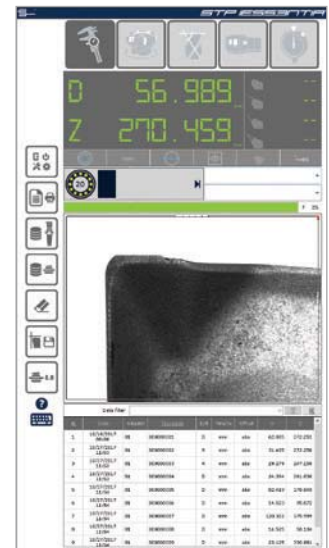
Manual Measurement



Runout Function



Measuring Icons Library



Inspection Light



ESSENTIA Accessories



SPERONI Workbench

Enclosed and ventilated workbench with storage area and lockable door. The black-and-white steel workbench provides working area for all presetting requirements.

Catalog Number	Description	L	W	H
32.EBENCH	SPERONI Workbench - ESSENTIA	47.25 (1200mm)	20.5 (520mm)	31.5 (800mm)

- Plastic holders can be purchased separately depending on tapers needed



Plastic Holder (for Sleeve/Tool Holder)

Catalog Number	Type	
	Taper	Size
32.105.180	ISO	30
32.105.181		40
32.105.182		50
32.105.184	HSK	63A



Workbench

Constructed of black steel and a 48x30-inch maple worktop.

Catalog Number	Description	L	W	H
32.123.BENCH	Modular Workbench - ESSENTIA	48	30	34

MAGIS
elegantly simple



MAGIS

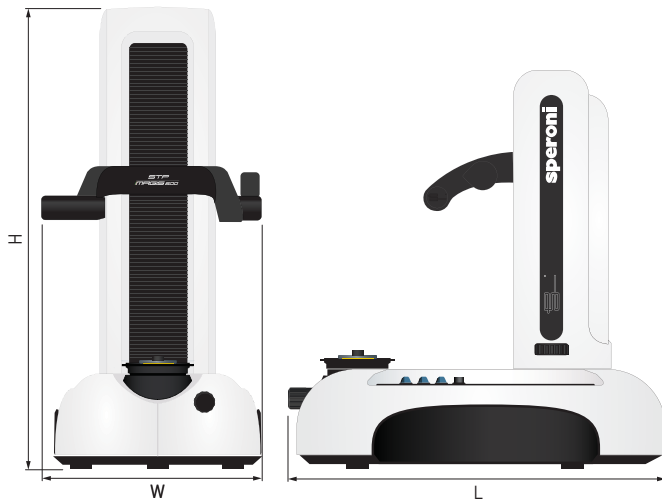
Intuitive Vision System

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

The graphical interface and powerful online help function guarantee a trouble-free and secure experience.

Features

- Made completely of aged pearlitic cast iron for thermal stability eliminates need for frequent recalibration
- Unmatched precision — T.I.R .0003" at 11.8"
- High frequency sub-pixel analysis delivers a 45x standard optical magnification
- Front light (episcopy) allows for the manual inspection of the tool tip/insert detecting wear or cracks
- Pneumatic spindle disc brake system locks at any point in the 360° rotation
- Precision-ground integrated spindle with calibration edge for quick calibration
- Taper angle tolerance AT1; no need for an external caliper or master
- Micron-precise glass scales and state-of-the-art guideways
- Largest and toughest recirculating ball bearing contact face in its class
- Windows PC-based control
- Online help function



Pneumatic Rapid Axis Movement



High Precision Spindle with Integrated Calibration Edge



X & Z-Axis Knobs for the Micrometric Movement



Front Light For Cutting Edge Inspection

Catalog Number	Control	X-Axis Max ø	Z-Axis Max Length	Spindle Taper	Mechanical Clamping	L	W	H	Weight
32.M44S	SimpleVision	11.8 (300mm)	16.0 (400mm)	ISO40		33.5 (852mm)	23.0 (583mm)	36.0 (916mm)	440 lbs (200kg)
32.M44SC					●				
32.M45S	SimpleVision	11.8 (300mm)	16.0 (400mm)	ISO50		33.5 (852mm)	23.0 (583mm)	36.0 (916mm)	440 lbs (200kg)
32.M45SC					●				
32.M65S	SimpleVision	11.8 (300mm)	24.0 (600mm)	ISO50		33.5 (852mm)	23.0 (583mm)	44.0 (1119mm)	570 lbs (260kg)
32.M65SC					●				
32.M45E	EDGE 2.0	11.8 (300mm)	16.0 (400mm)	ISO50		33.5 (852mm)	23.0 (583mm)	36.0 (916mm)	440 lbs (200kg)
32.M45EC					●				
32.M65EC	EDGE 2.0	11.8 (300mm)	24.0 (600mm)	ISO50	●	33.5 (852mm)	23.0 (583mm)	44.0 (1119mm)	570 lbs (260kg)

- Use of battery backup is recommended
- Standard integral spindle is ISO 50 taper; other options available
- Standard control software is SIMPLE VISION; other upgrades available
- 1-year warranty on material, control, labor and travel expenses

ACCESSORIES

<p>INTEGRAL SPINDLES PG. 43</p>	<p>SOFTWARE OPTIONS PG. 60</p>	<p>ADAPTERS PG. 70</p>	<p>BATTERY BACKUP PG. 72</p>
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MAGIS CNC

Available in a CNC Version for Operator-Independent Measuring Results

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. Automatically execute measuring cycles, adding speed and precision to your measurements. The unmatched repeatability and quality will further increase efficiency and profitability.

Features

- Same features as standard MAGIS
- CNC spindle and CNC X & Z-axis, automatically execute measuring cycles
- Numeric control system allows for the operator independent, fast and micron-precise positioning of the axes
- Steel workbench provides working area for all presetting requirements
- Conveniently positioned industrial grade controls for ease of use



Automatic Spindle and X & Z-Axis Movement



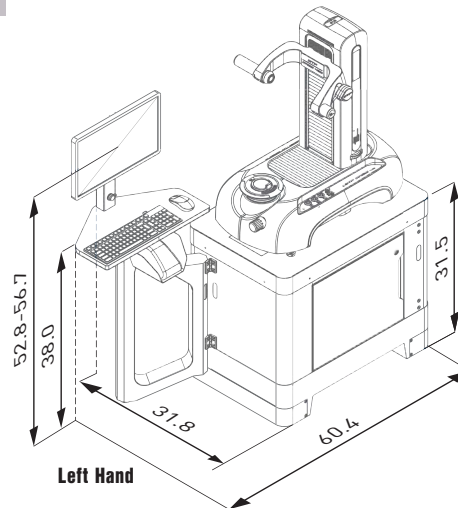
X & Z-Axis Manual Movement Always Available



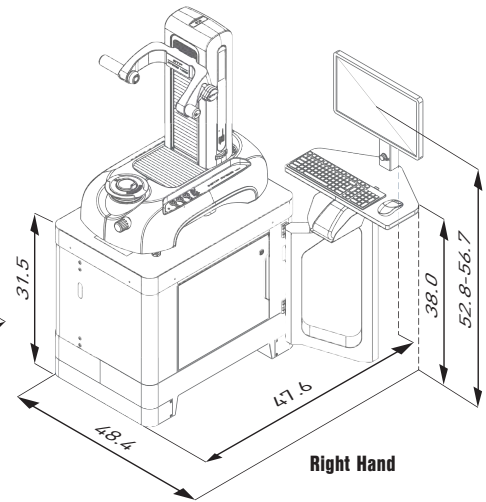
Optimized Cockpit



Aged Pearlitic Cast Iron Guarantees Maximum Isostaticity



Left Hand



Right Hand

Catalog Number	Description	X-Axis Max ø	Z-Axis Max Length	Power	Consumption	Pneumatic Requirements	Presetter L	Presetter W	Presetter H	Weight
32.M45CNC	MAGIS 400 CNC	-2.0 to +14.0 (-50mm to +350mm)	16.0 (400mm)	110V (60Hz up to 5 AMPs)	1...2 cfm	70-100 psi (5-7 bar)	33.5 (852mm)	23.0 (583mm)	36.0 (916mm)	505 lbs (230 kg)
32.M65CNC	MAGIS 600 CNC		24.0 (600mm)				33.5 (852mm)	23.0 (583mm)	44.0 (1119mm)	595 lbs (270 kg)

- Use of battery backup is recommended
- Standard integral spindle is ISO 50 taper; other options available
- Standard control software is EDGE 2.0; other upgrades available
- 1-year warranty on material, control, labor and travel expenses

ACCESSORIES



INTEGRAL SPINDLES
PG. 43



SOFTWARE
OPTIONS
PG. 60



ADAPTERS
PG. 70



BATTERY
BACKUP
PG. 72

MAGIS EZ SHRINK

Presetting & Shrinking in One Device

Featuring a dedicated control with essential measurement functions, the MAGIS EZ Shrink delivers unmatched repeatability and quality for greater efficiency and profitability.



Features

- Dedicated EZ Shrink control
- Spindle-integrated pin system with 150mm travel
- Integrated mechanical clamping system
- Ergonomic workbench
- Safe shrinking procedure
- Temperature monitoring eliminates overheating
- Optional integrated fume extractor
- Hands-free height adjustment



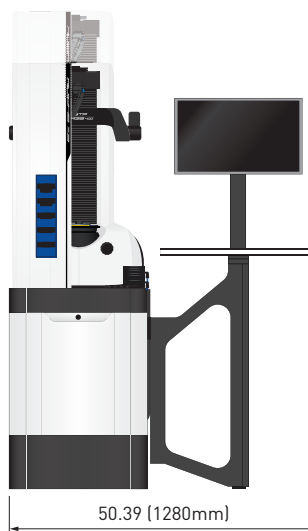
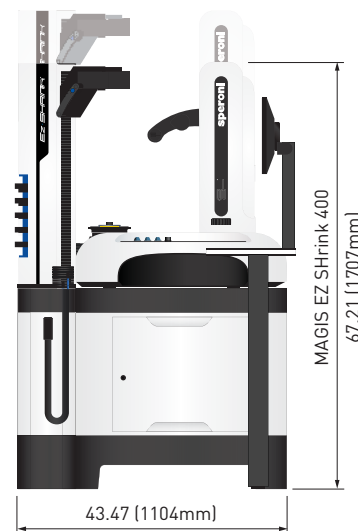
Fully Safe Management of Tool Holder Temperature Compensation



Dedicated Software Provides Step-By-Step Guidance With Clear Visuals, Ensuring Safe And Error-Free Operation



High-Precision Spindle with Integrated Calibration Edge and Brake System for Fast, Easy Recalibration



Catalog Number	Description	X-Axis Max ø	Z-Axis Max Length	Power	Consumption	Pneumatic Requirements	Presetter L	Presetter W	Presetter H	Weight
32.M45EZS	MAGIS 400 EZ Shrink	-2.0" to +14.0" (-50mm to +350mm)	16.0 } (400mm)	400-volt 3-phase	1...2 cfm	70-100 psi (5-7 bar)	50.39 (1280mm)	43.47 (1104mm)	67.5 (1707mm)	793.8 lbs (360 kg)
32.M65EZS	MAGIS 600 EZ Shrink		24.0 (600mm)				50.39 (1280mm)	43.47 (1104mm)	75.5 (1907mm)	883.8 lbs (400 kg)

- Industrial power transformer required
- Use of battery backup is recommended

PRESETTING & MEASURING

MAGIS Accessories

Automatic CNC Spindle

Motorized spindle allows for automatic focusing, location of max diameter and runout. A disc brake system locks the spindle at any point in the 360° rotation.

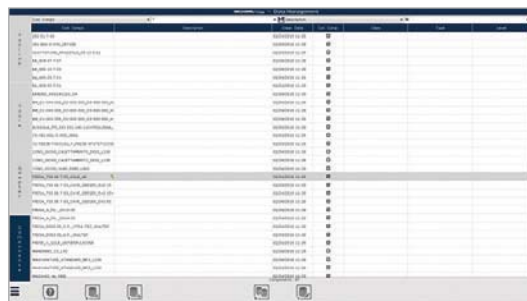
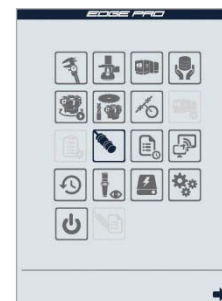


Catalog Number	Control	Description
32.MSU-AUTOFOCUS	Simple Vision	MAGIS SimpleVision Upgrade, Autofocus
32.MEU-CNC-A	EDGE	MAGIS EDGE Upgrade, CNC A Axis

- CNC/Autofocus spindle does not require CNC control
- All axes can also be moved manually

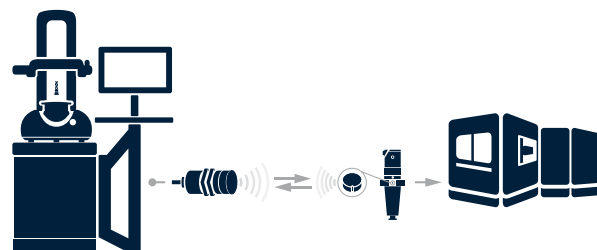
Tool RFID Chip

Provides complete and reliable tool data and guarantees secure operation. Tool RFID chips can be integrated into machine controls for reliable tool management. Data stays with the tool for optimal use and management.



Catalog Number	Description
32.105.124	Mechanical Slide for Read/Write Head - Automatic
32.105.125	Bar Code Reader - Uniscan C2R
32.105.120	Read/Write Balluff Hardware & Software for C, M and V Styles
32.105.122	Tool Identification Balluffs - Handle for Read/ Write Head

- P&F, Mazak and other systems available
- Requires EDGE 2.0 control software



4-Position Index System

The 90° spindle indexing system enables you to fix in four precise positions, a key element for the fast and accurate preset and measurement of lathe tooling.

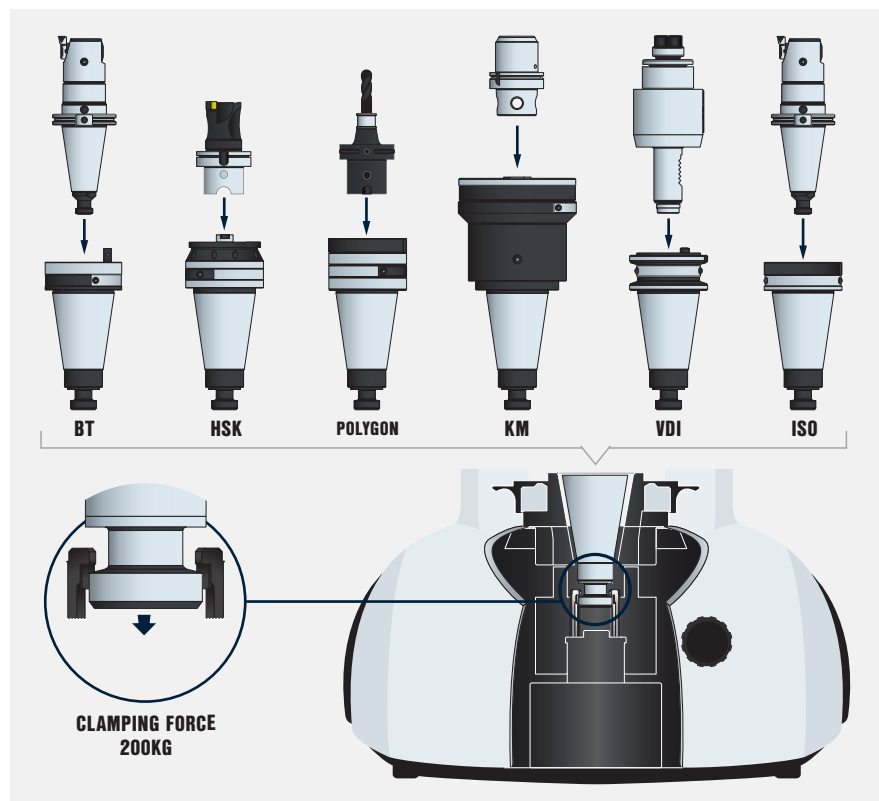


Catalog Number	Description
32.105.200	4-Position Index System

MAGIS Accessories

Automatic Mechanical Clamping System

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



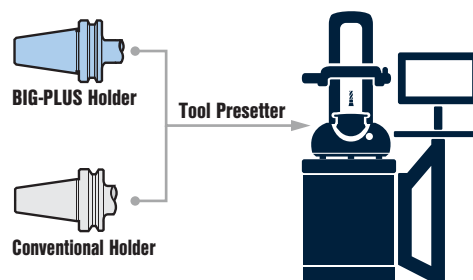
Catalog Number	Type	
	Taper	Size
32.105.204	ISO	30
32.105.203		40
32.105.202		50
32.110.037	HSK	32A/C
32.110.038		40A/C
32.110.039		50A/C*
32.110.040		63A/C
32.110.041		100A/C

Catalog Number	Type	
	Taper	Size
32.110.056	BIG CAPTO	C3
32.110.057		C4
32.110.058		C5
32.110.059		C6
32.110.064		C8

*110mm loss of measuring range with HSK-50A/C integral spindle
 • 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)

Perfect Interchangeability

BIG-PLUS tool holders can be used on existing standard machine spindles. Existing standard tool holders can also be used on BIG-PLUS spindles. In this case, however, simultaneous contact cannot be attained. Although other dual-contact systems require exclusive new accessories, BIG-PLUS tooling uses existing accessories. Further, it is not necessary to modify tool magazines and ATC devices on existing machines.



MAGIS Accessories



SPERONI Workbench

Prevent dirt and debris from corrupting your measuring instrument PC with this enclosed and ventilated workbench. Complete with storage area and lockable door. The black-and-white steel workbench provides working area for all presetting requirements.

Catalog Number	Description	Length	Width	Height
32.MBENCH	SPERONI Workbench - MAGIS	37	20	31

- Plastic holders can be purchased separately depending on tapers needed



Plastic Holder (for Sleeve/Tool Holder)

Catalog Number	Type	
	Taper	Size
32.105.180	ISO	30
32.105.181		40
32.105.182		50
32.105.184	HSK	63A



Workbench

Black steel cabinet with 60x30-inch maple top has a lockable door. The ventilated cabinet has a PC storage shelf and a lower shelf.

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

- Various options available to mount monitor and hand tools



Dust Cover

Protect your investment from dust and contaminants with a custom vinyl cover.

Catalog Number	Description
32.100.110	Dust Cover - MAGIS





FUTURA
FUTURE PROOF TECHNOLOGY

FUTURA

Unparalleled Precision, Repeatability and Longevity

The SPERONI FUTURA line is the result of more than 50 years of experience in the design and production of tool measuring and presetting. The FUTURA line represents the most advanced and complete line of vertical tool presetting and measuring machines in its class. The modular design offers the right solution for every measuring need and can be upgraded for future needs.

Features

- Structure is made completely of aged pearlitic cast iron for thermal stability
- Solid design eliminates need for frequent recalibration
- Unmatched precision — T.I.R .00016" at 11.8"
- High frequency sub-pixel analysis delivers a 45x standard optical magnification
- Front light (episcopy) allows for the manual inspection of the tool tip/insert to detect wear or cracks
- Pneumatically activated spindle disc brake system locks at any point in the 360° rotation
- X & Z-axis fine adjustment hand wheels allow for micron-precise adjustments
- Precision-ground integrated spindle with calibration edge for quick recalibration
- Taper angle tolerance AT1; no need for an external caliper or master
- Micron-precise glass scales and state-of-the-art guideways
- Largest recirculating ball bearing contact face in its class



Pneumatic Rapid X & Z Axis Movement Device



Integral ISO 50 Spindle with Calibration Edge



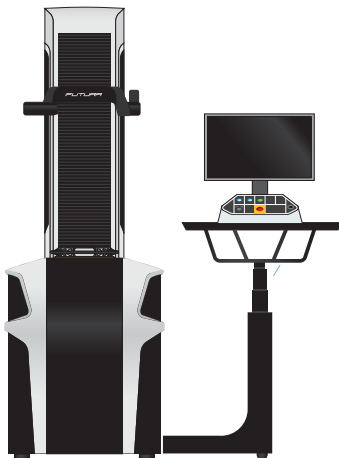
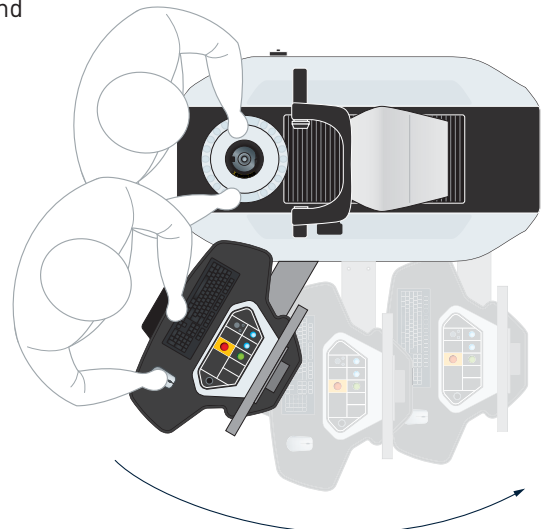
X & Z-Axis Knobs for the Micrometric Movement



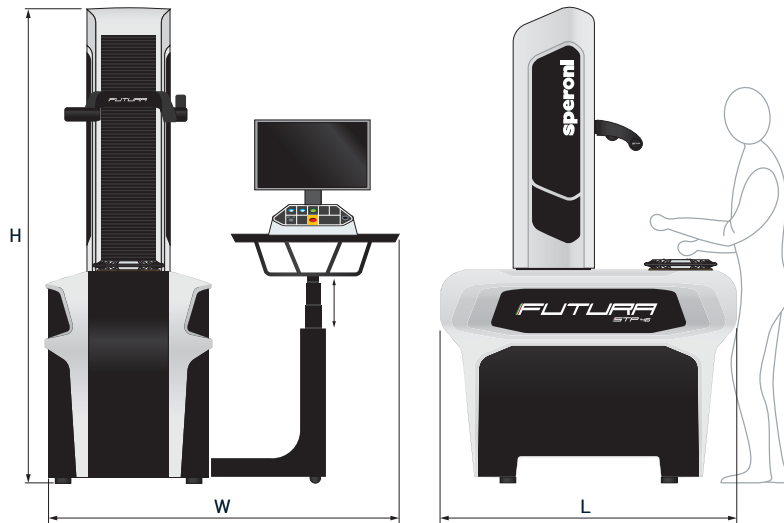
Optimized Cockpit for the Commands

Customizable Work Station

Setting the benchmark in ergonomics, the FUTURA's open spindle and cockpit controls are designed for worker safety and ease of use.



FUTURA



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)	100V (60Hz up to 5 AMPs) 110V (60Hz up to 5 AMPs) 220V (60Hz up to 3 AMPs)	1...2 cfm	70-100 psi (.05-.07 bar)	51.0 (1295mm)	63.0 (1600mm)	74.0 (1880mm)	1215 lbs (550 kg)
32.220.011	FUTURA STP 46		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)				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)				53.0 (1345mm)	63.0 (1600mm)	74.0 (1880mm)	1345 lbs (610 kg)
32.220.018	FUTURA STP 86		24.0 (600mm)				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)

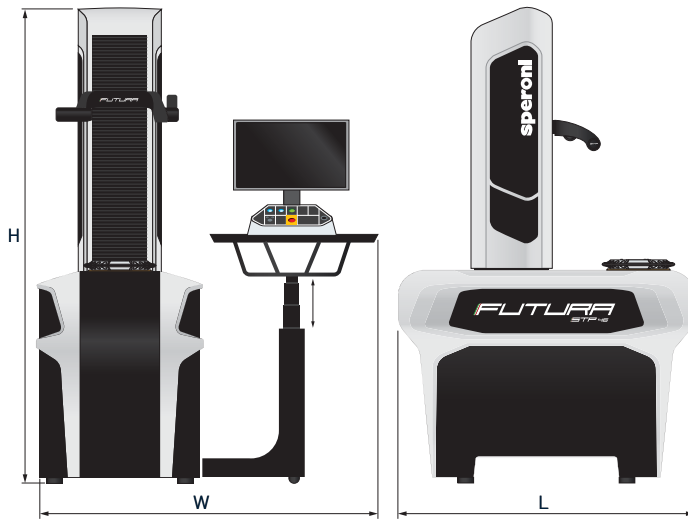
*Please specify power supply choice of 100V, 110V or 220V when ordering

- Use of battery backup is recommended
- Standard integral spindle is ISO 50 taper; other options available
- Standard control software is SIMPLE VISION; upgrades available
- 1-year warranty on material, control, labor and travel expenses

ACCESSORIES

 SPINDLE OPTIONS PG. 53	 SOFTWARE OPTIONS PG. 60	 ADAPTERS PG. 54	 BATTERY BACKUP PG. 72
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FUTURA CNC



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

- Use of battery backup is recommended
- Standard integral spindle is ISO 50 taper; other options available
- Standard control software is SIMPLE VISION; upgrades available
- 1-year warranty on material, control, labor and travel expenses

ACCESSORIES

 SPINDLE OPTIONS PG. 53	 SOFTWARE OPTIONS PG. 60	 ADAPTERS PG. 54	 BATTERY BACKUP PG. 72
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AUTOSHRINK
FUTURE PROOF TECHNOLOGY

PRESETTING & MEASURING A.3



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. The leader in terms of functionality, total accuracy and safety, the FUTURA AUTOSHRINK is the only hands-off fully automatic solution on the market.

Features

- Same features as standard FUTURA
- Drive-pin becomes a true axis, allowing for the highest level of precision
- Shrink-fit HSS tools ranging from $\varnothing 6$ -32mm and carbide tools ranging from $\varnothing 4$ -32mm
- Large range of diameter and taper degree setting and cooling sleeves
- Hands-off automatic positioning heating and cooling coil
- Additional quick-change coil is available for $\varnothing 32$ -50mm
- Cockpit holds all setting and cooling sleeves and cutting tools to be assembled and disassembled
- Through pin is mounted inside the spindle body for fully automatic setting of shrink-fit
- No adjustment required after the tool is shrunk



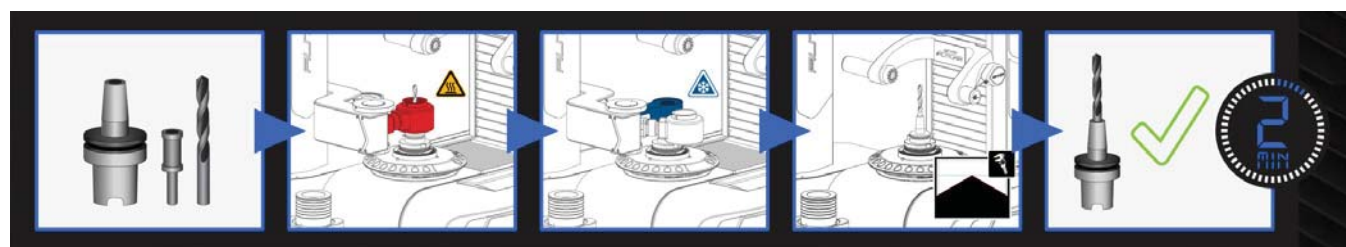
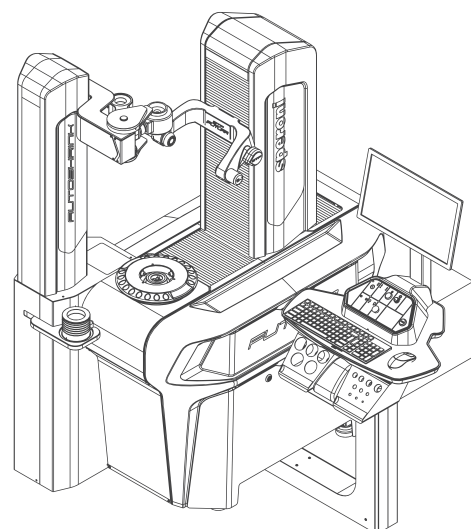
Automatic Integrated Shrinking



Standard Coil to Shrink HSS Tools from 3-32mm in Diameter



Integrated and Automatic Cooling System



Catalog Number	Description
32.220.071	AUTOSHRINK Kit - 400mm & 600mm
32.220.072	AUTOSHRINK Kit - 800mm
32.220.074	AUTOSHRINK Kit - 1200mm
32.316.400	AUTOSHRINK Kit with XXL Coil
32.220.073	Automatic Fume & Gas Extractor for AUTOSHRINK Kit
32.220.080	Multi-Frequency AUTOSHRINK - Fit System

- Catalog numbers are add-on option only and must be combined with a FUTURA catalog number; see pg. 48-49
- Also available as AUTOTRIBOS
- Industrial power transformer required
- Use of battery backup is recommended
- Standard control software is EDGE PRO
- 1-year warranty on material, control, labor and travel expenses

ACCESSORIES



SPINDLE OPTIONS
PG. 53



SHRINK OPTIONS
PG. 57

PRESETTING & MEASURING

FUTURA Accessories

Automatic CNC Spindle

Motorized spindle allows for automatic focusing, location of max diameter and runout. A disc brake system locks the spindle at any point in the 360° rotation.

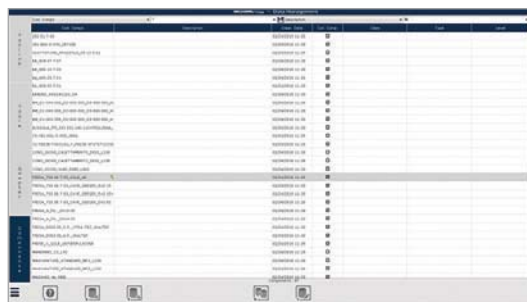
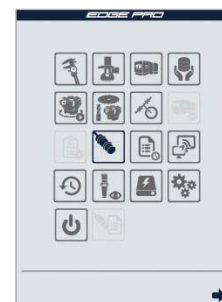


Catalog Number	Description
32.220.008	Automatic [CNC] Axis - Autofocus

- CNC/Autofocus spindle does not require CNC control
- All axes can also be moved manually

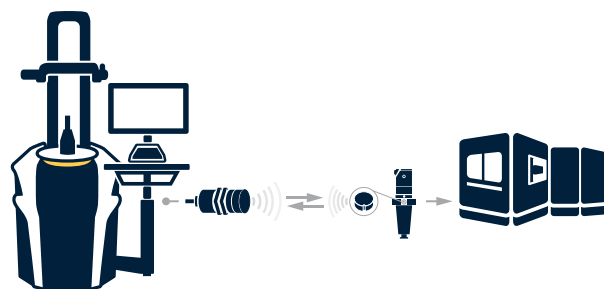
Tool RFID Chip

Provides complete and reliable tool data and guarantees secure operation. Tool RFID chips can be integrated into machine controls for reliable tool management. Data stays with the tool for optimal use and management.



Catalog Number	Description
32.220.081	Tool Identification Balluff: Support System Spindle
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 for C, M and V Styles
32.220.087	Tool Identification Balluffs - Handle for Read/ Write Head

- P&F, Mazak and other systems available
- Requires EDGE 2.0 control software

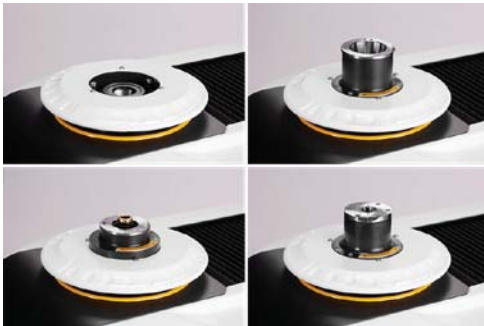


FUTURA Accessories

High-Precision Universal Vertical Rotating Spindle

The uniquely designed spindle includes the hyper static, simultaneous fit clamping system for standard and special tooling adapters.

The universal spindle maintains accuracy throughout the life of the system.



Catalog Number
32.220.025

- Requires SPERONI adapter; must be ordered separately see pg. 54-55

Mechanical Clamping System

The proprietary pneumatically activated universal retention knob clamping system 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. 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.



Catalog Number	Type
32.220.027	F-20

- Available for the new integral spindle included in this FUTURA configuration

FUTURA Accessories

Quick Change Adapter

Manually activated system allows the change of adapters in under 8 seconds. The locking and unlocking of the adapters is carried out by rotating the multi-function spindle handwheel; guaranteeing precision and accuracy within the spindle and adapter assembly and the entire Z-axis travel.



Catalog Number
32.220.026

- SPERONI adapter must be ordered separately

Quick Change Adapter (Steep Taper)

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



Catalog Number	Type	
	Taper	Size
32.300.115	ISO	20
32.300.116		25
32.300.110		30
32.300.111		35
32.300.112		40
32.300.113		45
32.300.114		50
32.300.117		60

Additional Adapters Available

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

- All steep taper adapters are manufactured by SPERONI in accordance to the following standards: ISO 7388.1, Taper Angle Tolerance AT1

Quick Change Adapter (Polygon)

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	BIG CAPTO
32.300.170.1	Automatic	C3
32.300.171.1	Automatic	C4
32.300.172.1	Automatic	C5
32.300.173.1	Automatic	C6
32.300.174.1	Automatic	C8

FUTURA Accessories

Quick Change Adapter (HSK)

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



Catalog Number	Type	
	Taper	Size
32.300.212	HSK	25E
32.300.214		32A/C
32.300.216		32E
32.300.218		40A/C
32.300.219		40B/D
32.300.220		40E
32.300.221		40F
32.300.222		50A/C
32.300.223		50B/D
32.300.224		50E
32.300.225		50F

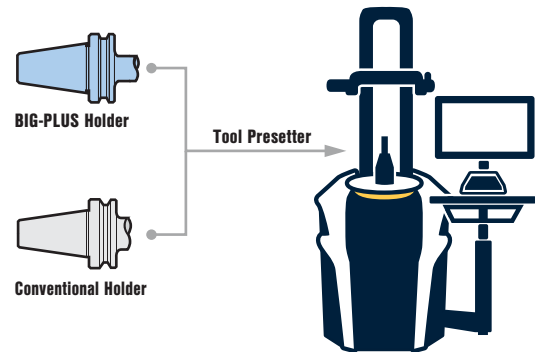
Catalog Number	Type	
	Taper	Size
32.300.226	HSK	63A/C
32.300.227		63B/D
32.300.228		63E
32.300.229		63F
32.300.246		63F/M
32.300.230		80A/C
32.300.231		80B/D
32.300.232		80E
32.300.233		80F
32.300.247		80F/M

Catalog Number	Type	
	Taper	Size
32.300.234	HSK	100A/C
32.300.235		100B/D
32.300.236		100E
32.300.237		100F
32.300.238		125A/C
32.300.239		125B/D
32.300.240		125E
32.300.241		125F
32.300.242		160A/C
32.300.243		160B/D
32.300.244		160E
32.300.245		160F

- All HSK adapters are manufactured in accordance to the following standards: ISO 12614

Perfect Interchangeability

BIG-PLUS tool holders can be used on existing standard machine spindles. Existing standard tool holders can also be used on BIG-PLUS spindles. In this case, however, simultaneous contact cannot be obtained. Although other dual-contact systems require exclusive new accessories, BIG-PLUS tooling uses existing accessories. Further, it is not necessary to modify tool magazines and ATC devices on existing machines.



FUTURA Accessories

Pneumatic Cockpit Height Adjustment

Pneumatically adjust the cockpit for a comfortable operating height. Adjustment range of 200mm.



Integrated Cockpit



Free Standing Cockpit

Catalog Number	Description
32.220.036	Integrated Cockpit – Pneumatic Height Adjustment
32.220.036.1	Free Standing Cockpit System – Fixed
32.220.036.2	Free Standing Cockpit System – Adjustable



Label Printer Support

Place the label printer directly on the control arm of the machine.

Catalog Number
32.220.047



Printer Shelf

Shelf to place a printer directly at the machine.

Catalog Number
32.220.048



Shelves

For Tools and Accessories

Catalog Number
32.220.047.1



Drawer

For Tools and Accessories

Catalog Number
32.220.047.2

FUTURA Accessories

Setting Sleeves

Available in metric and inch, setting sleeves are offered in a 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 Set

Catalog Number	Description	Qty.
32.316.201	Inch	9 Pcs

- Includes the following sizes:
3/16", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/4"

Metric Set

Catalog Number	Description	Qty.
32.316.000	Metric	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 range of diameters and taper degree depending on the tool holder's size and tool shank size.



3° Set

Catalog Number
32.316.110

- 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", 1 1/4"
- Extra large cooling sleeves available upon request

4.5° Set

Catalog Number
32.316.111

- 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

CONTROL SOFTWARE

A4

CONTROL SOFTWARE OVERVIEW	60
SPERONI SOFTWARE	61-67
SIMPLE VISION & ESSENTIA	61
EDGE	62
EDGE PRO	63
CONTROL SOFTWARE OPTIONS	64-67



	ESSENTIA	SIMPLE VISION	EDGE	EDGE PRO
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FUNCTIONS

Automatic Edge Detection	●	●	●	●
Max Profile	●	●	●	●
Runout Function	●	●	●	●
Tool Geometry Measurements (SVS Macros)	●	●	●	●
Tool Data Storage	●	●	●	●
User Management			●	●
Job-Based Setup List			○	●
Point-and-Click Measurements			●	●
Tool Step Programming			●	●
Component Management				●
Autofocus Spindle		○	○	○
Automatic CNC Measurements			○	○
Self-Teach CNC Programming				○
3D Scanning				○
Customizable Measuring Macros	●	●	●	●
Remote Support	●	●	●	●

DATA IMPORT/EXPORT

Label Printer	○	○	○	○
G Code Post Processor	●	●	●	●
SPI Bar Code/QR Code Support	○	○	○	○
CAD/CAM Data Import/Export			○	○
RFID Integration			○	○
Automatic RFID Read/Write System				○
TMS Intelligo/UBI Integration	○	○	○	○

● = Standard ○ = Optional

SIMPLE VISION & ESSENTIA

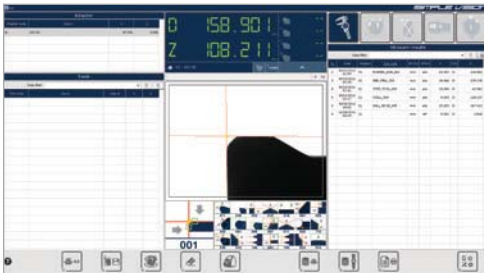
Standard software offered with a SPERONI tool presetter.

Features

- Flying cross-hair
- Full screen function and zoom to 120x
- 45x standard magnification
- Over 150 measuring icons
- Dial indicator and runout functions
- Maximum profile function
- Tool management for 1,000 tools
- Adapter and zero-point management
- Base post-processor
- Data backup function
- Powerful online help function
- Auto-focus function available on SIMPLE VISION (optional)



- Standard control software for ESSENTIA, MAGIS and FUTURA



Tool and Adapter Management

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



Runout Function

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



Post Processor

The integrated Post Processor allows generating and transferring the offset files for single measured tools automatically toward the numeric controls through a network connection, FTP server, USB device, etc., to eliminate any chance of error.

EDGE

Control and image processing system for tool management, user management, tool inspection and CAD.

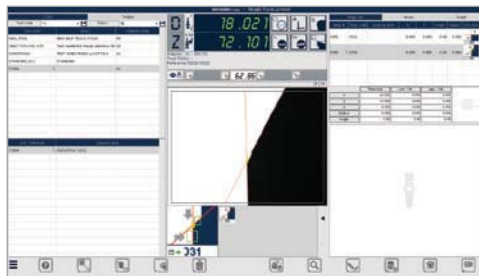
Features

- All the features of SIMPLE VISION
- Full tool management
- Pictures and graphics management
- Quick report management
- History tracking
- Automatic data backup
- Auto-focus management (optional)
- Jobs management (optional)
- Full post-processor (optional)
- User management (optional)



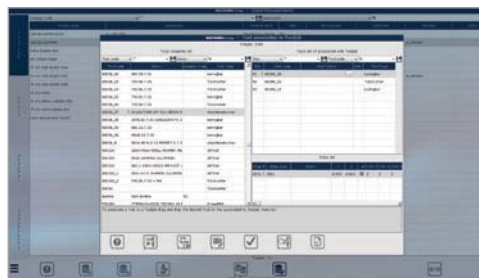
Catalog Number	Description
32.105.102	EDGE 2.0 - MAGIS
32.220.005	EDGE 2.0 - FUTURA

- Standard control software for MAGIS CNC, upgrades available



Database and Step Programming

Catalog and program all your tools in seconds either online or offline via the optional EDGE 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 has a specific user ID, password and access level.

EDGE PRO

Control and image processing system a complete control for manual and CNC configurations.

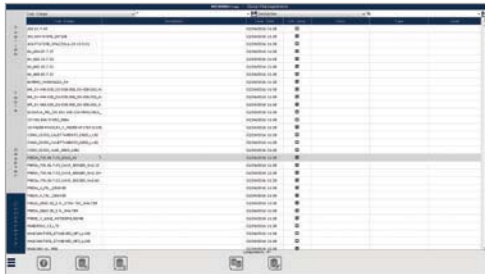
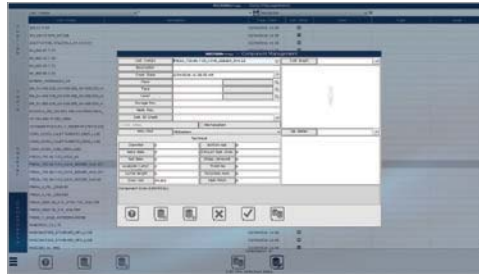
Features

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



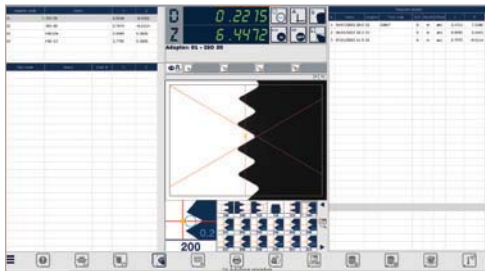
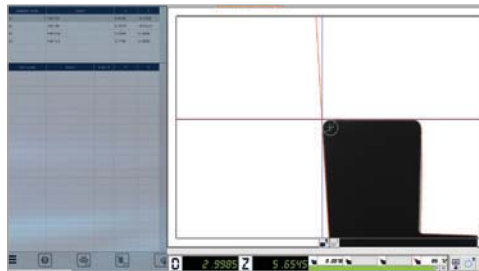
Catalog Number	Description
32.105.104	EDGE PRO - MAGIS
32.220.006	EDGE PRO - FUTURA

- Standard control software for FUTURA CNC and FUTURA AUTOSHRINK



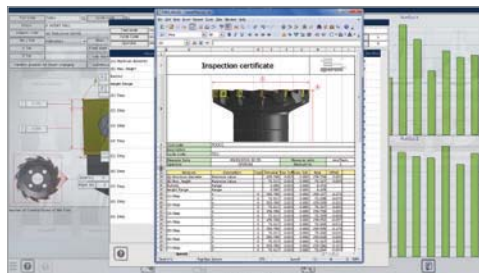
Database

The powerful database allows for the cataloging of tool jobs, tool assemblies, zero-points and adapters, as well as single components.



Automatic Measurement

Together with the CNC axis, EDGE PRO provides an easy interface for the automatic measurement of all your tools.



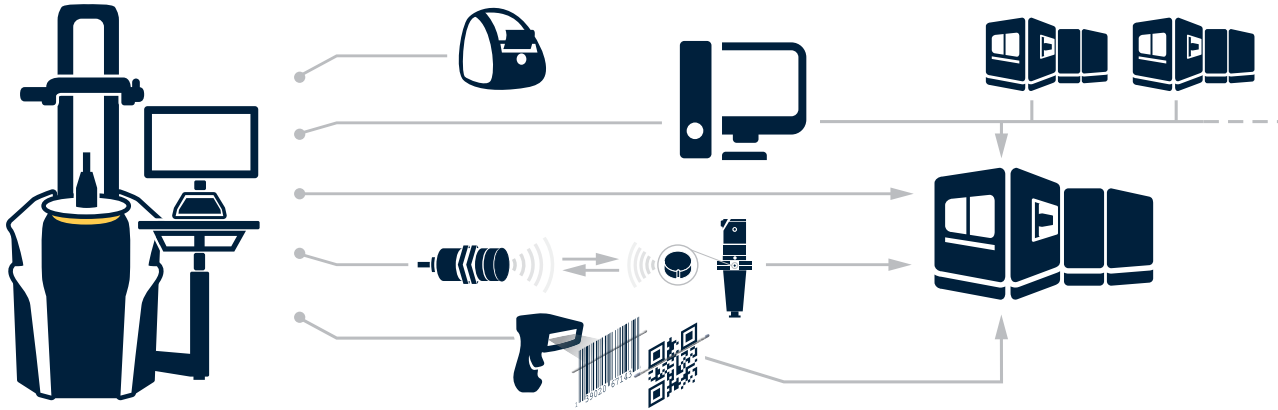
Self-Teach Programming

Allows you to freely program any simple or complex tool your way. The generation of a detailed and customizable inspection certificate is a built-in feature.

Control Software Options

RFID Integration (Balluff, Mazak & Pepperl+Fuchs)

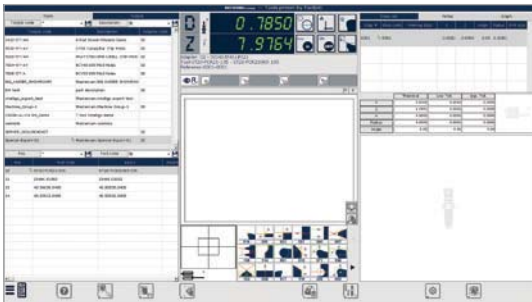
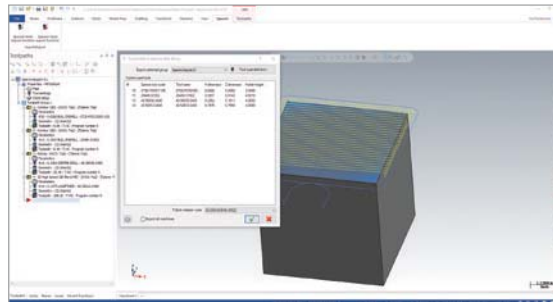
Read RFID tags in the presetter and write updated tool offsets back to the tag.



- EDGE/EDGE Pro required for Balluff and P&F

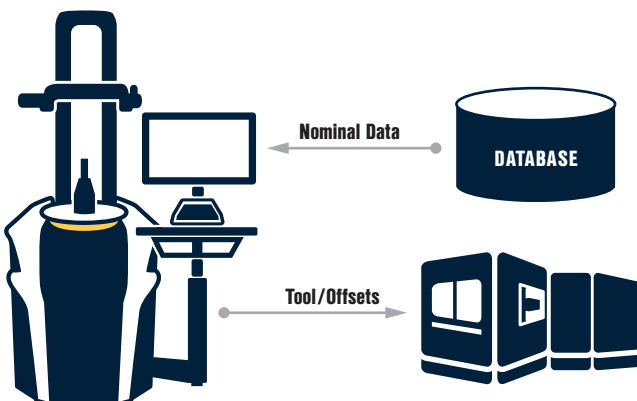
CAM Integration (Mastercam, Esprit, Siemens NX, Powermill, Gibbs, ETC.)

Seamlessly transfer existing CAM tool data to EDGE or EDGE PRO controls and eliminate the tool data entry process on your presetter.



Tool Management Integration (Intelligo, TDM & Wintool)

Links SPERONI EDGE / EDGE PRO to tool management software to share a tool database in real time.

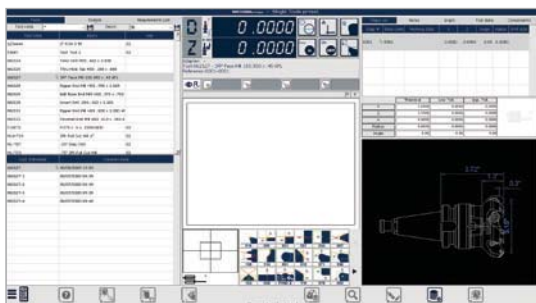


CONTROL SOFTWARE

Control Software Options

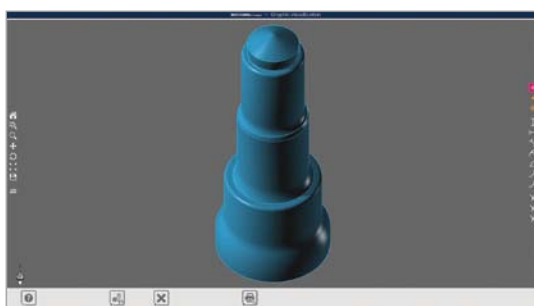
Cell Controller Integration (Makino & Fastems)

Links SPERONI EDGE / EDGE PRO to cell controller database for real-time offset transfers.



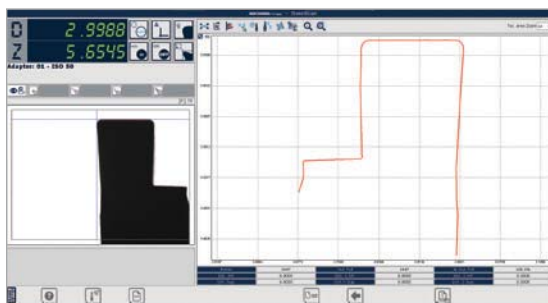
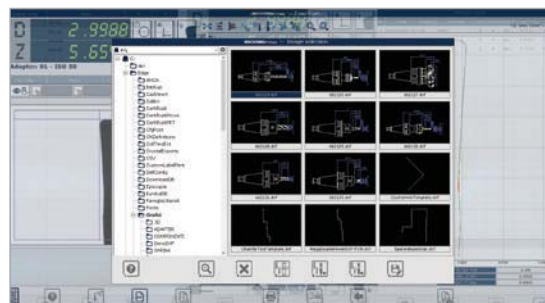
Vericut simulation integration

Export 3D scan profiles to Vericut.



Base Scan & Templating

Using the 3D scan function, compare and overlay worn or reground tool profiles to a drawing and easily detect defective or worn tool profiles.



CONTROL SOFTWARE

Control Software Options

Automatic Edge Detection

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



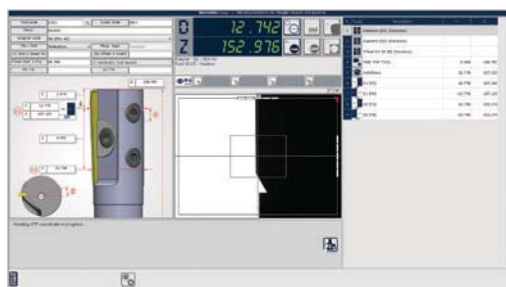
Step Tools

Step tool measurements are easily and automatically performed.



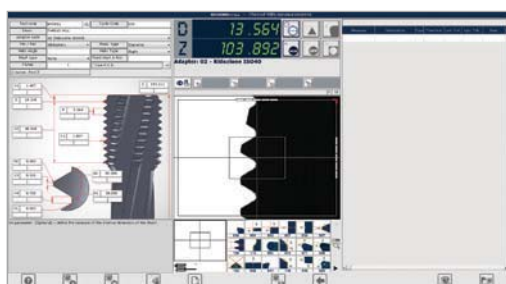
Reamers

Measurement and setting of reamers without data entry.



Thread Mills

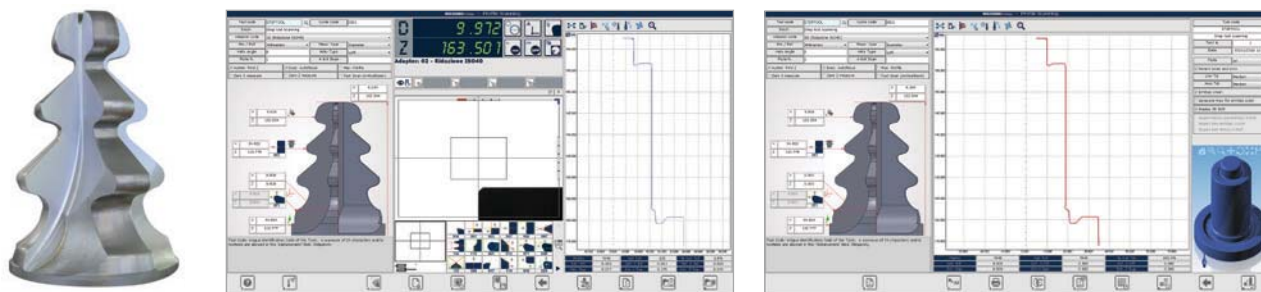
Easy programming and accurate measurement of pitch length, pitch diameter, etc.



Control Software Options

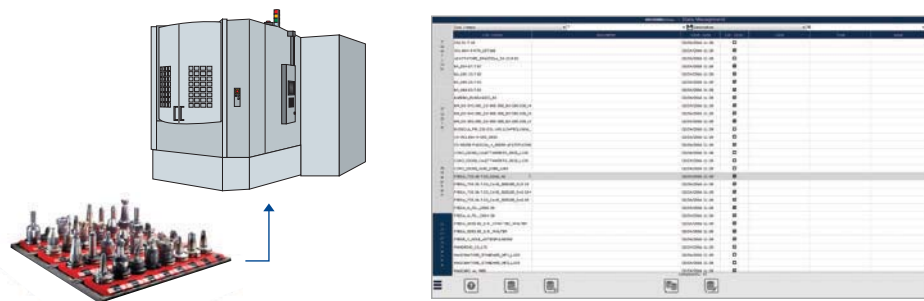
Scanning Function

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



Job Comparison & Tool Preparation List

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



Families Measuring Programs

Measuring and presetting of tools without data entry.



ACCESSORIES AND MAINTENANCE

A.5



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Tapered Adapter (ESSENTIA & MAGIS)

Reference Edge Provided On The Adapter Face For Zero Setting



BT

Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
BT40-30STP	BT40	ISO30	1.97 (50mm)
BT50-30STP	BT50	ISO30	
BT50-40STP	BT50	ISO40	

Manual Front Clamp Adapter (ESSENTIA & MAGIS)

With the adapter mounted on the presetter, tools can be mounted/demounted using an allen key.



BT/HSK

Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
BT50-TPA/HSK32C-80STP	BT50	HSK-32A/E❖	3.15 (80mm)
BT50-TPA/HSK40C-80STP	BT50	HSK-40A/E	
BT50-TPA/HSK50C-85STP	BT50	HSK-50A/E	3.35 (85mm)
		HSK-63F	
BT50-TPA/HSK63C-85STP	BT50	HSK-63A/E	3.35 (85mm)
BT50-TPA/HSK100C-140STP	BT50	HSK-100A	5.51 (140mm)

- Reference edge is provided for zero set
- The adapter is designed for the presetter and cannot be used on a machining center
- For models marked ❖ 32A cannot be used with a coolant pipe

BT/BIG CAPTO

Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
BT50-TPA/C4C-90STP	BT50	C4	3.54 (90mm)
BT50-TPA/C5C-95STP		C5	3.74 (95mm)
BT50-TPA/C6C-100STP		C6	3.94 (100mm)
BT50-TPA/C8C-130STP		C8	5.12 (130mm)

- Reference edge is provided for zero set
- The adapter is designed for the presetter and cannot be used on a machining center
- Holders can be mounted with or without a coolant pipe

Auto Clamp Adapter (MAGIS)



ISO

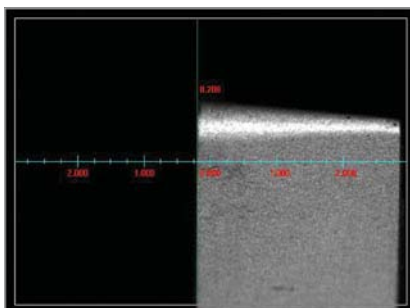
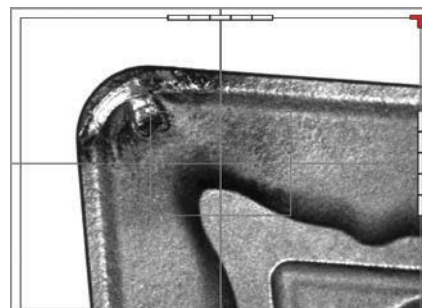
Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
32.310.101	ISO50	ISO30	1.38 (35mm)
32.310.100		ISO40	
32.310.102		ISO45	

ISO/HSK

Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
32.310.110	ISO50	HSK-A40	3.15 (80mm)
32.310.111		HSK-A50	
32.310.112		HSK-A63	

ISO/BIG CAPTO

Catalog Number	Type		Z Offset
	Outer Taper	Inner Taper	
32.310.119	ISO50	C3	3.15 (80mm)
32.310.120		C4	
32.310.121		C5	
32.310.122		C6	



Second CCD Camera

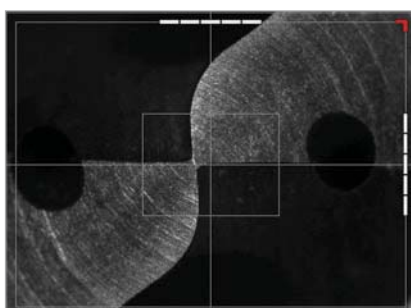
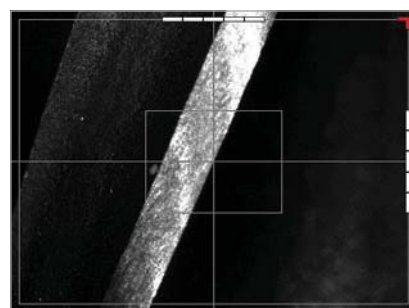
The fixed second CCD Camera is equipped with a dedicated inspection light. Field of view is 6mm x 4.5mm and has a visual magnification of 45x with a zoom function of 120x magnification.

This additional camera is completely independent from the optic that comes with the SPERONI 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 SPERONI 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
- Requires EDGE 2.0 or EDGE PRO software control

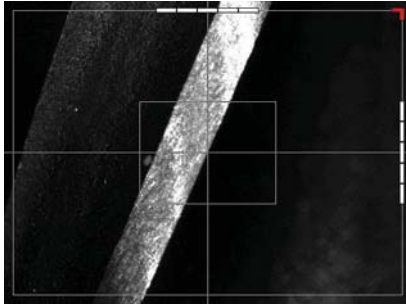


Second CCD Camera (With Swing Arm)

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 0° and 90°. Between -30° and 120°, 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
- The maximum measurable diameter at horizontal camera position is 356mm
- The maximum measurable diameter at a vertical camera position is 240mm
- Requires EDGE 2.0 or EDGE PRO software control



Dedicated Optics

View micro tools with increased magnification.

Catalog Number	Description
32.299.157	1.5mm x 1mm
32.299.164	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 and 50mm in radius.

100mm

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

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

- The maximum space between the optic carrier is 220mm



Touch-Screen Monitor

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
32.300.039	24" Touch-Screen Monitor - MAGIS
32.220.056	24" Touch-Screen Monitor - FUTURA



Battery Backup

This compact APC Back-UPS Pro tower provides backup power during outages, protects electronics from surges, manages peripheral power, and features an LCD screen showing estimated runtime.

Catalog Number	Description
32.316.901	1000VA (or equivalent) - 115 AC

ACCESSORIES



Label Printer

Print text and bar code labels.

Catalog Number	Description
32.300.021	Thermal Alphanumeric - MAGIS
32.220.042	Thermal Alphanumeric - FUTURA

- For PC-based controls



Printer

Print lists and inspection certificates.

Catalog Number	Description
32.220.043	Color Inkjet Printer

Data Clip

Secure around the flange for easy labeling of tools.



Steep Taper

Catalog Number	Taper Type
32.DC-BT30	BT30
32.DC-BT40	BT40
32.DC-BT50	BT50
32.DC-CV40	CV40
32.DC-CV50	CV50

HSK

Catalog Number	Taper Type
32.DC-HSK25	HSK25
32.DC-HSK32	HSK35
32.DC-HSK40	HSK40
32.DC-HSK50	HSK50
32.DC-HSK63	HSK60
32.DC-HSK100	HSK100

BIG CAPTO

Catalog Number	Taper Type
32.DC-C3	C3
32.DC-C4	C4
32.DC-C5	C5
32.DC-C6	C6
32.DC-C8	C8

Edge Cover

Cover protects the calibration reference edge.



Catalog Number	Taper Type
STP-EC40	BT40
STP-EC50	BT50

- For ESSENTIA and MAGIS integral spindles only

Cleaning Putty

Keep your measurements accurate by wiping away dust particles, oil or coolant from your tools.



Catalog Number	Description
32.400.049	Tool Cleaning Putty - 2oz.

- One package includes 6 units of cleaning putty



TOOL PRO

Tool holding device for the assembly and disassembly of tooling systems.



Steep Taper

Catalog Number	Type	
	Taper	Size
31.300.001	ISO	30
31.300.002		40
31.300.004		50
31.300.020		60

HSK Taper

Catalog Number	Type	
	Taper	Size
31.300.015	HSK	A40
31.300.008		A50
31.300.006		A63
31.300.005		A100
31.300.029		A125

Polygon Taper

Catalog Number	Type	
	Taper	Size
31.300.065	C	5
31.300.066		6

- HSK Type E/F and VDI also available
- For full 360° rotation, remove safety pin from rear of base; consult BIG DAISHOWA engineering for additional details



VARIO

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

Catalog Number	Description
31.300.100	Base Unit

Steep Taper Adapters

Catalog Number	Description	Type	
		Taper	Size
31.300.110	Fixed	ISO	30
31.300.112			40
31.300.114			50
31.300.271	Spin	ISO	30
31.300.272			40
31.300.273			50
31.300.117	Fixed	AGH	35

HSK Taper Adapters

Catalog Number	Description	Type	
		Taper	Size
31.300.130	Fixed	HSK	A32
31.300.131			A40
31.300.132			A50
31.300.133			A63
31.300.134			A80
31.300.135			A100
31.300.283	Spin	HSK	A63
31.300.284			A80

Polygon Taper Adapters

Catalog Number	Description	Type	
		Taper	Size
31.300.153	Fixed	C	3
31.300.154			4
31.300.155			5
31.300.156			6
31.300.158			8
31.300.292	Spin	C	6
31.300.293			8

- HSK Type E/F and VDI also available
- For tapers not shown please contact BIG DAISHOWA

SPIN

Tools can be locked at increments of 30° by engaging an index pin. The adapter can also be rotated 180° and locked into any position in increments of 45°.

Steep Taper

Catalog Number	Type	
	Taper	Size
31.300.202	ISO	40
31.300.204		50

HSK Taper

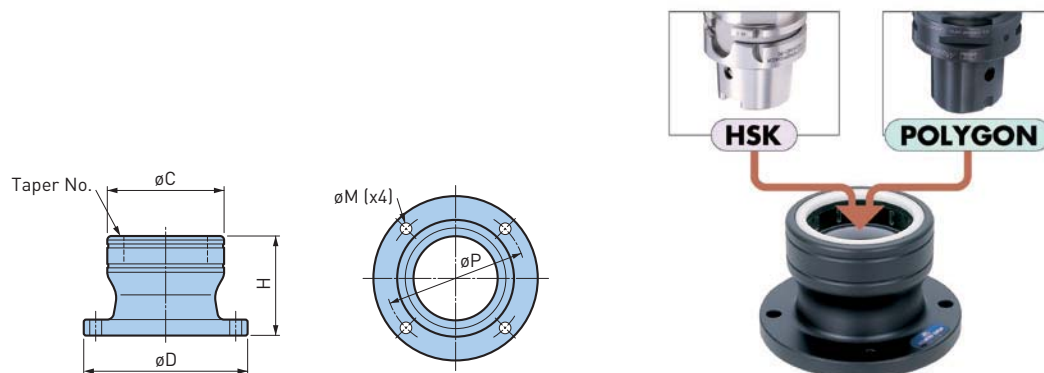
Catalog Number	Type	
	Taper	Size
31.300.214	HSK	A63
31.300.215		A80
31.300.216		A100
31.300.217		A125

- For full 360° rotation, remove safety pin from rear of base; consult BIG DAISHOWA engineering for additional details
- For tapers not shown, please contact BIG DAISHOWA



KOMBI GRIP

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



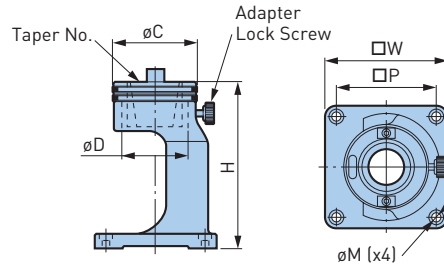
Catalog Number	HSK (Form A/E/F)	BIG CAPTO	øC	øD	H	øP	øM
KG25R	25	—	1.890	3.110	2.559	2.441	.276 (For M6) or UNC 1/4
KG32R	32	C3	2.165	3.346		2.717	
KG40R	40	C4	2.480	3.661	2.756	3.031	
KG50R	50	C5	2.953	4.134		3.504	.354 (For M8) or UNC 5/16
KG63R	63	C6	3.465	4.862	2.953	4.154	
KG80R	80	C8	4.213	5.591	3.543	4.882	
KG100R	100	—	5.000	6.378	3.937	5.669	

- Mounting bolts (4 pcs.) not included
- KOMBI GRIP can be used for BIG CAPTO; polygon taper made by other manufacturers cannot be used

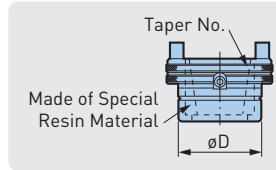
KOMBI GRIP must be securely fixed to a bench with 4 mounting bolts.

TOOLING MATE

For mounting and removal of pullstud bolts and tools.



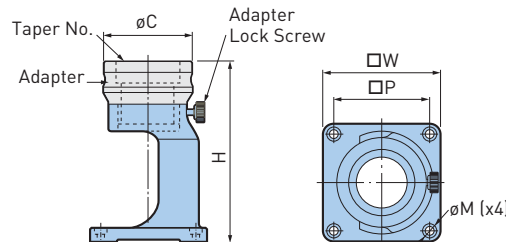
Replaceable Adapter



Catalog Number	CV/BT	ϕC	ϕD	H	$\square W$	$\square P$	ϕM	Adapter Model
TMS40-30	30	2.992	2.362	5.906	4.331	3.543	.276 (for M6)	TMA40-30
TMS40-40	40							TMA40-40
TMS50-40	40	4.134	3.465	7.480	6.299	5.118	.354 (for M8)	TMA50-40
TMS50-50	50							TMA50-50

- 1 adapter is included
- Adapters can be ordered individually
- Adapter lock screw is available as a spare part (Model: RTM0615)
- Mounting bolts (4 pcs.) not included

TOOLING MATE must be securely fixed to a bench with 4 mounting bolts.



Catalog Number	HSK	BIG CAPTO	ϕC	H	$\square W$	$\square P$	ϕM	Adapter Model
TMS40-32R	32	—	2.992	6.496	4.331	3.543	.276 (for M6) or UNC 1/4	TMA40-32R
TMS40-40R	40	C4						TMA40-40R
TMS40-50R	50	C5						TMA40-50R
TMS40-63R	63	C6	3.425	6.772	6.299	5.118	.354 (for M8) or UNC 5/16	TMA40-63R
TMS50-63R	63	C6	4.094	8.071				TMA50-63R
TMS50-80R	80	C8	4.488	8.465				TMA50-80R
TMS50-100R	100	—	4.882	8.622				TMA50-100R

- 1 adapter is included
- Adapters can be ordered individually
- Adapter lock screw is available as a spare part (Model: RTM0615)
- Mounting bolts (4 pcs.) not included
- Tooling Mate can be used with BIG CAPTO; polygon taper made by other manufacturers cannot be used

TOOLING MATE must be securely fixed to a bench with 4 mounting bolts.



Spindle Cleaners

Clean tapered spindles maintain precision and prolong the life of machine tools, cutting tools and tool holders.

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



Steep Taper (With Pull Stud Recess)

Catalog Number	Type	
	Taper	Size
SC20	ISO	20
SC30		30
SC40		40
SC45		45
SC50		50



HSK Taper

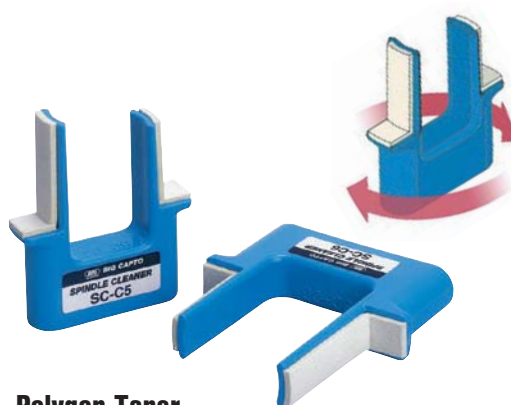
Catalog Number	Type	
	Taper	Size
SC-HSK20E	HSK-E	20
SC-HSK25	HSK-A	25
SC-HSK25E	HSK-E	
SC-HSK32	HSK-A	32
SC-HSK32E	HSK-E	
SC-HSK40	HSK-A	40
SC-HSK40E	HSK-E	
SC-HSK40F	HSK-F	
SC-HSK50	HSK-A	50
SC-HSK50E	HSK-E	

Catalog Number	Type	
	Taper	Size
SC-HSK63	HSK-A	63
SC-HSK63E	HSK-E	
SC-HSK63F	HSK-F	
SC-HSK80	HSK-A	80
SC-HSK80F	HSK-F	
SC-HSK100	HSK-A	100
SC-HSK100E	HSK-E	
SC-HSK125	HSK-A	125



Morse Taper

Catalog Number	Type	
	Taper	Size
SC1	MT	1
SC2		2
SC3		3
SC4		4
SC5		5
SC6		6

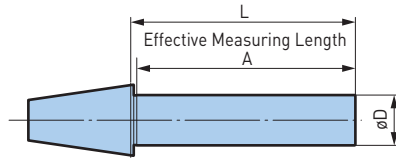


Polygon Taper

Catalog Number	BIG CAPTO
SC-C3	C3
SC-C4	C4
SC-C5	C5
SC-C6	C6
SC-C8	C8

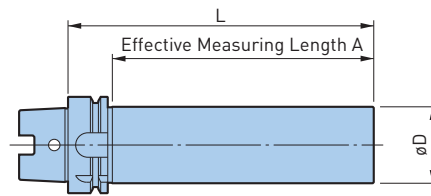
DYNA TEST

Gage Bars



Basic Type

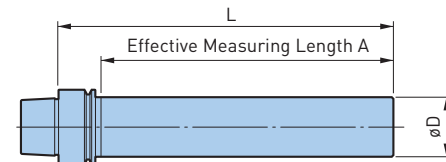
Catalog Number	L	A	øD
NT30-32-L150	5.906	5.591	32mm
NT30-32-L225	8.858	8.543	
NT40-50-L200	7.874	7.244	50mm
NT40-50-L335	13.189	12.559	
NT50-50-L200	7.874	7.520	
NT50-50-L335	13.189	12.835	



- As the depth of the drive keys are symmetrical, it can be mounted in 180° inversion

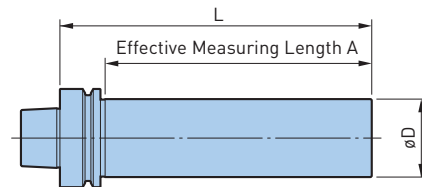
HSK-A Type (DIN 69893-1 and ISO 12164-1)

Catalog Number	L	A	øD
HSK-A40-32-L180SD	7.087	6.181	32mm
HSK-A50-32-L150SD	5.905	4.764	
HSK-A50-32-L240SD	9.449	8.307	
HSK-A63-50-L200SD	7.874	6.732	50mm
HSK-A63-50-L350SD	13.780	12.638	
HSK-A100-50-L200SD	7.784	6.614	
HSK-A100-50-L350SD	13.780	12.520	
HSK-A125-50-L360SD	14.173	12.910	



HSK-E Type (DIN 69893-5)

Catalog Number	L	A	øD
HSK-E25-20-L175	6.890	6.417	20mm
HSK-E32-20-L180	7.087	6.220	
HSK-E40-32-L180	7.087	6.181	32mm
HSK-E50-32-L240	9.449	8.307	

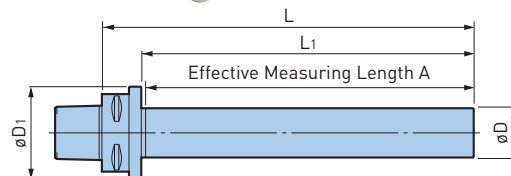


HSK-F Type (DIN 69893-6)

Catalog Number	L	A	øD
HSK-F63-50-L200	7.874	6.732	50mm
HSK-F63-50-L350	13.780	12.638	

BIG CAPTO Type

Catalog Number	L	L ₁	A	øD	øD ₁
C5-32-L150	7.087	5.906	5.827	32mm	2.480
C5-32-L215	9.646	8.465	8.386		
C5-40-L250	11.024	9.843	9.724	40mm	2.953
C6-40-L150	7.165	5.906	5.787	40mm	
C6-40-L200	9.134	7.874	7.756		
C6-40-L320	13.858	12.598	12.480		
C8-40-L200	9.449	7.874	7.756	40mm	3.346
C8-40-L320	14.173	12.598	12.480		



SPERONI Service

BIG DAISHOWA SPERONI Service provides unparalleled precision, reliability and continuous productivity to elevate your machining experience. Our SPERONI service is designed to optimize your machine's performance. Every detail matters. We clean, inspect and lubricate all applicable parts of your machine, giving you a solid foundation for consistent, precise operations.

Annual Software Maintenance Programs

Unlock the full potential of your Speroni machine's controls with our Annual Software Maintenance. Programs are offered for each of the control systems.

Annual Maintenance & Inspection Visit

Ensure your machine's longevity and performance with our Annual Maintenance & Inspection Visit. Our experts meticulously examine and fine-tune every aspect of your SPERONI machine, keeping it in prime condition. From thorough inspections to precise adjustments, this visit is your guarantee of uninterrupted precision.

SPERONI Service is not only about maintaining machines; it's about nurturing your vision and ambition to reach new levels of productivity.

Services Include

- Thorough inspection and lubrication
- Bearing preload optimization
- Concentricity and alignment verification
- Mechanical and optical excellence
- Functionality assessment
- Repeatability and calibration assurance
- Technical support
- Travel and labor
- Emergency labor cost savings
- Remote support

SPERONI Training

Empowering Your Expertise

Our commitment to precision goes beyond machines; it extends to your understanding of them. Step into the world of expertise with our comprehensive SPERONI training.

Controls Training at BIG DAISHOWA

Controls training designed to equip you with in-depth knowledge, we offer targeted training sessions that elevate your mastery of SPERONI controls. Our focus is on your growth.



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