

STP FUTURA



speroni
precision by design





reddot award 2014
winner



FUTURA · 科技引领未来
FUTURA · future proof technology

STP FUTURA刀具预调与测量系统，是我们50多年来革新技术的延伸。我们的产品一直是行业内技术领导者。

STP FUTURA 引领人类工程学与机器易用性上了一个新的台阶。也带来了刀具预调与测量系统世界性的精度革命。

模块化的设计与丰富的配置，不仅为每一次测量提供正确的解决方案，同时更保证提供全面可升级方案以满足您公司不断发展的需要。

The new *STP FUTURA* line of tool presetting and measuring systems, is the expression of our 50 years of innovative technology. Based on key construction concepts which have always been copied but never equalled, the new *STP FUTURA* introduces new levels of ergonomics, ease of use and precision in the tool presetting and measuring world. The modular design and vast number of configurations available, offer the right solution for every measuring need guaranteeing at the same time full upgradability in the future as your company's needs grow.

50年创新与质量保证
50 years of innovation and quality



SPERONI 自从1963年创立以来，便致力于从设计上提供最根本的的解决方案，为用户创造最大的价值。

完善的质量控制体系：
SPERONI 作为全制造型企业，对所交付的产品拥有全面的质量控制能力，在车削、镗铣、磨削及复合加工上一直采用先进的技术与设备。

强大的软件研发与设计能力：
软件上的研发与设计100%来自意大利总部。50多年来我们一直坚持向用户提供第一手的信息与技术。

公司的信念与战略：
自始至终的质量保证与透明化的沟通。SPERONI 在1997年通过了 ISO9001 质量认证体系。

所有的刀具预调与测量设备（含软件系统）均由 SPERONI 全面自主设计制造。

Since 1963 *SPERONI* has dedicated its design efforts to provide fundamentally sound solutions in order to generate the most value for its end users.

We have full control of the quality we deliver due also to the fact that *SPERONI* is a full manufacturing company employing the latest technologies in turning, milling, grinding and complex machining. 100% of our software development and design is carried out at our headquarters in Italy providing 50 years of first-hand knowledge to all our customers. Quality and transparent communication has been a true belief and a strategy since our beginning. Since 1997 *SPERONI* has been ISO 9001 certified, further guaranteeing the quality of our products and services.

All SPERONI tool presetting and measurement systems are fully designed and manufactured, software included, by SPERONI spa.

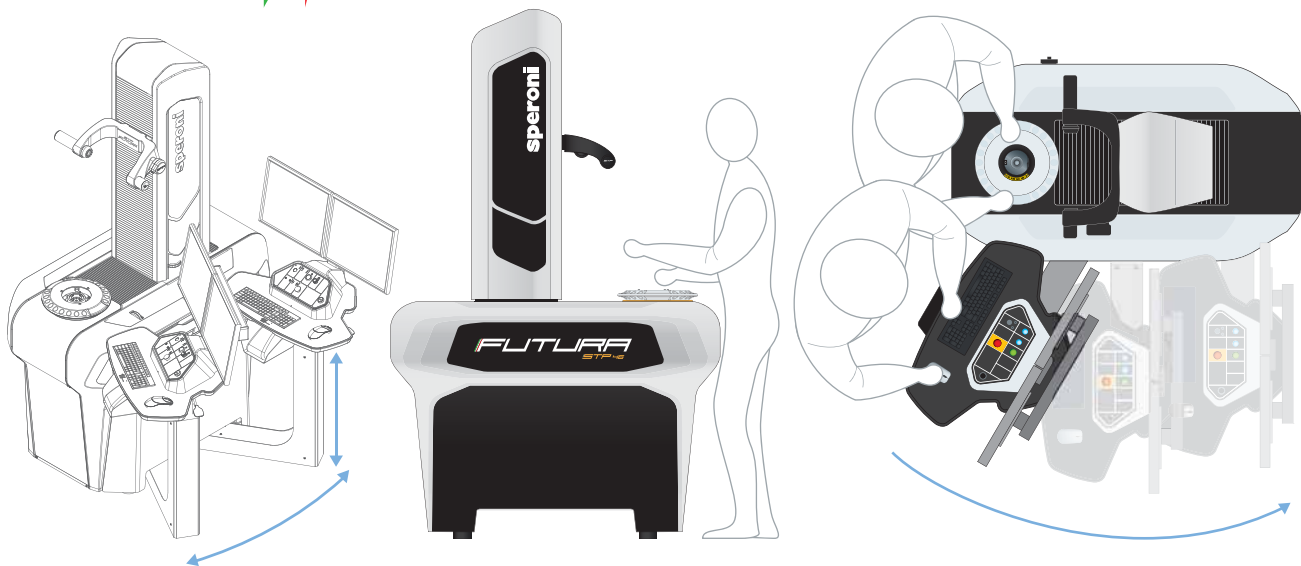


专注于人体工程学
focus on ergonomics

作为一家刀具预调仪生产商，推动刀具预调与测量技术的进步是我们永恒的追求目标。人体工程学有时候不仅仅是一句营销口号。面临的挑战主要是诸如安全性、易用性以及美观性等。

As a manufacturer, it is our constant aim to push the boundaries of tool presetting & measurement.

Ergonomics is sometimes used just as a marketing slogan. The challenges we faced in this department encompassed aspects such as safety, ease of use and design.



STP FUTURA在人体工程学方面绝对树立了一个新的标准。同时，开创了机械夹紧主轴设计的先河，采用全新的可旋转、可升降的操作平台，树立了行业的标准及典范。

STP FUTURA让每一位操作者都可以自由调节找到最舒适的操作位置。

The new *STP FUTURA* definitely sets a new bar becoming the benchmark also in the ergonomics department. While maintaining the unsurpassed open spindle design and introducing a completely new and redesigned cockpit solution *STP FUTURA* allows each operator to fully customize his and hers working position.

精密源于设计
precision by design

我们的坚实设计与精密卓越的制造，使得在工作间的温度发生改变时，机器不再需要频繁的校准，同时也保证了机器系精度稳定性与可持续性。基于这种技术，其他刀具预调仪厂家为纠正机械精度损失而进行的软件补偿法，在我们的机器上不再需要。

STP FUTURA的精度源于精密的设计与制造工艺。

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

单手操作的快速轴向运动系统，操作者可以同步移动或单独移动X/Z轴。符合人体工程学的按钮气动激活系统，移动平稳精准。

One hand rapid axis movement has been designed to maximize the ease of use of the system. The operator can move the axis simultaneously or independently. Pneumatically activated this feature guarantees smooth and precise movement of the linear axis.



符合人体工程学的X/Z轴微调手轮，微米级调整精度，移动平稳，操作方便。



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



精密研磨的高精度主轴，完全由SPERONI制造。是刀具预调仪领域最高等级的主轴。主轴上集成校准刃，可以快速校准基准，不需要使用额外的校准基准规。

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). Precision ground integrated spindle calibration edge for the fast and easy recalibration of the system is included.





符合人体工程学的按钮
操作便捷舒适
主轴旋转锁紧按钮
4*90分度锁紧
主轴机械拉紧按钮
刀具表面检查灯调整按钮

Industrial grade controls for the spindle disk brake system, the 4-position index*, the mechanical tool clamping* and all other controls are conveniently positioned on the new cockpit system for ease of use and maximum ergonomics.



海德汉玻璃光栅尺
施利博格直线导轨
坚固而精密的滚珠轴承，确保在全行程范围内最高精度等级的重复测量精度



Micron precise Heidenhain® glass scales, state of the art Schneberger® guideways, together with the largest and toughest recirculating ball bearing contact surface in its class, guarantee the highest precision and repeatability along the whole system's measuring range.



转换套抽屉，方便放置与取出转换套。抽屉关闭后与外部环境隔离，有效的保护转换套。
可通过操作系统控制。

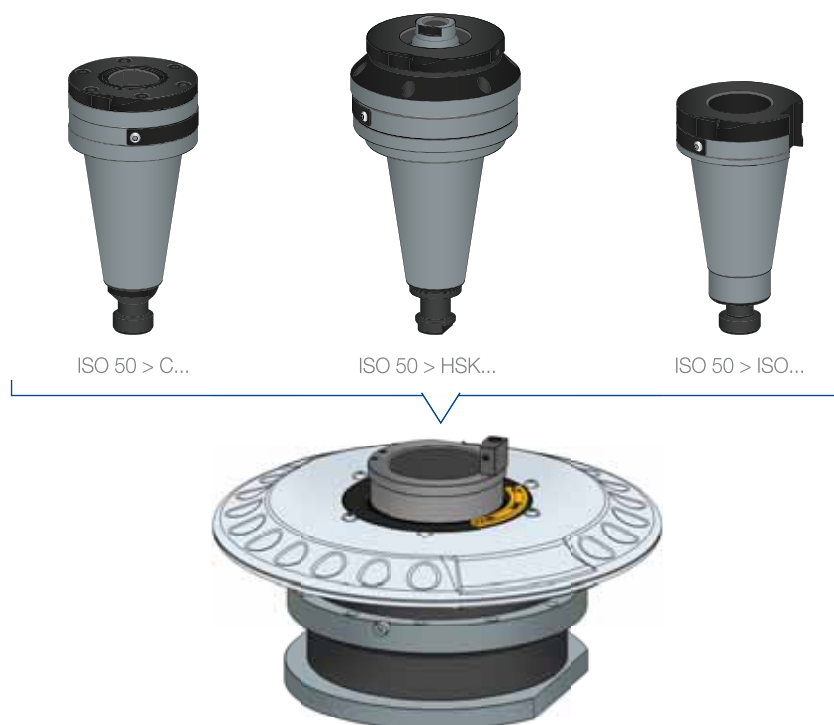
New integrated *original* adapter support is conveniently located in a drawer making them readily available and protected from the environment. A different secured drawer allows for easy access to the electronics and controls of the system.

产品特性 highlights	<ul style="list-style-type: none"> > 对称结构 > 极致人体工程学 > 无以伦比的精度 > 海德汉玻璃光栅尺 > 施利博格直线导轨 > 索尼CCD相机 > 马赛-奥博特光学镜头 > 菲斯托气动系统 > 著名品牌控制器 > SPERONI主轴系统 > 自动机械夹紧主轴、主轴自动聚焦系统、全自动CNC系统、X/Z轴CNC控制系统 > 数据输出（后置处理器）与网络联网通讯 	<ul style="list-style-type: none"> > homogeneous structure > maximum ergonomics > superior precision > Heidenhain® glass scales > Schneeberger® linear guideways > Sony® CCD cameras > Marcel Aubert® optics > Festo® pneumatics > brand PC-based controls > SPERONI original spindle system > manual operation, automatic mechanical clamping*, cnc spindle*, cnc X and Z axis* > data output (post processor) and network connection
----------------------------------	--	--

主轴系统 spindle systems	<p>ISO50标准主轴及通用机械夹紧主轴均依据最高的主轴制造标准，完全由SPERONI制造。</p> <p>这两种主轴解决方案保证了刀具预调仪长期高精度稳定运行，以及长期的使用寿命。</p>	<p>New high precision 50 taper vertical rotating integral spindle and the optional uniquely designed high precision universal spindle are fully manufactured by SPERONI.</p> <p>These two solutions provide the needed quality and universality required to guarantee the longevity of your tool presetting and measuring system.</p>
---------------------------------------	--	---

AIC套筒*
 SPERONI A. I. C. 机械夹紧主轴套筒，包含了自动机械夹紧系统（行业内发明者），可以拉紧任何形式的刀柄，如：ISO/BT 40 e ISO/BT 30, ISO/HSK等等。

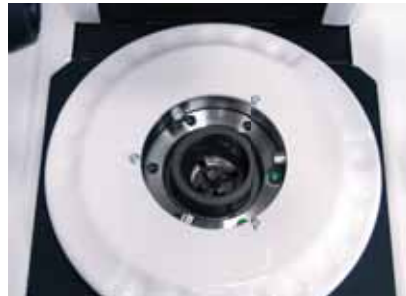
A.I.C. Sleeves*
 Original SPERONI AIC Sleeve include an Automatic Integrated Clamping system (unique in the industry) which allows for the mechanical clamping of any tool: ISO/BT 40 & ISO/BT 30, ISO/HSK, etc.



快换主轴系统*
adapter quick change*

快换主轴系统可快速更换主轴。可以在8秒之内实现快速更换，保证无以伦比的精度和准确性。独特设计的“同步适配”保证重复装夹精度小于0.001mm。

Adapter quick-change system allows the changing of original adapters in less than 8 seconds, guaranteeing unmatched precision and accuracy. The uniquely designed “simultaneous fit” adapter clamping system allows for an adapter mount repeatability of less than 0.001mm.

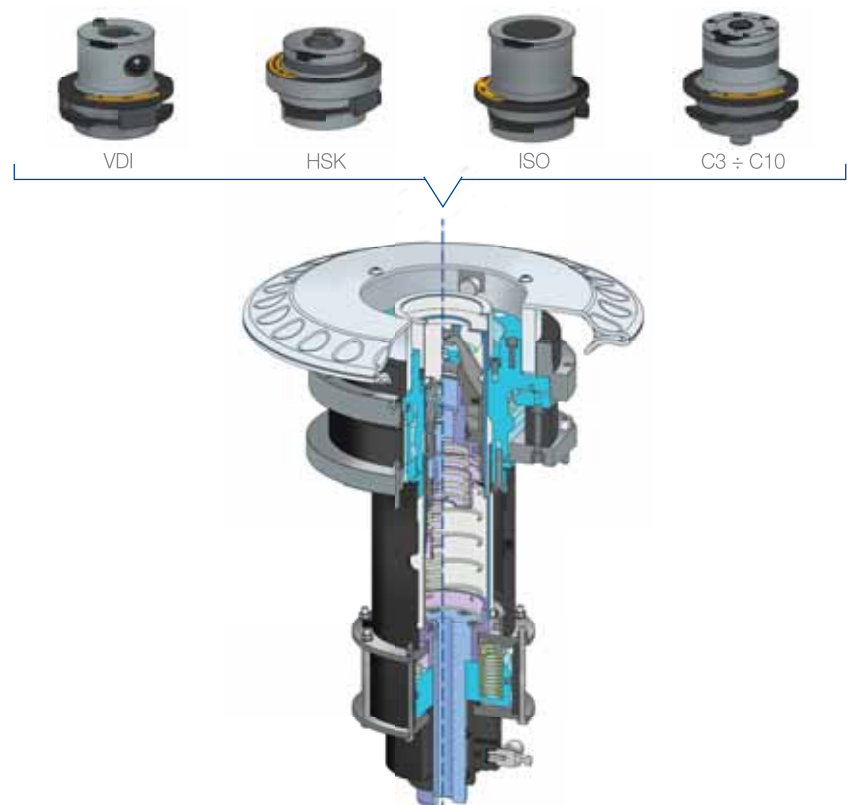
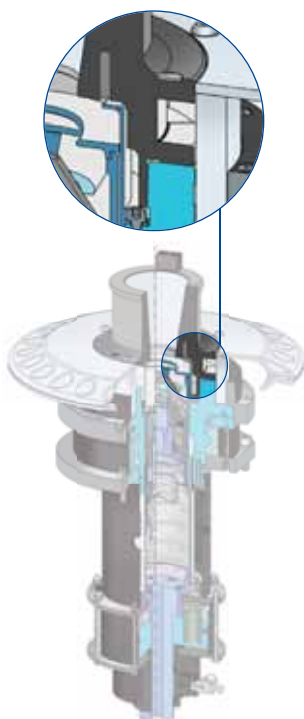


机械夹紧*
mechanical clamping*

通过通用式机械拉紧拉钉（该机构由SPERONI在1992年在刀具预调仪领域设计并推广），可以拉紧任何标准尺寸的拉钉，不需要更换拉钉，以确保刀具测量过程中无以伦比的重复性和精度。

Pneumatically activated universal retention knob clamping – The original design of this system (unique in the industry – introduced in 1992) allows for the mechanical clamping of any standard size knob to ensure an unmatched repeatability and accuracy in the measurement of the tool.

*equipaggiamenti
adapter*



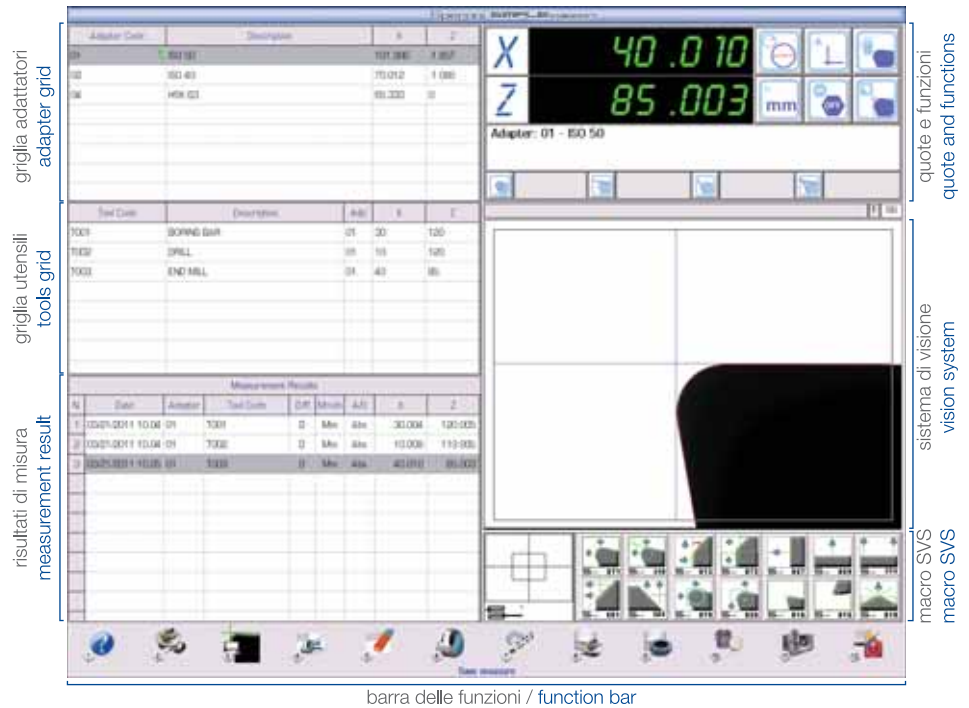
基于计算机的基本成像系统
Simple Vision PC-based control

基本控制单元配置了22寸高分辨率的TFT显示器-1280x1024p - 清晰显示刀具测量图像以及相关数据，界面清晰，操作便捷。

全新设计的用户界面，使基本控制系统更加直观简单。

强大的用户在线帮助功能，确保工人安心操作，消除您的后顾之忧。

The new *Simple Vision* PC-based control and image processing system is supplied with a brilliant high resolution 22" TFT monitor - 1280x1024px - for a crisp and clear visualization of your tool data. The newly designed graphical interface makes the *Simple Vision* control the most intuitive and easy to use vision system on the market today. A powerful help online function is also integrated in order to guarantee a trouble-free and secure use at any time.



- 软件特性
software highlights
- > 单个窗口的图形界面
 - > 动态十字线自动跟踪刀具
 - > 45X光学放大，
可选 90X/120X
 - > 超过200种以上刃型图像
 - > 管理3000把以上刀具
 - > 转换套与基准管理
 - > 打印管理
 - > 千分表与跳动功能
 - > 图像合并功能
 - > 图像全屏与120X软件放大功能
 - > 后置处理器（数据传输）
 - > 数据备份
 - > 自动聚焦*

- > single window graphical interface
- > flying crosshair
- > 45X standard magnification,
Optional 90X / 120X
- > over 200 measuring icons
- > tool management for 3,000 tools
- > adapter & zero point management
- > print management
- > dial indicator and run-out functions
- > MaxP function
- > full screen function and zoom to 120X
- > base Post Processor
- > data backup function
- > autofocus function*

刀具与转换套管理 tool and adapter management

可以管理3000把以上刀具信息，包括刀具参数，刀具附件，装配信息及公差。转换套管理功能具有转换套零点监控功能，确保转换套匹配正确的参数，避免出现测量错误导致撞刀，或发生废品。

Integrated tool management for the storage of 3,000 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.



跳动检测 Run-Out function

跳动检测功能可以非常容易并快速的测量刀具的跳动。

Automatic *Run-Out* feature is the easiest and fastest way to determine your tool's run-out without any specific programming.



后置处理器 base Post Processor

刀具测量完成后，后置处理器可以自动并批量生成刀补程序文件，并可以传输到不同的机床控制系统。无需繁琐的输入每把刀具刀补参数，避免手动输入可能出现的错误。文件可以通过网络、FTP服务器、U盘等方式进行传输。

Integrated *Post Processor* allows for the automatic generation of the offset files for each measured tool. The generated file can be transferred to the different machine tool's controls via network, FTP server, USB stick, etc. for a mistake free operation.

主轴自动聚焦* autofocus spindle*

主轴自动聚焦功能帮助您自动判定刀具最佳测量、预调位置，自动测量刀具的直径、高度和跳动等。主轴自动聚焦功能无需任何程序，只需要一个按键。

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

EDGE 2.0 系统*
EDGE 2.0 control*

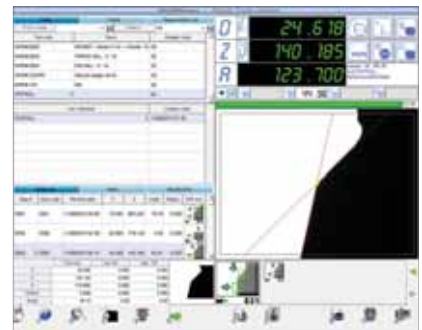
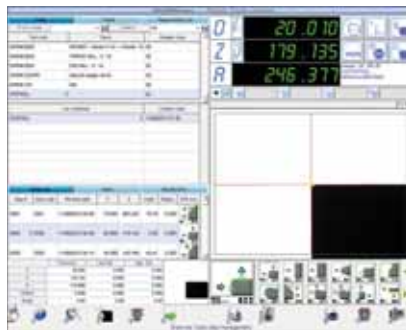
基于计算机主机上的EDGE2.0控制系统，包含了刀具的测量、刀具管理、用户管理以及CAM接口

The new *EDGE 2.0* PC-based control and image processing system is the complete upgradable control for Tool management, user management, tool inspection and CAM interfacing.

数据库与测量方案
database and step programming

通过EDGE2.0系统，无论在线或离线状态下，几秒就可以生成刀具的测量目录与方案。

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



测量任务管理*
tool jobs management*

根据机床加工程序，选定的刀具快速生成测量刀具列表。

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



用户权限管理*
user management*

为每一个用户设定用户名和密码，并定义用户等级。可以根据用户等级或者自定义用户的功能和权限。

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



报告
reporting

系统自动记录刀具预调仪上的所有测量与预调动作与数据，这些可追溯的历史记录可以用报告的形式导出。

Rapid and always up to date traceability of all of the operations that are being carried out on the tool presetting and measuring system.

RFID 芯片系统* connectivity to RFID systems*

EDGE 2.0 兼容多种芯片系统，通过芯片系统可以提高刀具管理水平及通讯能力。

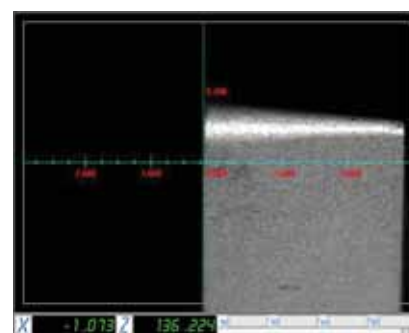
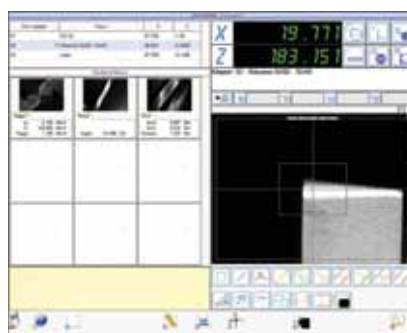
The *EDGE 2.0* system is ready to implement at any time RFID solutions for improved tool management and data communication.



中心高相机系统* centre height camera system*

中心高相机包含LED照射光源，十字线可以旋转与调整。SEF-SPERONI Edge Finder (刃型识别系统) 便于调整切削刃中心高度。

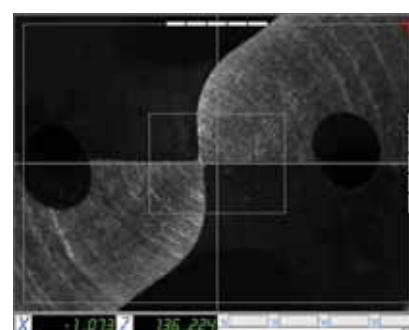
Centre height camera system complete with LED based front light technology together with swiveling and adjustable cross-hairs and SEF - SPERONI Edge Finder - allows for the adjustment of tool cutting edges center height.



旋转测量臂 (第二相机系统)* swing arm camera system*

通过第二相机可以对刀具进行全面的测量与检查。第二相机带入射光源，二者完美结合，可以测量刀具所有重要的参数。通过选配第二相机可以进行刀具的全面测量和预调，无需其他设备。

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



FUTURA CNC

STP FUTURA 系统完美演绎了刀具预设和刀具测量的最佳测量精度与重复测量精度。

The innovative STP FUTURA tool presetting and measuring system is the highest expression of repeatability and measurement accuracy.

STP FUTURA 全自动系统配置了最高级别CNC控制器和无刷电机，保证了微米级的测量重复性精度。

The STP FUTURA full CNC is equipped with state of the art dedicated CNC controller and brushless motors guaranteeing a sub-micron positioning repeatability.



微调手轮
微调手轮、操作杆与独立轴的选择在最大的易用性与人体工程学角度整合进了控制室。

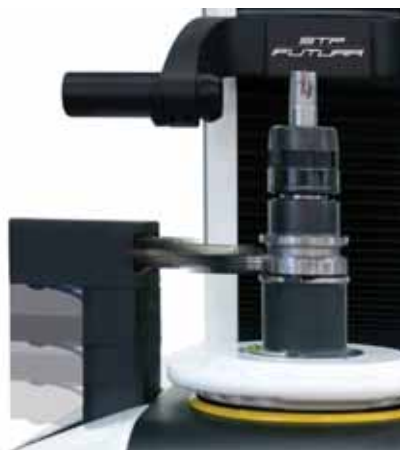
Micrometric CNC Hand-Wheel

Micrometric Hand-wheel, Joystick and independent Axes selection integrated in the control's cockpit for maximum ease of use and ergonomics.

刀具自动识别* automatic tool identification*

可以自定义的高度与模块适用于所有系统：Balluff®, Pepperl & Fuchs®, Bilzand®等，系统可自动定位到不同的芯片高度位置。

Highly customizable and modular is available all systems, such as Balluff®, Pepperl & Fuchs®, Bilzand® many others. The system automatically positions to the different heights of the code carrier chip.



EDGE Pro系统*
EDGE Pro*

基于计算机控制系统与图像处理系统的 EDGE Pro系统，对手动与CNC全自动系统可以产生完全的、可升级的数据，可以编录刀具清单、刀具配件、零点与转换套以及单个组件。

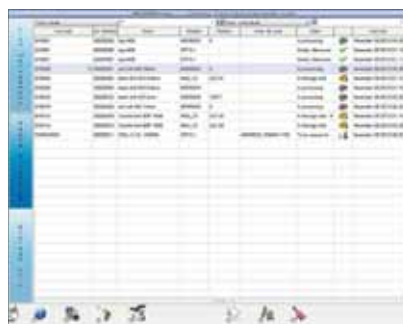
The new *EDGE Pro* PC-based control and image processing system is the complete upgradable control for manual and full CNC systems.

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



EDGE Pro系统配置CNC系统，轻松测量所有刀具。

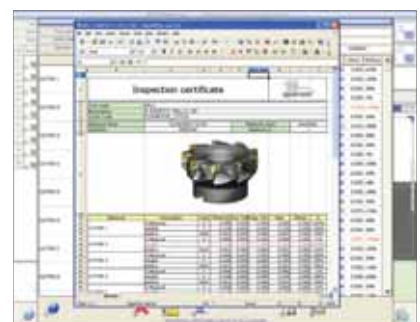
Together with the CNC axis, *EDGE Pro* provides an easy interface for the automatic measurement of all your tools.



自主编程功能
self-teach programming

功能强大、配置灵活、操作十分简单。EDGE Pro具有自学习功能，操作者可以自行测量任何简单的或者复杂的刀具，系统会自动记录操作过程并作为测量程序保存，便于之后同把刀具或同类型刀具测量调用。

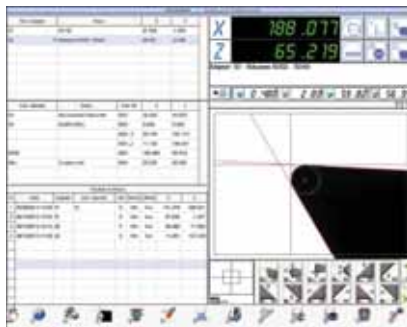
Powerful, flexible and extremely simple to use, the *EDGE Pro* Self Teach Programming allows you to freely program any simple or complex tool your way. The generation of a detailed and customizable inspection certificate is also a built in feature.



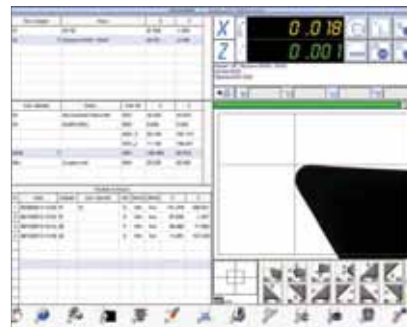
自动十字线
flying crosshair



动态十字线自动跟踪，自动测量高度、直径、角度、圆弧半径等。



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



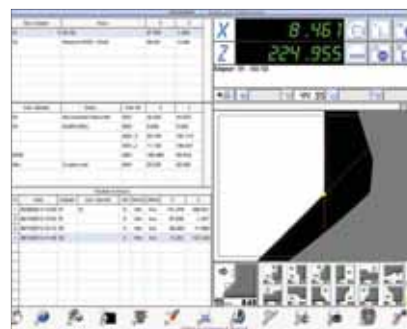
阶梯刀具
step tools



阶梯刀具的测量非常简单，程序可自动执行。



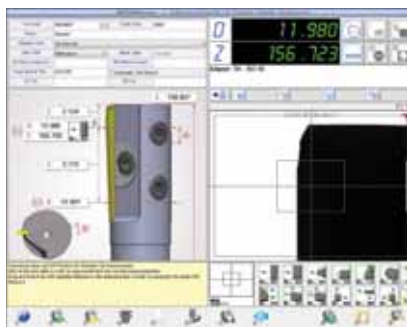
Step tools measurement is easily and automatically performed.



铰刀*
reamers*



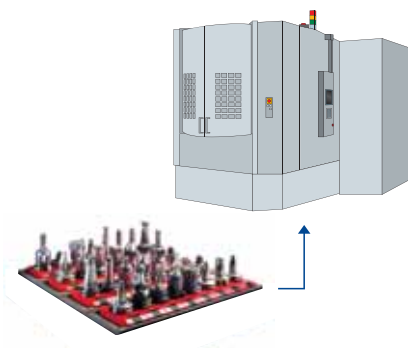
测量和设置铰刀，无需任何输入数据。



Measurement and setting of reamers without any data entry.



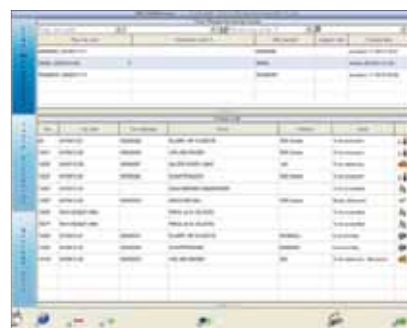
与TPL工作模式对比*
job comparison & TPL*



刀具准备模块列表的运用，让您轻松的无缝对接需要测量的刀具。



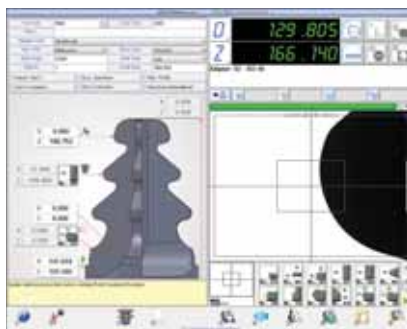
Tool preparation list module allows you to easily and seamlessly prepare your tools for the next job.



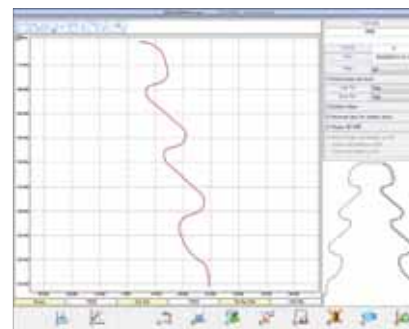
轮廓扫描*
scanning function*



测量程序适用于测量及扫描所有的刀具轮廓。



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



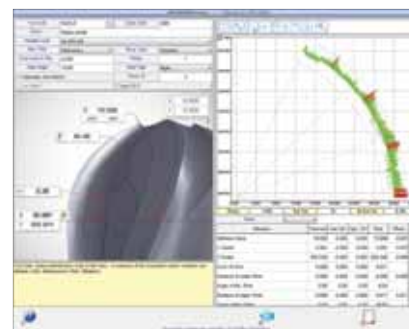
测量程序包*
families measuring programs*



测量包内的所有刀具测量与预调程序不需要输入任何数据。



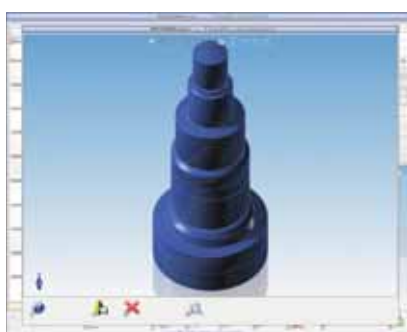
Measuring and presetting of tools without data entry.



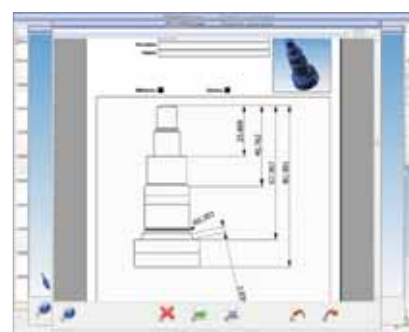
3D重建与测量*
3D reconstruction and measurement*



根据测量要求自动生成3D影像与尺寸。

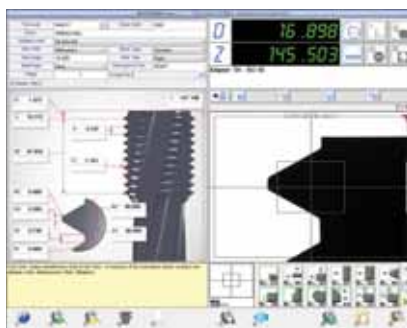


Automatic 3D generation and dimensioning of acquired features.



丝锥*
thread mills*

编程简单、测量精准，轻松获得丝锥的牙距、外径、中径和小径等尺寸。



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



全自动热缩系统
AutoShrink

STP FUTURA AutoShrink 是 SPERONI 公司第四代全自动预调热缩一体机系统。1999年，SPERONI联合BRINEY TOOLING公司研发第一代预调热缩一体机，这套系统是当时世界独一无二的，具有非常好的装夹精度以及重复测量精度，符合人体工程学，具有极高的安全性。

STP FUTURA AutoShrink把刀具预调与热缩完美结合，并且保证100%操作安全。

The STP FUTURA AutoShrink is our 4th generation fully integrated Shrink Fit and presetting system. Developed by SPERONI in association with Briney Tooling Systems® first in 1999, this solution is unmatched in terms of accuracy, repeatability ergonomics and safety.

The STP FUTURA AutoShrink delivers a seamless and 100% safe shrinking and setting process.



全自动冷却系统
automatic integrated cooling

加热与冷却刀柄全部自动运行，无需手动。

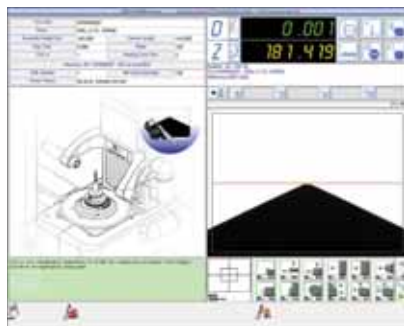
Fully Integrated and hands-off system for heating and cooling of the tool-holders.



专用软件模块
dedicated software module

操作向导指导操作者逐步进行程序设置，可以很简单的装配任何类型的热缩刀具。程序的每一步都有非常清晰的示意图与文字说明，界面非常友好。卸刀程序同样通过操作向导轻松完成。受热的刀柄被密封保护，防止烫伤。

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 process is guided by clear graphics as well as text instructions for maximum user friendliness. The disassembly process is also just as well guided and full proof.



符合人体工程学的操作台
ergonomic cockpit

符合人体工程学的操作台，您可以非常方便的，在您最舒适的位置操作设备，安装与拆卸刀具。

The ergonomic cockpit conveniently hold all setting and cooling sleeve as well as provides rest position for the cutting tools to be assembled and the ones that have just been disassembled.



**Tribos自动装夹系统与尾架*
autotribos and tailstock***



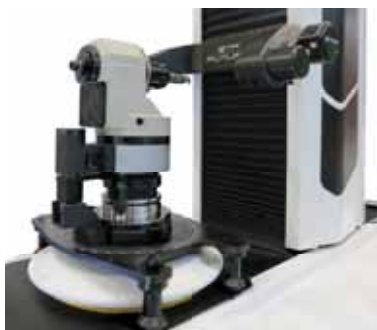
模块化设计的STP FUTURA刀具测量与预调系统可以根据您的实际需求配置不同的功能模块或定制化生产。如集成Schunk® TRIBOS®夹紧系统，可以通过主轴中心高度自动调整装置自动调整刀具长度到指定位置，并且自动夹紧与松开刀具。

通过尾架（顶针）可以手动的夹持铰刀，确保刀具在主轴中心，以便进行精密测量与预调。

The modular design of the *STP FUTURA* tool presetting and measuring systems enable you to configure and customize the tool presetter and measuring system for your individual production requirements – ex. integrated *Schunk® TRIBOS®* polygon clamping technology guarantees automatic length setting to specific dimension and the integrated tailstock mechanism designed to hold reamers between centers thus allowing secure μ precise setting.



**角度头预调*
angle head setting***



通过角度头预调系统可以进行角度头的测量与预调。通常来说，角度头的测量与预调是很困难的，并且占用机床很多工作时间。

通过SPERONI STP FUTURA预调仪加上角度头预调系统，可以非常方便的进行离线测量和预调角度头，大幅减少角度头预调时间，并切实提高了生产效率。

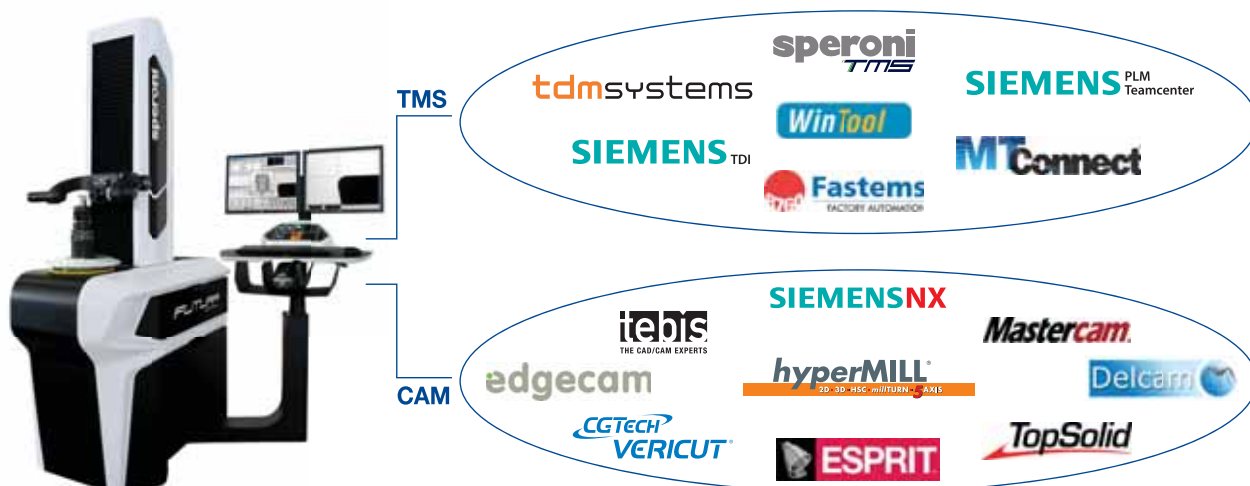
A further concrete example of the modularity of the *STP FUTURA* is expressed by the new angle head setting system.

The normally lengthy and difficult setting of angle heads can now be carried out easily and seamlessly off-line providing a great reduction in setup times and a tangible increase in productivity.

与CAM和TMS的通讯* integration to CAM and TMS*

通讯系统把刀具预调仪与刀具管理系统和CAM进行无缝连接，避免人为手动输入数据的繁琐和错误，安全并实现数据传输。

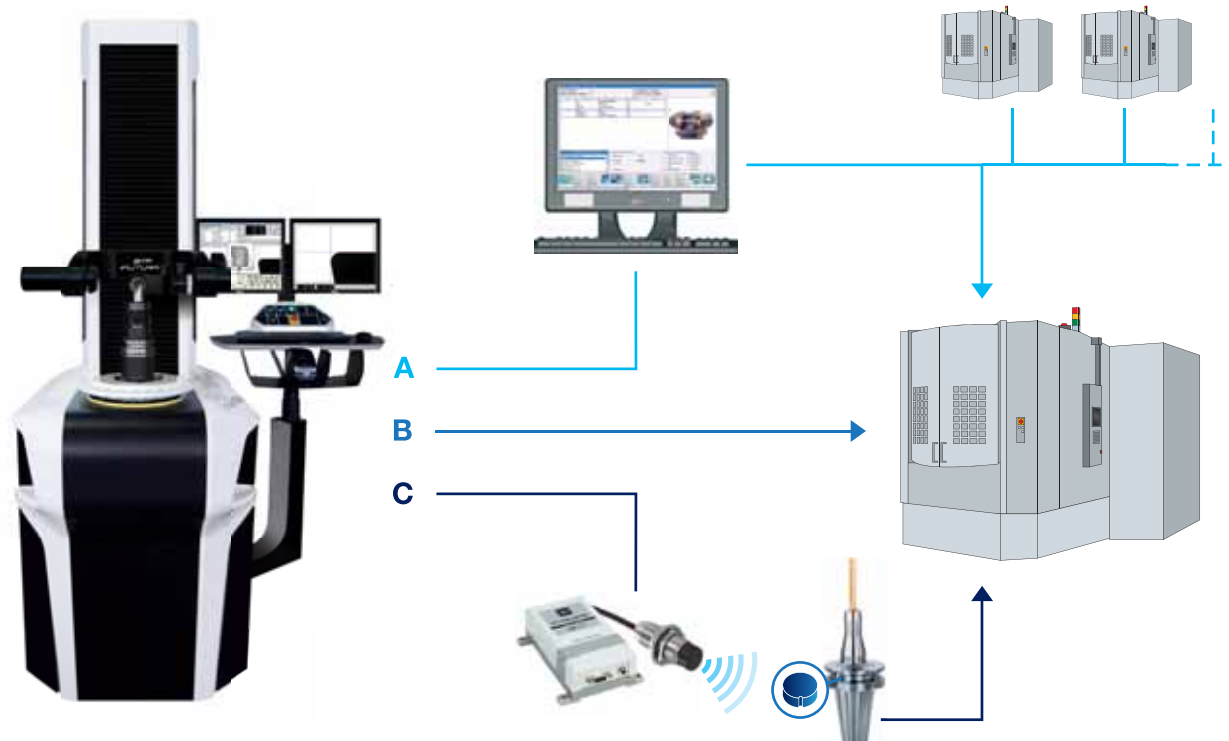
Eliminate data redundancy and safely share data amongst your systems with the powerful *SPERONI* integration options.



连接 connections

简单安全的将刀具测量数据传输到您的机床。

Easily and securely transfer your measured tool data to your machine tools.



A

通过局域网或FTP服务器自动将刀补数数据传输到所有的机床。

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

B

通过RS232接口或专用连接直接进行数据传输。

Direct Integration via RS232 or dedicated connection with your NC machine control.

C

通过各种刀具识别系统进行数据传输，如芯片、二维码、条形码等。

Full integration with any read-only and read/write tool identification systems.

技术参数
technical data

基础版本控制系统	Simple Vision control	●
45倍光学放大	45X standard magnification	●
刀具表面检查灯	episcopy front light system	●
气动锁紧X/Z轴	pneumatically activated axis movement	●
X/Z微调系统	fine adjustment X & Z axis	●
ISO50高精度主轴	integral spindle ISO 50 high precision	●
主轴制动	spindle brake	●
主轴集成校准刃	integrated calibration master	●
跳动@300mm	T.I.R. @ 300mm	≤ 3 μm
主轴同心度	spindle concentricity	1 μm
显示分辨率	axis resolution	1 μm
电压	power supply (V)	100 ÷ 230
功率	power consumption (KVA)	0.5 ÷ 1.5
气压 (Mpa)	pneumatic requirements (Mpa)	0.5 ÷ 0.7
Edge 2.0系统	EDGE 2.0 control	○
Edge Pro系统	EDGE Pro control	○
CNC单元X, Z, A&Y	CNC unit for X, Z, A e Y	○
自动聚焦	autofocus spindle	○
机械拉紧主轴	universal spindle	○
快换主轴系统	adapter quick change system	○
刀具机械拉紧系统	universal tool-holder clamping system F20	○
集成热缩系统	integrated shrink-fit system	○
中心高相机	centre height camera	○
第二相机系统	swing arm camera	○
数据后处理	Post Processor	○
与CAM及TMS通讯	integration to CAM and TMS	○
芯片读写系统	Integration with RFID systems	○

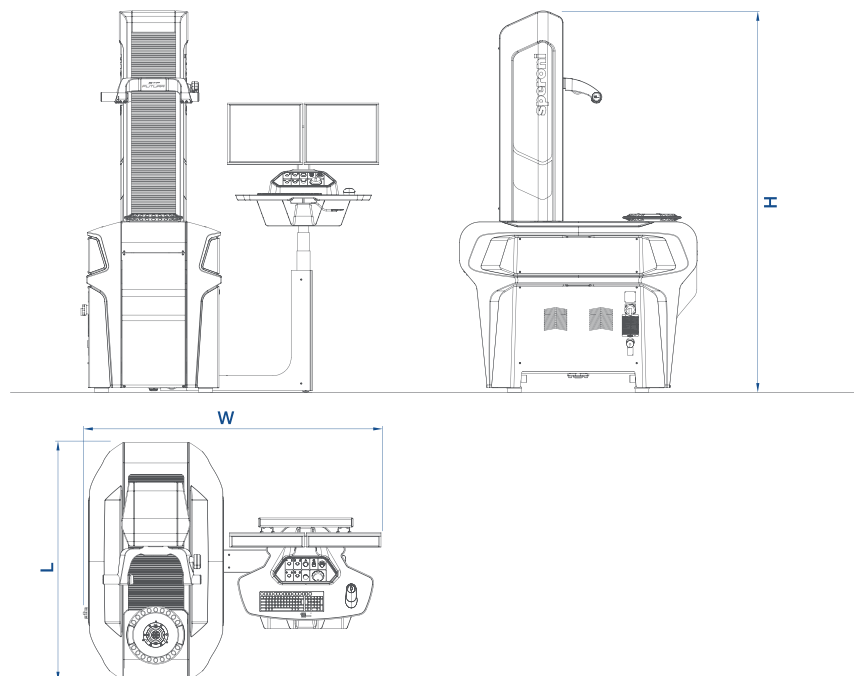
standard ● option ○
standard ● option ○

STP设备功能模块与选项，可以根据各地市场情况或法律规定有所不同。样本上的参数参考。SPERONI可能会因为技术或市场原因修改参数。

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



reddot award 2014
winner



	STP 44	STP 46	STP 48	STP 64	STP 66	STP 68	STP 612	STP 84	STP 86	STP 88	STP 812	STP 124	STP 126	STP 128	STP 1212
max Ø	400	400	400	600	600	600	600	800	800	800	800	1200	1200	1200	1200
max H	400	600	800	400	600	800	1200	400	600	800	1200	400	600	800	1200
W	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
L	1300	1300	1300	1300	1300	1300	1300	1350	1350	1350	1350	1550	1550	1550	1550
H	1890	2090	2290	1890	2090	2290	2690	1890	2090	2290	2690	1890	2090	2290	2690

misure espressa in mm / dimensions in mm



MAGIS

轻而易举提高您的生产效率和精度。

在刀具预调与测量领域 MAGIS绝对是物超所值的选择。

刀具预调与测量所需要的全部功能和数据全部呈现在一个屏幕内，用户界面友好，操作便捷。

MAGIS · there is no better & easier way to improve your process

The new *STP MAGIS* generation of tool presetting and measuring system has revolutionized the value of *entry level* tool measurement.

The innovative *MAGIS* control delivers all of the needed measuring features and functions in a user friendly, clean and trouble-free single screen user interface.



750004115-00 / March 2014 · Speroni design

50 YEARS OF
PRECISION
1963 · 2013

www.speronispa.com

中国公司:

斯波尼机械(南京)有限公司

地址: 南京市苏源大道19号九龙湖国际企业总部园C2座

电话: +86 25 52080266 传真: +86 25 52080766

网址: www.speronispa.com.cn



Speroni spa · Via Po, 2 fraz. Sostegno - 27010 Spessa - PV - ITALIA
tel +39 0382 729720 · fax +39 0382 729734 · speroni@speronispa.com

Showrooms · Italy · Usa · Japan · Germany · Switzerland · England
India · France · Spain · Russia