

elbo controlli



68B



TOOL PRESETTER

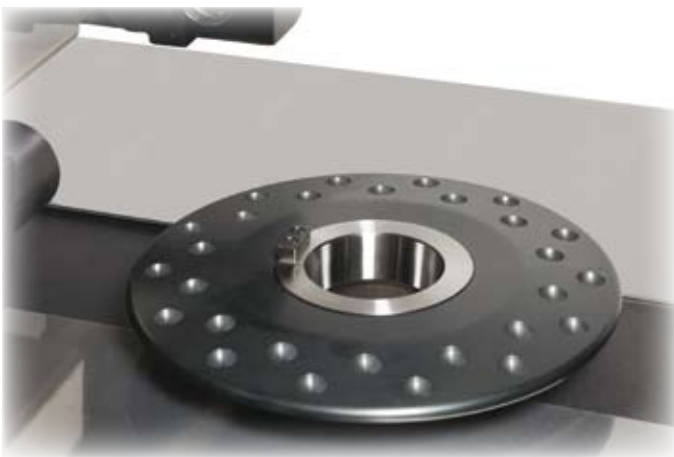




Stepper motors servo control the axes movements and provide two operation modes: rapid (2.5 m/min) and fine micrometric mode (positioning accuracy 0.8 μm).

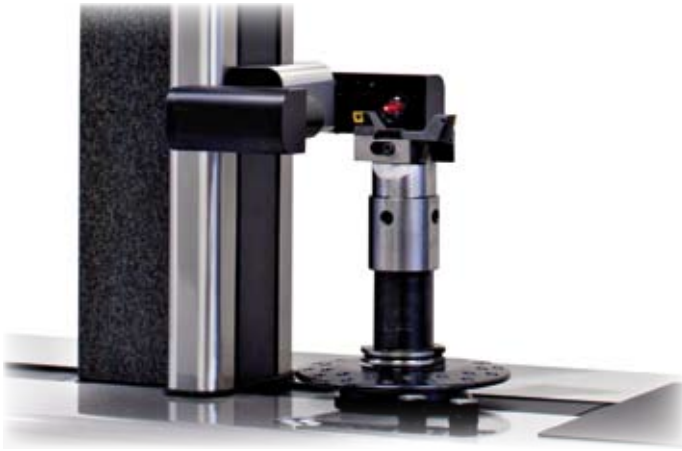


Micrometric movements (electronic handwheels) are used to collimate the tool profile and to acquire the measurement. The automatic clearance recovery system is patented.



Spindle body with double ball retainer. Patented interchangeable spindle (run-out error < 2 μm). Universal shank locking system. Rotation brake. Angular index.





Camera system for measuring and inspection procedures. C-MOS sensor, punctiform and toroidal red light double illuminator. Telecentric optic system with low F/Number.



Large 15" touch screen for the best visualization of the tools and simple management functions to operate the measuring machine.



New electronic control: a powerful fanless PC with Linux operating system for the integrated management of the functions of measurement / inspection tools, machine origins and toolsets. Ease of use thanks to the integrated touch screen.



Inspection function for accurate control of the tool status. Possibility to increase or decrease the brightness for a better visibility.

Td SIX (Tool Data SIX)



Td SIX is a new additional software function developed by Elbo Controlli, used to acquire tool's measurements, to input them into the tooling tables and create a file including tools offstes.



The datas are elaborated and post-processed by the software. There are more than 50 post-processor format for the most common numerical controls available on machine tool market.

MACHINE 1 **TOOLSET 1**
Mon Oct 27 2014

T	Code	x	xTh	z	zTh	A	R
1	MILL D.10	9.918	10 ⁺⁰ _{-0.30}	166.46	166.5 ^{+0.05} _{-0.05}		
2	SHELL MILL	0	0	105.594	105.6	45	
3	BORING BAR	19.013	19 ^{+0.010} _{-0.01}	227.51	0 ⁺		0.02

It's possible to generate and / or print a report with the theoretical values, tolerances and measurements of the selected tool table.



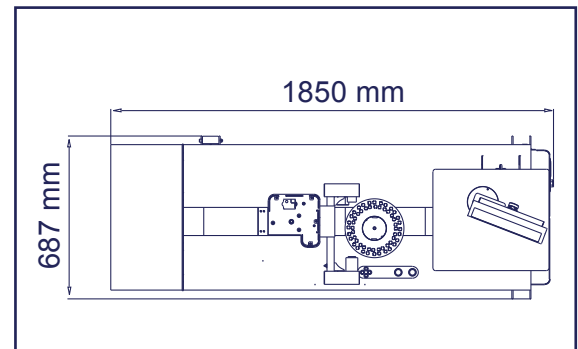
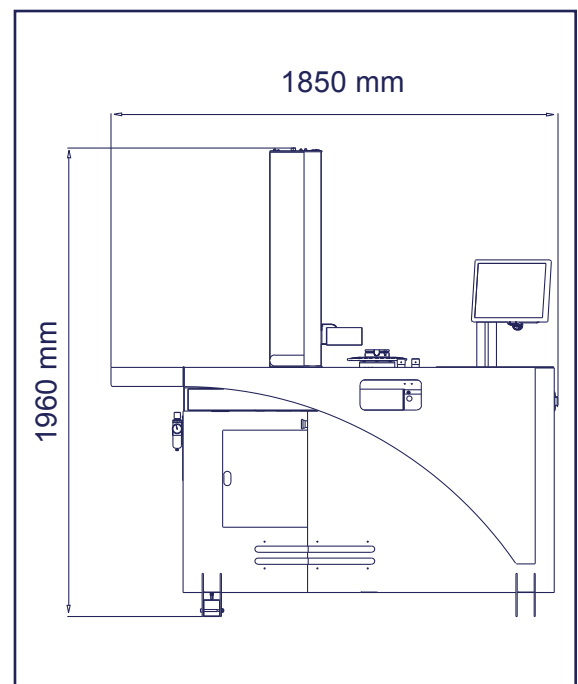
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TECHNICAL FEATURES

- Measuring range:
diameter max 600 mm (radius 300 mm) height max 600 mm. (66B)
diameter max 600 mm (radius 300 mm) height max 800 mm. (68B)
- Machine structure in stainless steel offering high mechanical and long life, floor mounted with adjustable supports in non-deformable steel.
- Base and column made of natural granite: linearity max error 4 µm/Mt certification with Taylor Hobson res.1 µm/Mt electronic millesimal level.
- ISO/BT/HSK/VDI etc. Interchangeable rotating spindle-holder (to be specified) max run-out error < 2 µm.
- Double vault arc prismatic slideways: n°2 X axis slideways, n°1 Z axis slideway.
- Double re-circulating ball bearing slides, lubricated for life (3) (preloading slides/slideways: P/H class).
- Spindle index in four angular positions: 0°-90°-180°-270°. (optional)
- Universal mechanical tool clamping.
- Pneumatic-mechanical braking of the spindle-holder rotation with radial compensation of the clamping force: no axis angular run error.
- Constant load Archimedean spiral spring (as opposed a mass counter-balance system).
- Motorized axes movements.
- Control panel with micrometric handwheels and rapid movement buttons.
- Vision-system for tool measuring and cutting inspection including:
 - C-MOS sensor - Framed image area 6,4 x 6,4 mm. ☒
 - Magnifications about 30X.
 - Telecentric lens.
 - Doublet lenses at low F/Number in order to eliminate the error of the clearness circle.
 - Episcopic illuminator with ring lens and red leds; diascope illuminator with red, puntiform light led.
- Machine operator interface through:
 - TFT 15" colour Touch Screen.
 - Intel Atom D.C. fanless motherboard.
 - UBUNTU LINUX operating system.
 - Data storage on solid state disk SSD.
 - N°3 USB ports and N°1 LAN
- Standard software:
 - CNC machine origin management and adapters.
 - Tool list creation and/or single tool.
 - Labels printing
 - Free software upgrade downloadable from internet
 - Td SIX (Tool Data SIX) to manage:
 - tools set and Post Processor universal generator;
 - magnetic chip code-holders (Balluff for example, hardware not included);
 - printable tool set report;
 - theoretical measurements and tolerances management.
- ELBO CONTROLLI Linear Transducers in optical glass type SLIDE 371 certified HP laser:
 - Axes resolution: X =1 µm, Z= 1 µm.
- Anti-dust cover provided for when not in use.
- Overall dimensions: Length = 1865mm, Height = 1957mm, Depth = 687mm
- Net weight: 380 Kg (66B); 386 Kg (68B).



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