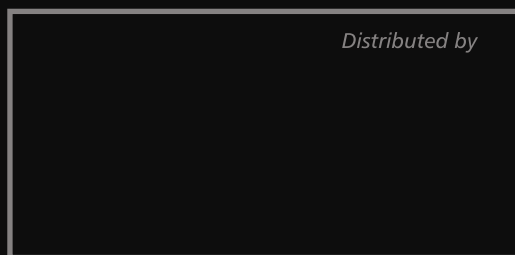
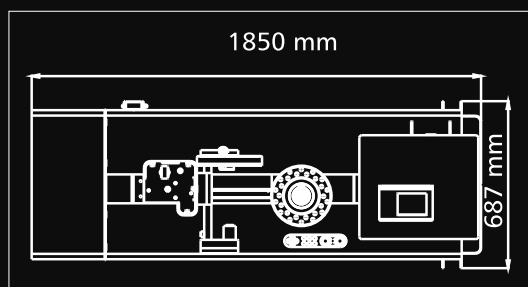
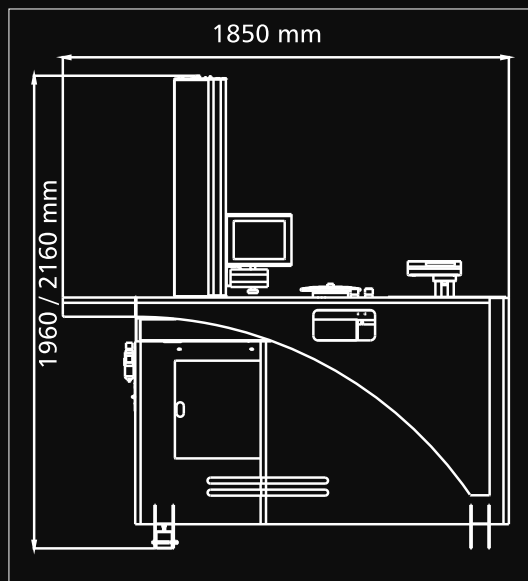


TECHNICAL FEATURES

- Measuring range:
 - diameter max 600 mm (radius 300 mm); height max 600 mm;
 - diameter max 600 mm (radius 300 mm); height max 800 mm.
- 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/CAPTO 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
 - X axis=3, Z axis=2 - (preloading slides/slideways: P/H class).
- Spindle index in four angular positions: 0°-90°-180°-270°.
- 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 to a mass counter-balance system).
- Vision-system for tool measuring and cutting inspection including:
 - TFT screen - colours 212 x 160 mm, magnifications about 35X.
 - C-MOS sensor - Framed image area 6,4 x 4,8 mm VGA System.
- Machine operator interface through:
 - TFT 5,7" colour Touch Screen.
 - Technology with FLASH® 32 bit microprocessor.
 - LINUX operating system.
 - Data storage on SD card.
- Standard software:
 - CNC machine origin management and adapters.
 - Tool list creation and/or single tool.
 - Automatic change of CNC machine origin allocation.
 - TOOLINGUP to manage:
 - tools set and Post Processor universal generator;
 - magnetic chip code-holder (Balluff for example, hardware not included);
 - multi-cutting tools.
- Optical Equipment:
 - 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;
 - diascopic illuminator with red, puntiform light led.
- 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: L=1850 mm, H=1960 / 2160 mm, D=687 mm.

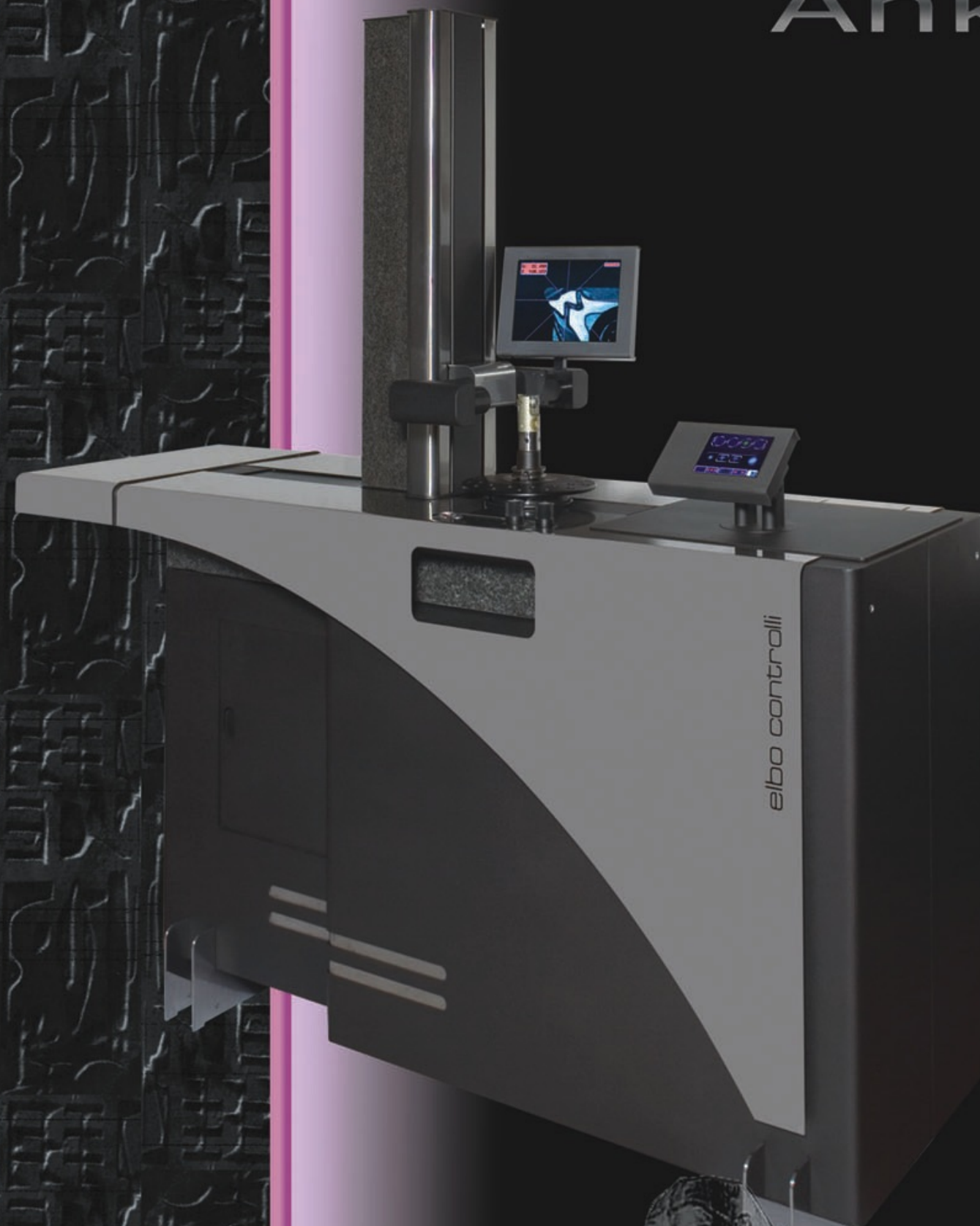


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SPECIFICATIONS SUBJECT CHANGE WITHOUT PRIOR NOTICE

Ankh

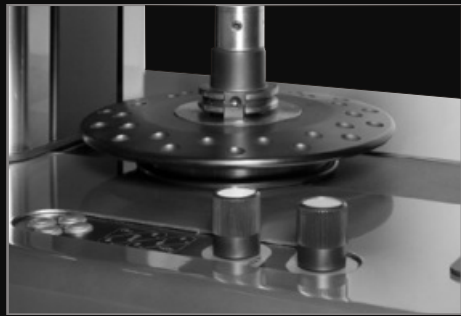


Tool Presetter

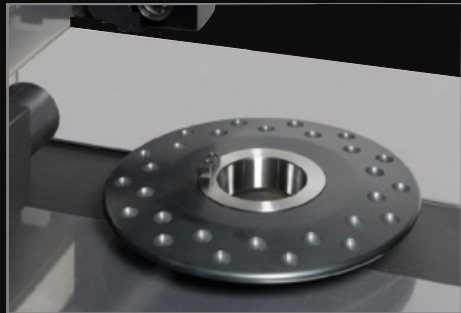




Step-by-step motors servo control the axes movements and provide two operation modes: rapid (2.5 m/min) and fine micrometric mode (positioning accuracy 0.8 μm).



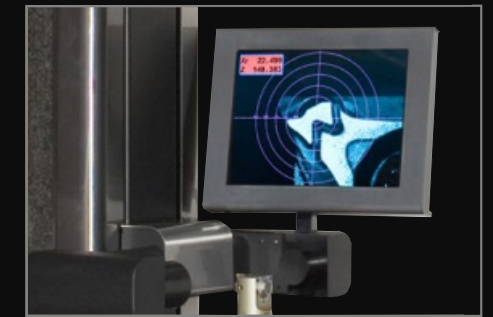
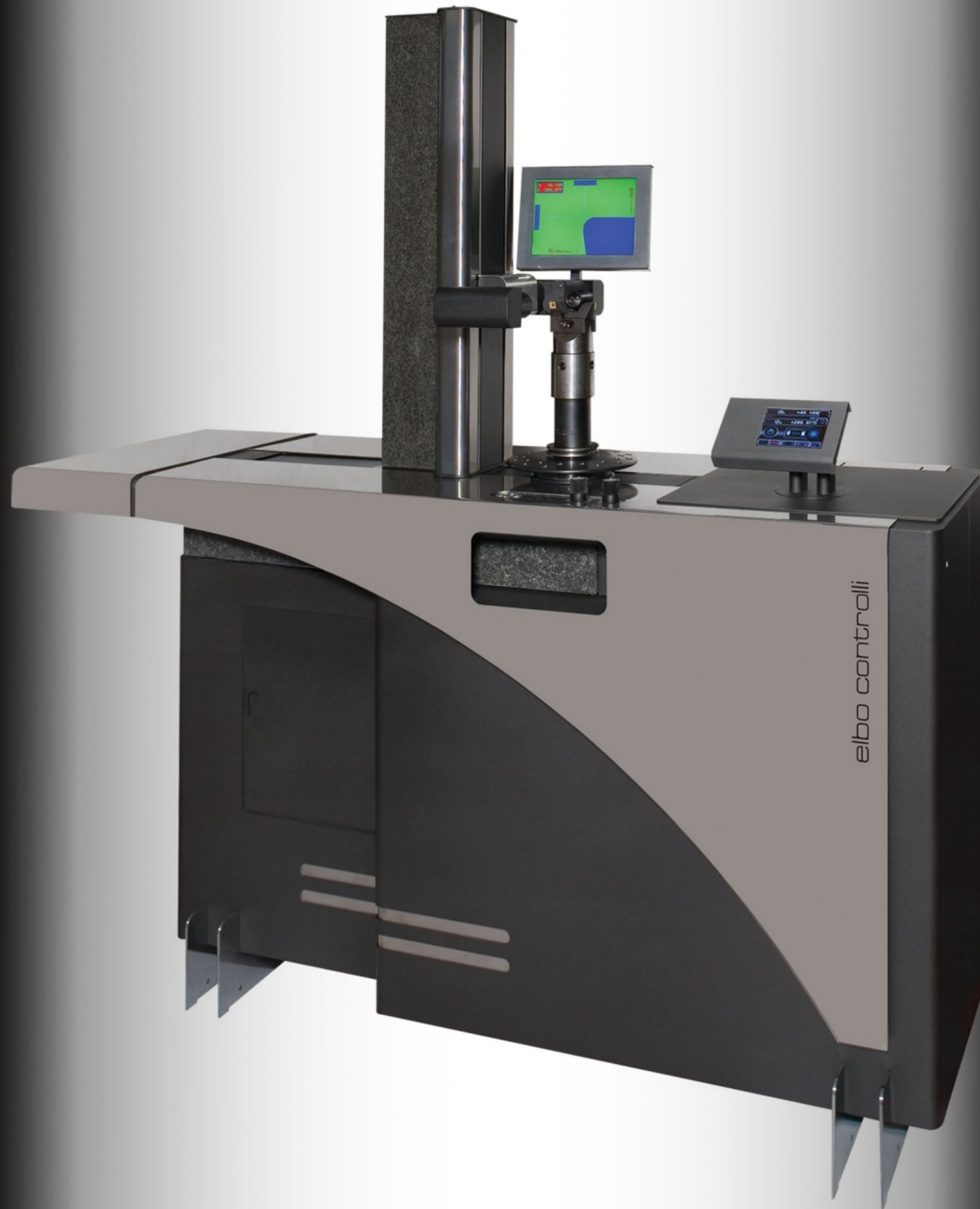
Micrometric movements (electronic handwheels) are used to collimate the tool profile and to acquire the measurement. The automatic clearance recovery system is patented.



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



Base and column made of natural granite. The low thermal inertia of the material assures non-deformability in time and the possibility to directly install the machine in the workshop.



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



LCD touch panel display and software running on a LINUX platform for a quick and easy operation of the machine and measuring functions. Technology with FLASH® 32 bit microprocessor.



TOOLINGUP software for post processing and tool table management. An intuitive, flexible and powerful software which allows adapting the format of the measured values to those of a CNC for their subsequent transmission.

MECHANICS
ELECTRONICS
OPTICS
SOFTWARE

by

elbo controllii