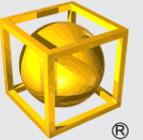




To ensure efficiency and precision in a modern machine shop, the adoption of a tool presetter is essential.

This technology allows tool dimensions to be accurately measured and set before machining, reducing machine downtime and improving the quality of final products.

The E68 series represents excellence in the field of tool presetting. In an increasingly competitive market, every detail counts. The E68 presetter series are the ideal solution for those who want to optimise production times, improve machining accuracy and reduce waste.



OPTIMISE YOUR PRODUCTION WITH STATE-OF-THE-ART TOOL PRESETTER

NEW E68 PRESETTERS: PRECISION AND EFFICIENCY IN A SINGLE PRODUCT

Why choose a tool presetter?

- ✓ **Reduced machine downtime:** tool preparation while the machine is running
- ✓ **Greater precision:** exact measurement of tool geometry for error-free machining
- ✓ **Production optimisation:** fast and efficient set-ups for smooth workflows.

The integration of a tool presetter such as the E68 series is a strategic investment for any machine shop that wishes to increase its competitiveness, guaranteeing high quality machining and efficient production times.

Investing in the E68 series means investing in the future of your workshop:

1. Less waste, more quality
2. Less wasted time, more productivity
3. Less costs, more competitiveness

Discover how the E68 Series can transform the way you work!

All E68 presetters are equipped with GS371 optical scales on both X and Z axes. This unique measuring system uses a natural granite ruler with an optical glass scale, representing a true revolution in the industry.

GS371 is the first and only optical scale in the world to use granite: thanks to this innovative solution, the E68 series guarantees uncompromising accuracy and unprecedented repeatability.

E68 presetters are the benchmark for those seeking the highest quality in tool control and preparation.

NATURAL GRANITE: UNCOMPROMISING STABILITY AND PRECISION



The E68 presetter series are designed to offer maximum precision and repeatability in measuring operations, thanks to the use of natural granite as construction material.

Thanks to its very low thermal expansion coefficient, it guarantees high dimensional stability even in the presence of temperature variations.

COMPACT AND ROBUST STRUCTURE: WHEN PERFORMANCE SPEAKS FOR ITSELF

Built to withstand the harshest conditions, the E68 series is perfect for use in industrial environments characterised by constant vibration, which could compromise measurement accuracy.

Its structural rigidity ensures high operational reliability, allowing you to work safely even in the most demanding situations.

Why settle for an adapter when you can aim for excellence in interchangeability?

In fact, the E68 series is equipped with interchangeable spindle holders, eliminating coupling errors and guaranteeing unprecedented precision. The design of the spindle body, featuring a double ball cage, guarantees a flawless coupling.

Every component in the E68 series undergoes rigorous construction and testing procedures. This commitment to quality results in a run-out error of less than 2 μm , ensuring extremely accurate and reliable measurements. Relying on the quality of Elbo Controlli NIKKEN tool presetters means choosing state-of-the-art technology.



ABSOLUTE ACCURACY WITH AN OUTSTANDING VISION SYSTEM

The vision systems are manufactured using bi-telecentrics, specially designed by Elbo Controlli NIKKEN, to achieve the best performance in tool measurement.

What are the advantages? Accurate view of the cutting edge, extremely low distortion maximum measurement accuracy, excellent resolution and much more.

With decades of know-how in the complete design of all components, optical and electronic, of the vision system, we guarantee the best performance for tool measurement and inspection.
The difference is visible in the details: because, when it comes to precision, every micron counts.

Nel settore industriale, la qualità e l'affidabilità dei componenti sono essenziali per garantire precisione e produttività. A distinctive feature of the new E68 Series is the adoption of 15.6" (E68B Series) and 21.5" (E68CX) vertical touch screen monitors, developed to ensure an intuitive user experience and superior visual quality.

These ultra-high-definition displays provide sharp and detailed images. They also ensure optimal touch responsiveness, improving interaction and management of machine settings.

Designed to withstand even the most demanding working environments, the E68 series monitors guarantee quality and durability. Their robustness and durability make them the ideal solution for those seeking high performance without compromise.

Discover the performance of our monitors: with the E68 series, precision meets innovation.



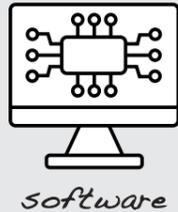
DEDICATED ELECTRONICS FOR HIGH PERFORMANCE

Our electronics guarantee stable performance even under intense working conditions.

For this reason, all E68 presettors series are equipped with Embedded Industrial PCs specifically designed for this function.

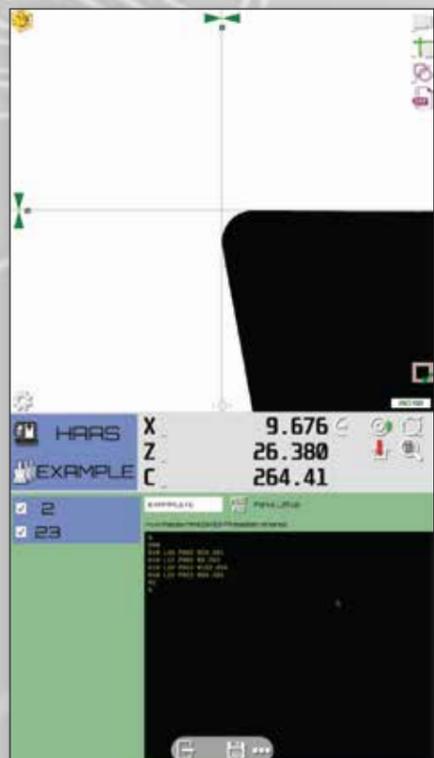
When every detail counts, you need electronics capable of supporting the most advanced vision and measurement technologies.

Maximum performance, minimum consumption, impeccable results. The difference is in the details.



USABILITY AND FUNCTIONALITY: THE PILLARS OF OUR QUALITY

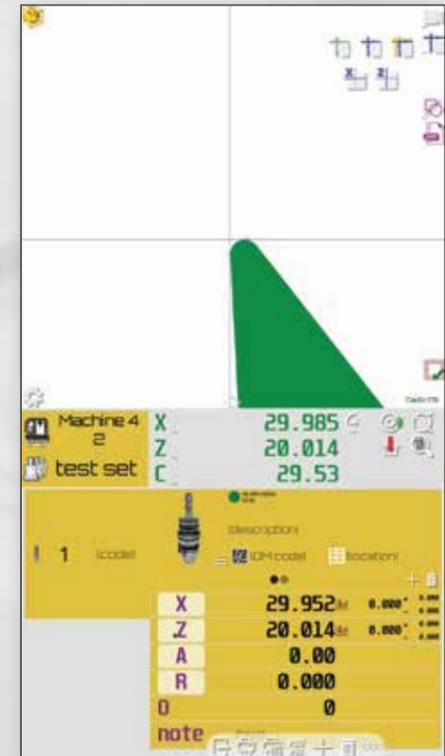
Innovation is not only about functionality, but also about the way the user interacts with the system. With smartphone-like usability, our software offers an intuitive and immediate experience, designed to facilitate every operation. **Maximum efficiency, minimum complexity: innovation is in your hands.**



The new machine software is the beating heart of our product innovation. Designed to offer maximum performance and an intuitive user experience, this software is the perfect combination of advanced technology and user-friendliness. The E68B presetter series are equipped with version B software, featuring modern blue graphics and a complete set of functionalities, including fixed reticule measurement, autocollimation and measurement freezing, tool inspection, post-processor creation and much more!

High-quality software must be powerful and simple at the same time. For us, usability is not just a detail, but a fundamental element, a real pillar on which all other features of our software are based.

The E68CX presetters are equipped with version C software, featuring modern yellow graphics and a range of advanced functions, all designed to be intuitive and easy to use: creation, export and import of DXF files, customised tool tables, advanced geometric functions, post-processor, etc.



MODERN INTERACTION FOR AN EFFICIENT PRESETTER

Our design philosophy ensures immediate and natural use of the software, reducing the learning curve and increasing productivity. The responsive and customisable graphical interface allows you to work faster and more accurately, making each operation smoother and more accessible.

Advanced technology, impeccable usability, perfect results.



AUTOMATIC AXIS AND CAMERA POSITIONING

E68BP

The E68BP's new automatic axis positioning system takes tool presetting to the next level, ensuring a fast, intuitive and error-free measuring operation.

The machine performs semi-automatic positioning and measurement of cutting edges, optimising the workflow and reducing the risk of inaccuracies.

At Elbo Controlli NIKKEN, attention to every detail is a top priority. Our aim is to offer state-of-the-art solutions that drastically reduce the operator's margin for error, constantly guiding him in his work thanks to the intelligent automatisms of our systems.

Our solutions are designed for companies that want to provide their operators with a more efficient working environment, improving quality and reducing downtime.

Investing in Elbo Controlli NIKKEN technology means choosing reliability, innovation and productivity without compromise.

MAXIMUM PRECISION, ZERO ERRORS

How does the new automatic axis positioning system work?

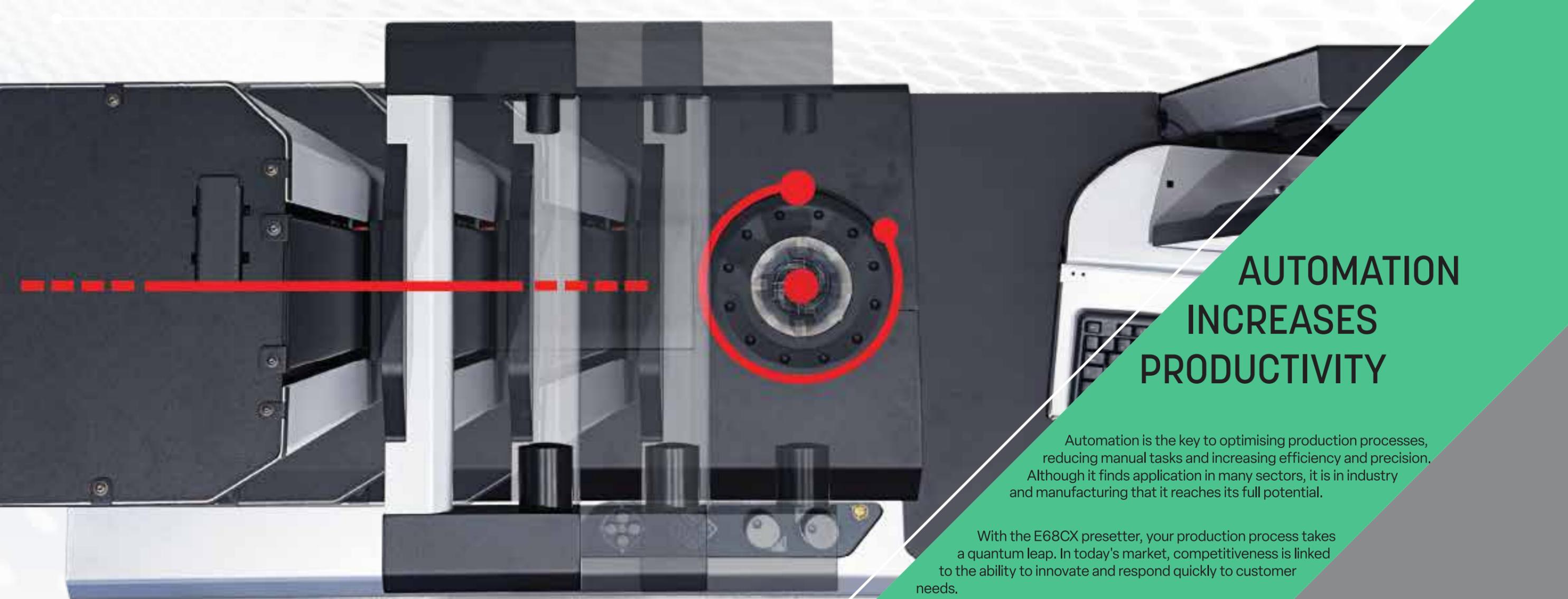
After identifying the tool, simply enter the theoretical diameter and height values, along with the desired tolerances. At this point, the E68BP automatically positions itself and measures the maximum X and Z values, completing a 360° rotation cycle of the spindle.

Thanks to this technology, the measurement can be repeated as many times as necessary with a simple recall of the tool, leaving the operator only to wait for the process to be completed.

In a shared production environment, where several operators perform presetting operations, it is essential to have a reliable and objective tool. The E68BP ensures consistently accurate and repeatable results, improving efficiency and quality of work.

Choose the technology that simplifies your production process: the E68BP is the future of tool presetting.





AUTOMATION INCREASES PRODUCTIVITY

Automation is the key to optimising production processes, reducing manual tasks and increasing efficiency and precision. Although it finds application in many sectors, it is in industry and manufacturing that it reaches its full potential.

With the E68CX presetter, your production process takes a quantum leap. In today's market, competitiveness is linked to the ability to innovate and respond quickly to customer needs.

Automating means evolving, optimising and staying one step ahead.

The E68CX presetter is the solution that helps your company improve efficiency and adapt to change, delivering superior results in less time.

More productivity. More control. More competitiveness.

E68CX: BREAKTHROUGH TECHNOLOGY, ABSOLUTE SIMPLICITY

E68CX



Elbo Controlli NIKKEN has always developed state-of-the-art solutions for automatic tool measurement, inspection and analysis, following a fundamental principle: to make operators' work as easy as possible, while minimising human error.

With our new intelligent interface, programming tool measurement becomes a smooth and intuitive experience.

Set all measurement points, define the number of cutting edges, theoretical values and tolerances, all in one screen. You decide how to measure your tools and where to export the results: post-processor, TID, RFID chip or a simple printable report.

The E68CX tool presetter offers advanced functionality to ensure speed and accuracy at every stage:

- ✔ Automatic vision system positioning
- ✔ Sharp measurement with autofocus for flawless results
- ✔ Adaptive identification of geometric entities
- ✔ Advanced data processing and analysis
- ✔ Simplified export and printing

No complications, only efficiency. The software guides you step by step, ensuring a stress-free measurement experience.

TECHNICAL FEATURES AND CONFIGURATION

LEGEND: ● available ○ optional – not available

E68B(E81B) E68BP(E81BP) E68CX(E81CX)

GENERAL FEATURES

	600 x 800(800 x 1000)	600 x 800(800 x 1000)	600 x 800(800 x 1000)
Measuring range (diameter and height in mm)	600 x 800(800 x 1000)	600 x 800(800 x 1000)	600 x 800(800 x 1000)
Natural granite base and column	●	●	●
Steel base (3+1 adjustable feet)	●	●	●
Linear guideways (2 for X axis, 1 for Z axis) with double recirculating ball bearings slides	●	●	●
Motorized axis movement	●	●	●
Motorized fine adjustment	●	●	●
ECN AS371 certified optical scales (resolution 1µm)	●	●	●
Vertical Touch Screen Monitor	TFT 15,6" Full HD	TFT 15,6" Full HD	TFT 21,5" Full HD
Keyboard and mouse	●	●	●
Label printer	○	○	○
Spindles side support (1 for 2 spindles)	●	●	●
Additional spindles side support	○	○	○
Overall dimensions (mm)	L1748,5xH2217 (2417)xP717,1		
Weight (kg)	570 (590)		

SPINDLE FEATURES

	E68B(E81B)	E68BP(E81BP)	E68CX(E81CX)
Interchangeable spindle (ISO, BT, CAT, HSK, Polygonal taper, etc.)	○	○	○
Spindle identification system (SP-ID)	–	●	●
Spindle mechanical index (0°-90°-180°-270°)	●	–	–
C axis visualization	–	●	●
Automatic spindle rotation and electronic index	–	●	●
Pneumatic spindle brake	●	●	●
Motorized mechanical tool holder clamping (standard pull stud DIN69872, ISO7388, MAS403)	●	●	●
Motorized mechanical tool holder clamping (HSK, Polygonal taper)	●	●	●

CAMERA SYSTEM FEATURES

	E68B(E81B)	E68BP(E81BP)	E68CX(E81CX)
Bi-telecentric optical lenses	●	●	●
Elbo Controlli NIKKEN camera system measuring range (mm)	10 x 10	10 x 10	10 x 10
Monochromatic C-MOS sensor USB 3.0 Super speed connection	●	●	●
Elbo Controlli NIKKEN camera system resolution	1 µm	1 µm	1 µm
Elbo Controlli NIKKEN camera system magnification	18 x	18 x	25 x
Analogic and digital camera view	●	●	●
Digital zoom (4x)	●	●	●
Tool inspection function	●	●	●
Resizable camera area	●	●	●

E68B(E81B) E68BP(E81BP) E68CX(E81CX)

SOFTWARE AND MEASURING FUNCTIONS

	E68B(E81B)	E68BP(E81BP)	E68CX(E81CX)
Embedded Elbo Controlli NIKKEN operating system Linux based	●	●	●
Elbo Controlli NIKKEN machine software B version (blue screen)	●	●	–
Elbo Controlli NIKKEN machine software C version (yellow screen)	–	–	●
Number of machine origins / number of tool sets	∞ / ∞	∞ / ∞	∞ / ∞
Multi-origin function for multitasking machines	●	●	●
Manual measure function with fixed reticle	●	●	●
Autotargeting measure function	●	●	●
Autotargeting measure function with dimension freeze	●	●	●
Collimation indicators for fixed reticle measure	●	●	●
On-screen automatic measure of tool corner radius & theoretical centre point	●	●	●
On-screen automatic measure of tool corner angle & theoretical intersection	●	●	●
Chamfer measuring function	●	●	●
Adjustable Area of Interest (AOI)	●	●	●
Automatic spindle rotation and measurement of tool edges	–	●	●
Presetter automation software for tool presetting (1 step)	–	●	●
Presetter automation software for tool presetting (unlimited steps)	–	–	●
Software for manual tool presetting and geometry control	●	●	●
Presetter automation software for tool presetting and geometry check (full CN)	–	–	●

GRAPHIC FUNCTIONS

	E68B(E81B)	E68BP(E81BP)	E68CX(E81CX)
Adjustable reticles (axis and circles)	●	●	●
Profile image capture function	●	●	●
Automatic geometry (1 geometric entity)	●	●	–
Automatic geometry (multiple geometric entity)	–	–	●
Geometry by points	●	●	●
Camera image capture	●	●	●
DXF files import of the tool profile	●	●	●
Manual DXF acquisition of the revolution profile	–	–	●
Automatic DXF acquisition of the revolution profile	–	–	●

CONNECTION AND INTEGRATION FUNCTIONS

	E68B(E81B)	E68BP(E81BP)	E68CX(E81CX)
USB ports (4)	●	●	●
LAN connection	●	●	●
Wi-Fi connection	–	–	●
Standard post processor	●	●	●
Customized post processor	○	○	○
TID (Tool identification)	○	○	○
TTS (Tool tracking system)	○	○	○
RF-ID tool identification	○	○	○
TP32 software ready (double monitor and dedicated PC)	○	○	○

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20821 MEDA (MB) - Italy - Via San Giorgio, 21
T. +39 0362 342745 - **F.** +39 0362 342741
www.elbocontrolli.it - info@elbocontrolli.it

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