



## Elbo Controlli NIKKEN E236+ Tool Presetting Machine

Our range of standard and advanced tool presetting machines are designed, developed and manufactured by our sister company Elbo Controlli NIKKEN.

All Elbo Controlli NIKKEN tool presetters are designed and manufactured 'in-house' at our two sites in Meda near Milan, Italy. Every single construction material and component is carefully controlled and developed specifically with the function and requirement of measuring tools in mind (from the optics and electronics right through to the glass scales, spindles and structural assemblies).



### MAIN FRAME & CONSTRUCTION

Designed to be bench mounted with a machine structure in electro-welded and de-tensioned steel. Solid granite column and base to guarantee and maintain maximum accuracy (also available to enhance the E236+ is our optional presetter stand which incorporates storage for up to three spindle cartridges). This construction ensures durability and offers high levels of thermal stability making the E236+ highly suitable for machine shop conditions with no issue of concern in respect of accuracy, repeatability and reproducibility.

### SPINDLE SYSTEM

A wide variety of tools can be pre-set utilizing interchangeable spindle cartridges rather than adaptors. This reduces the number of interface connections delivering accuracy across all spindle types.

### FUNCTIONALITY

The E236+ features a 86mm x 150mm (7") TFT LED matrix graphic touch screen mounted vertically for easy viewing. Simple icon and graphically driven menus enable the operator to quickly and intuitively manage all tool measurement and inspection functions, in addition a range of auxiliary functions are available such as creating 9 CNC Machine origins and 9 tool sets (each up to 99 tools). Td236+ software is also provided to allow PC connection via USB for basic transfer of tool data.

### SERVICE & SUPPORT

NIKKEN have a UK based service and Engineering team offering unrivalled levels of customer support, we are able to offer a comprehensive range of services including:

- Installation, training, technical support, service and calibration. Our team is 'manufacturer' trained and we stock a wide range of spares to facilitate quick response times and a highly efficient service.



## TECHNICAL DATA

**Versions:** ISO/BT 40, 50 / HSK / VDI "INTERCHANGEABLE" rotating spindle-holder.

### Technical specifications:

Measuring range: X axis 130 mm (diameter 260 mm).

Measuring range: Z axis 360 mm.

Measuring resolution: X axis 0.001 mm.

Measuring resolution: Z axis 0.001 mm.

Electronics driver based on RISC 32 bit processor and integrated vision system.

C-MOS image sensor framed image area 5mm x 5mm.

Telecentric lens and LED illuminator.

Magnifications: 20X.

TFT colour LCD 7" LED backlight points matrix graphic display (86x150 mm image size).

Full touch-screen for all presetter operations.

Intuitive icons and menu-based software.

Display radius/diameter, mm/inch, abs/incr, analogical/digital.

Measurement capability by full-screen auto-targeting.

X axis and Z axis focusing control bars.

Radius and angle automatic computing cycle.

9 numerical machine origin management.

9 numerical tool tables management.

Tool corrector specific storage of T, Lx, Lz, insert radius.

Data storage on Flash memory.

USB port for PC connection (Windows OS).

BIOS update by USB port with TD236+.

External 24Vcc power supply.

TD236+ Software – Data Post Processing: correctors file generator, in more than 50 CNC machine-specific formats by the universal post-processors creator. User friendly backup and restore management of machine origins and tool-lists.

### Options:

Label printer.

ISO / BT / HSK / VDI interchangeable spindle-holders and adapters.

Machine Stand.

**Overall dimensions:** Length: 570 mm, height: 793 mm, depth: 408 mm, weight: 46 kg.



Interchangeable spindle options available:

| Part Description   | Part Numbers            |                 |
|--|-------------------------|-----------------|
|  | Interchangeable Spindle | Resetting Gauge |
| ISO/BT/CAT Spindle-holder. 7/24 taper versions for 50, 40 & 30 are available.  | 04PMI50                 | 04B125          |
|  | 04PMI40                 | 04B123          |
|  | 04PMI30                 | 04B122          |
| HSK Spindle-holder. Equipped with an integrated manual mechanical clamping system. HSK100, HSK80, HSK63, HSK50, HSK40 FORM A,C,E versions are available. | 04PMH100R               | 04B128          |
|  | 04PMH80R                | 04B131          |
|  | 04PMH63R                | 04B127          |
|  | 04PMH50R                | 04B130          |
|  | 04PMH40R                | 04B133          |
|  | 04PMH32R                | 04B132          |
| VDI Spindle-holder. VDI50,40 & 30 versions are available.  | 04PMV50R                | N/A             |
|  | 04PMV40R                |                 |
|  | 04PMV30R                |                 |
| Polygonal taper Spindle-holder. Equipped with an integrated manual mechanical clamping system. C8, C6, C5 & C4 versions are available.                   | 04PMC8RV                | N/A             |
|  | 04PMC6RV                |                 |
|  | 04PMC5RV                |                 |
|  | 04PMC4RV                |                 |

Other spindle holders and accessories available by request.