

# E46L TW TOOL PRESETTER

Advanced Measure & Inspect | Twin Cameras
Floor Model



- Twin Cameras Innovative 90° rotating support for a second camera allows for cutters to be viewed from top and also from the side
- ► Full HD LCD 22" Color Touchscreen Monitor
- Motorized tool holder clamping system that simulates the working conditions of the CNC spindles
- Precision spindle system
   fully interchangeable, one piece
   cartridge eliminates the need for adapters
   and the errors associated with their use
- ► Elbo Controlli designed optical scales and slideways guarantees the highest degree of accuracy
- Can store unlimited
   NC machine specifications and tool sets
- Advanced Tool Data Management Software for basic tool measurement, inspection, and label printing to high end networking integration, geometric scanning and tool DXF profile acquisition



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## PRECISION SPINDLE SYSTEM

Fully interchangeable precision spindle system with cartridges available for all types of machine tapers: CAT, ISO, BT, HSK, CAPTO, VDI One-piece cartridge eliminates the need for adapters and the errors associated with their use. Elbo Controlli's patented Spindle-holder identification system (SP-ID) with NFC technology automatically identifies the spindle holder in the presetting machine.



## **NATURAL GRANITE**

All Elbo Controlli tool presetters utilize natural granite for the column and base to insure the best thermal stability. Larger granite base for increased accuracy and rigidity.

# **USER FRIENDLY INTERFACE**

Ergonomic design combined with a 22" HD Color LCD Touch Screen. This system provides full operator control and selection of options and functions with simplicity that is second to none. Unit comes standard with 2 graphical icon layouts. ISO 7000 or Elbo Controlli's Graphical Interface.



# **SOFTWARE**

Also included is DNC Connection software that allows the transfer of the tool offset data directly into the tool table of the numerical control (depending on CNC controller capabilities)

# **E46L TW CONSTRUCTION**

Integrated Stand

Natural Granite Base & Column

Stainless Steel Mechanical Elements

Dimensions 1,282mm L x 672mm D x 1,874mm H

Weight 295Kg / 650 lbs.

## **AXIS MOVEMENT**

X Axis (Radial) = 200mm / 7.87in

X Axis (Diameter) = 400mm / 15.75in

Z Axis = 600mm / 23.62in

Resolution X & Z Axis - 1 µm

Manual Rapid & Fine Adjustment Movement (Zero Backlash)

# **SPINDLE**

Interchangeable Rotating Spindles

Pneumatic Mechanical Brake with Radial Compensation of Clamping Force

Tool Clamping - Automatic Pull-Stud Recognition

Spindle-holder identification system (SP-ID)

Concentricity - 2 µm

Maximum Tool Weight 40kg / 88 lbs.

#### **OPERATING SYSTEM**

Full HD LCD 22" Color Touchscreen Monitor

Intel I3 Quad Core Processor

UBUNTU 14.04 LTS LINUX operating system

SSD Data Storage

4 USB ports (keyboard, mouse, printer and one spare)

1 Network LAN port

## **CAPABILITIES**

Optical Autofocus to determine largest and widest X + Z dimensions

Measure - radial and axial runout

Measure - Full Screen Auto Targeting

Measure - X&Z Axis Focusing Control Bar

Measure - Radius/Diameter, MM/Inches,

Absolute/Incremental Modes

Measure - Analog & Digital Visualization

Measure - Tool Profile Photograph - Difference Between

**Cutting Edges** 

# **VISION SYSTEM (Main Camera)**

C-MOS sensor - Framed image area 10 x 10mm.

32X Magnification

Cutting Edge Inspection for wear and tear

Diascopic Illuminator for Greater Contrast and Enhanced Clarity for Geometrical Profiling when Measuring

Episcopic Illuminator to Best Expose Tool Surfaces for Inspection

# **VISION SYSTEM (Second Camera)**

C-MOS sensor - Framed image area 4 x 4mm.

60X Magnification 2x and 4x digital zoom

90 degree, rotating camera support

Cutting Edge Inspection for wear and tear

# PRESETTER SOFTWARE

Tool List Management / Tool Sets & Post / Tool Graphics Processor Universal Generator

Printable tool set report

Theoretical measurements and tolerances management.

Free software upgrades



# **ERGONOMICALLY DESIGNED CONTROLS**

Ergonomically designed micrometric hand wheels. Micrometric Adjustments - 2 fine adjustment hand wheels for the X and 1 fine adjustment hand wheel for the Z axis. Precise and smooth fixed-target and auto adjustment measurements. The axis can be moved simultaneously or independently.

# **SLIDEWAYS / OPTICAL SCALES**

Elbo Controlli designed optical scales incorporated with a double rail system for the X axis movement with 3 double recirculating ball bearing sliding block grant the highest degree of accuracy. Both X & Z axes have a resolution of 1  $\mu m$ .

# PROPRIETARY VISION SYSTEM

High resolution camera system utilizing Elbo Controlli's realized technology. The double lit, variable LED arrangement in combination with a C-MOS sensor and telecentric lens produces the most accurate lighting system available.

The new E46LTW is equipped with 3 cameras for the front view and side view of the tool. The system allows tool manufacturers and tool regrinders to measure all the geometrical features of the tool.



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