

PRESETTER PRODUCT CATALOG

Ergonomic, simple yet powerful, we guarantee added productivity one toolholder at a time!



THERMAL STABILITY COUPLED WITH HIGH PRECISION



**COMPLETE
METALWORKING
SOLUTIONS**

(800) 991-4225
www.ahbinc.com
ISO Certified
customerservice@ahbinc.com



WHY GET A PRESETTER?

GIVEN:

- 5 CNC Vertical Machining Centers
- 25 tools required to be changed daily (5 per machine)
- 36 seconds per toolholder saved by presetting
- \$100/hr shop rate
- 261 working days per year

TIME IS MONEY!

ANNUAL COST SAVINGS!
\$6,525 PER YEAR



PRESETTER ADVANTAGES

PRACTICAL

- Measuring tools offline optimizes spindle uptime.
- Especially for smaller tools, measuring lengths and diameters are easily accomplished.
- Efficiency can be scaled throughout the entire shop for both mills and lathes.

PRECISE

- With 1 micron resolution, length and diameter dimensions transferred to machines are very accurate.
- Preset tools allow for tooling consistency that results in performance consistency.

PRODUCTIVE

- Monitoring tool run out will help optimize cutter life and cutting capability.
- More parts produced since less time is dedicated to toolholder set up.
- Inspection tools can see insert and cutter edge wear preventing scrap or poor finishes.

ROCK SOLID PRECISION

Thermal Stability coupled with High Precision

Elbo Controlli Tool Presetters combine the best of both worlds for thermal stability and optical precision. This combination provides the highest level of repeatability and reproducibility making Elbo Controlli Presetters ideal for most tool measuring and inspecting applications.

With over 35 years of experience specializing in the engineering and design of optical scales, Elbo Controlli Tool Presetters incorporate custom optical scales and vision systems that are geared for measuring and inspecting cutting tools.

Ergonomic, simple yet powerful, we guarantee added productivity one toolholder at a time!



PRECISION SPINDLE SYSTEM

All Elbo Controlli precision spindle systems are fully interchangeable. The one-piece cartridge eliminates the need for adapters and the errors associated with their use.

FEATURES AND BENEFITS



GRANITE COLUMN CONSTRUCTION

Mounted and supported by dual rail guides, the rugged design assures the same perpendicularity accuracy for tools of all sizes.



OPTICAL SCALES

Optical scales embedded within the granite base ensure the most accurate positioning feedback to the controller. *(Currently available on E68 Series only)*



AXIS CLAMPING

An ergonomic pneumatic handle allows for movement and the axis brake to be engaged with one hand, freeing up the other hand to manipulate a toolholder.



VISION SYSTEM

Elbo Controlli's custom vision system makes measuring and inspection accurate and easy to visualize. Built with a dual lit system, variable LED arrangement and a CMOS sensor; brightness for optimal visualization is achieved while minimizing heat generation that can distort measuring accuracy.



SOFTWARE FEATURES

Presettors not only provide the ability to quickly measure tools, but also can be used to help increase productivity. Elbo Controlli software packages (except the E236 model) include an inspection mode where run out and cutting edge surface inspection can easily be done. With over 35 years of experience specializing in the engineering and design of optical scales, Elbo Controlli Tool Presettors incorporate custom optical scales and vision systems that are geared for measuring and inspecting cutting tools.

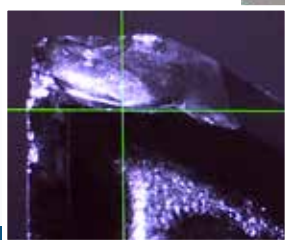
Ergonomic, simple yet powerful, we guarantee added productivity one toolholder at a time!



MEASUREMENT MODE

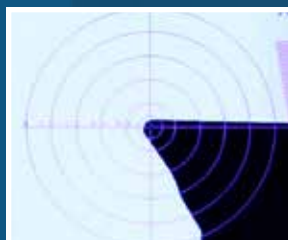


INSPECTION MODE



VISUAL INTERFACE

Thin Film Transistor LCD Touch Screen coupled with icon based software provides an easy to use interface with superb image quality.



BT30/40/50

CAT40/50

HSK32-100A

C3-C8



SPINDLES

Constructed with triple re-circulating ball bearing supports, repeatable run out and perpendicularity can be achieved when spindles are interchanged.

PRESETTER OFFERINGS

Check out our lineup of quality presetters equipped for any type of job.



E236N

MEASURABLE RANGE:

- **X-Axis:** 10.23" (Diameter)
- **Z-Axis:** 14.17" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 5.7" high resolution Color Screen
- Manual Spindle Lock for accurate measurements
- Micro adjustments in X and Z (1µm resolution)
- 20x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 20.16" • **Height:** 32.56"
- **Depth:** 15.98" • **Weight:** 99 lbs.

E346N

MEASURABLE RANGE:

- **X-Axis:** 14.17" (Diameter)
- **Z-Axis:** 18.1" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 9" high resolution Color Screen
- Micro adjustments in X and Z (1µm resolution)
- Angle and Radius Comparison Tool
- Inspection Mode to verify condition of cutting tools
- 25x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 23.54" • **Height:** 35.47"
- **Depth:** 16.06" • **Weight:** 154 lbs.

E346+ E346V+

MEASURABLE RANGE:

- **X-Axis:** 14.17" (Diameter)
- **Z-Axis:** 18.1" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15" high resolution Color Screen
- Micro adjustments in X and Z (1µm resolution)
- Angle and Radius Comparison Tool
- Inspection Mode to verify condition of cutting tools
- 25x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 37.40" • **Height:** 38.27"
- **Depth:** 16.93" • **Weight:** 198 lbs.



E460N

MEASURABLE RANGE:

- **X-Axis:** 15.74" (Diameter)
- **Z-Axis:** 23.62" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15" high resolution Color Screen
- Pneumatic Automatic Axis Clamping
- Vacuum Spindle Lock for taper fitment confirmation and accurate measurements
- Micro adjustments in X and Z (1µm resolution)
- Automatic Angle and Radius Measurement (1µm resolution)
- Inspection Mode verifies condition of cutting tools and compares run out
- Built-in Post Processor to send offsets directly to a machine or network
- 30x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 42.13" • **Height:** 44.88"
- **Depth:** 23.43" • **Weight:** 242 lbs.



HATHOR SIX & SIX A

MEASURABLE RANGE:

- **X-Axis:** 15.74" (Diameter)
- **Z-Axis:** 23.62" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15" high resolution Color Screen
- Mechanical Draw Bar clamping for most retention knob designs
- Pneumatic Axis and Spindle Locking System
- Automated Tool Measurement for optimal consistency (1µm resolution) - Model Six A only
- Automatic Angle and Radius Measurement (1µm resolution)
- Inspection Mode verifies condition of cutting tools and compares run out
- Built-in Post Processor to send offsets directly to a machine or network
- Tool Management Software Included
- 30x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 48.82" • **Height:** 72.44"
- **Depth:** 21.97" • **Weight:** 418 lbs.



E46L, E46L IS, E46LA, E46LA IS

MEASURABLE RANGE:

- **X-Axis:** 15.74" (Diameter)
- **Z-Axis:** 23.62" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Larger Touch Screen 22" Monitor
- Pneumatic Automatic Axis Clamping
- Micro adjustments in X and Z (1µm resolution)
- Automatic Spindle Identification System (SP-ID) - Optional
- Upload and Download DXF Tool Profile
- Complete Tool Table Management and post processing capabilities
- Automatic geometrical measurements on the Tool Profile
- 360° Tool Profile capture
- High Resolution Camera for Tool Inspection
- Thicker Granite for Thermal Stability and Repeatability
- 26x Camera magnification

DIMENSIONS (From Operator's position):

- **Width:** 50.47" • **Height:** 73.78"
- **Depth:** 26.46" • **Weight:** 562 lbs. (E46L, E46L IS)
584 lbs. (E46LA, E46LA IS)

E46LTW

MEASURABLE RANGE:

- **X-Axis:** 15.74" (Diameter)
- **Z-Axis:** 23.62" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Larger Touch Screen 22" Monitor
- Pneumatic Automatic Axis Clamping
- Micro adjustments in X and Z (1µm resolution)
- Automatic Spindle Identification System (SP-ID) - Optional
- On-Screen measurement for Tool Geometry
- Extended Tool Table function for Tool Report customization
- 3 Camera System for Tool Inspection (side and top). This system allows tool manufacturers and tool regrinders to measure all of the geometrical features of the tool.
- Up to 60x Magnification for easier cutting tool geometry confirmation
- Thicker Granite for Thermal Stability and Repeatability

DIMENSIONS (From Operator's position):

- **Width:** 50.47" • **Height:** 73.78"
- **Depth:** 26.46" • **Weight:** 584 lbs.



E68B, E68BA, E68L, E68L IS, E68LA E68LA IS

MEASURABLE RANGE:

- **X-Axis:** 23.62" (Diameter)
- **Z-Axis:** 31.49" (Length)

FEATURES & BENEFITS:

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Larger Touch Screen 22" Monitor (excluding E68B)
- Pneumatic Automatic Axis Clamping
- Micro adjustments in X and Z (1µm resolution)
- Automatic Spindle Identification System (SP-ID) - Optional
- Upload & Download DXF Tool Profile (excluding E68B)
- Complete Tool Table Management and post processing capabilities
- Automatic geometrical measurements on the Tool Profile
- 360° Tool Profile capture (excluding E68B)
- High Resolution Camera for Tool Inspection (excluding E68B)
- Thicker Granite for Thermal Stability and Repeatability

DIMENSIONS - ALL MODELS (From Operator's position):

- **Width:** 66.93" • **Height:** 90.55"
- **Depth:** 27.56" • **Weight:** 1,213 lbs.

PRESETTER VERSIONS

Find out what each type of Presetter can do



L VERSION

Denotes Standard Model
(Models E46L & E68L)



B VERSION

Provides a smaller and more economical screen
(Models E68B & E68BA)



A VERSION

Allows for Automatic Focusing of the C-Axis Spindle.
(Models: E46LA, E68LA & E68BA)

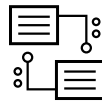


IS VERSION

Provides an integrated solution for Tool Management Software.
(Models: E46L IS, E46LA IS, E68L IS, E68LA IS)

TID AUTOMATIC TOOL IDENTIFICATION SYSTEM

TID (Automatic Tool Identification System) is a solution which allows Elbo Controlli NIKKEN presets to quickly identify tools and send correction data directly to the numerical control without interrupting any operation in progress. Elbo Controlli NIKKEN has created *the ideal appliance to manage tool identification data*.



DIRECT CONNECTION PRESETTER-CNC

TID allows a two-way communication between presetter and CNC. Measurements taken from the presetter can be sent directly to the CNC without downtime. TID can acquire tool data from the CNC offset table.



SAFETY AND RELIABILITY

TID allows operators to eliminate insertion errors, each tool is uniquely identified, thus guaranteeing the transfer of its data to the CNC machine.



NO ADDITIONAL COSTS

TID is an advantageous solution that eliminates the additional costs associated in the purchase of RFID storage devices and the application of read/write hardware interfaced with the machine tool.



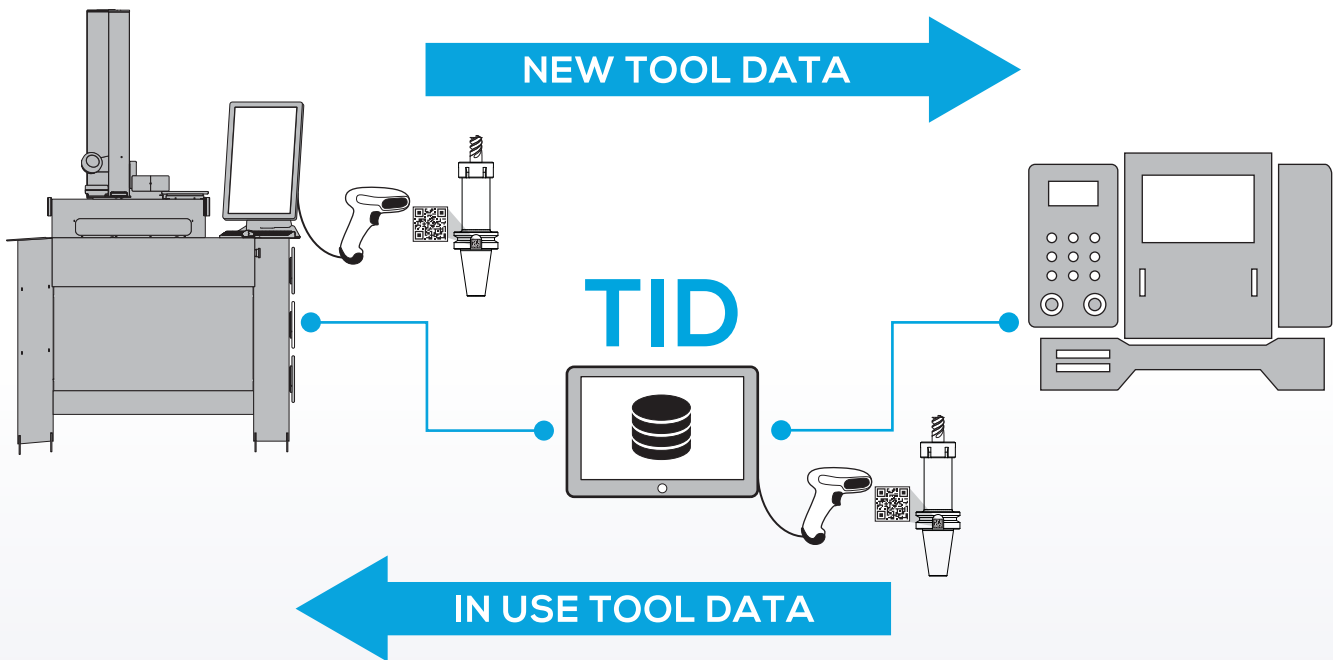
FULL CUSTOMIZATION

TID allows a complete customization to manage different configurations according to the tool data required for the specific machine.





FACTORY 4.0



Elbo Controlli NIKKEN's vast experience in the industrial sector has led to the creation of a versatile system which addresses all the needs of those who want to work with tool identification system.

Tools which are simple to use and limit the possibility of operator errors are essential in the workplace. TID has an **intuitive graphical interface** which interacts and guides the operator during use, minimizing the possibility of errors.

Tools are identified by TID through a unique code which is also associated to all correction data. After measuring the tool, the operator can select the correct machine tool for loading. The NC receives the correction data only when the tool is loaded in the machine thus avoiding transcription errors or changes to the corrector table which do not reflect the actual situation. The tool identification system is a two-dimensional bar code matrix called the Data Matrix.

TID is made more comprehensive with the ability to view the status of the tool inventory and the NC corrector table, making it an essential component for Industry 4.0 production.

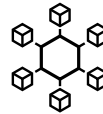
TP32 INTEGRATED TOOL MANAGEMENT SYSTEM

The **TP32 Integrated Tool Management System** was created to provide a usability-oriented approach. It offers a complete view to tool related problems within a company's production cycle.



SIMPLE

Managing tools is no longer a problem with TP32. With an intuitive graphic interface, users are easily guided in each operation. This limits any possible room for error.



MODULAR

The modularity of TP32 allows you to integrate with any CNC Machine, Presetter, Automatic Warehouse, Management System (ERP), or CAM software and Simulator.



MULTI-SEAT

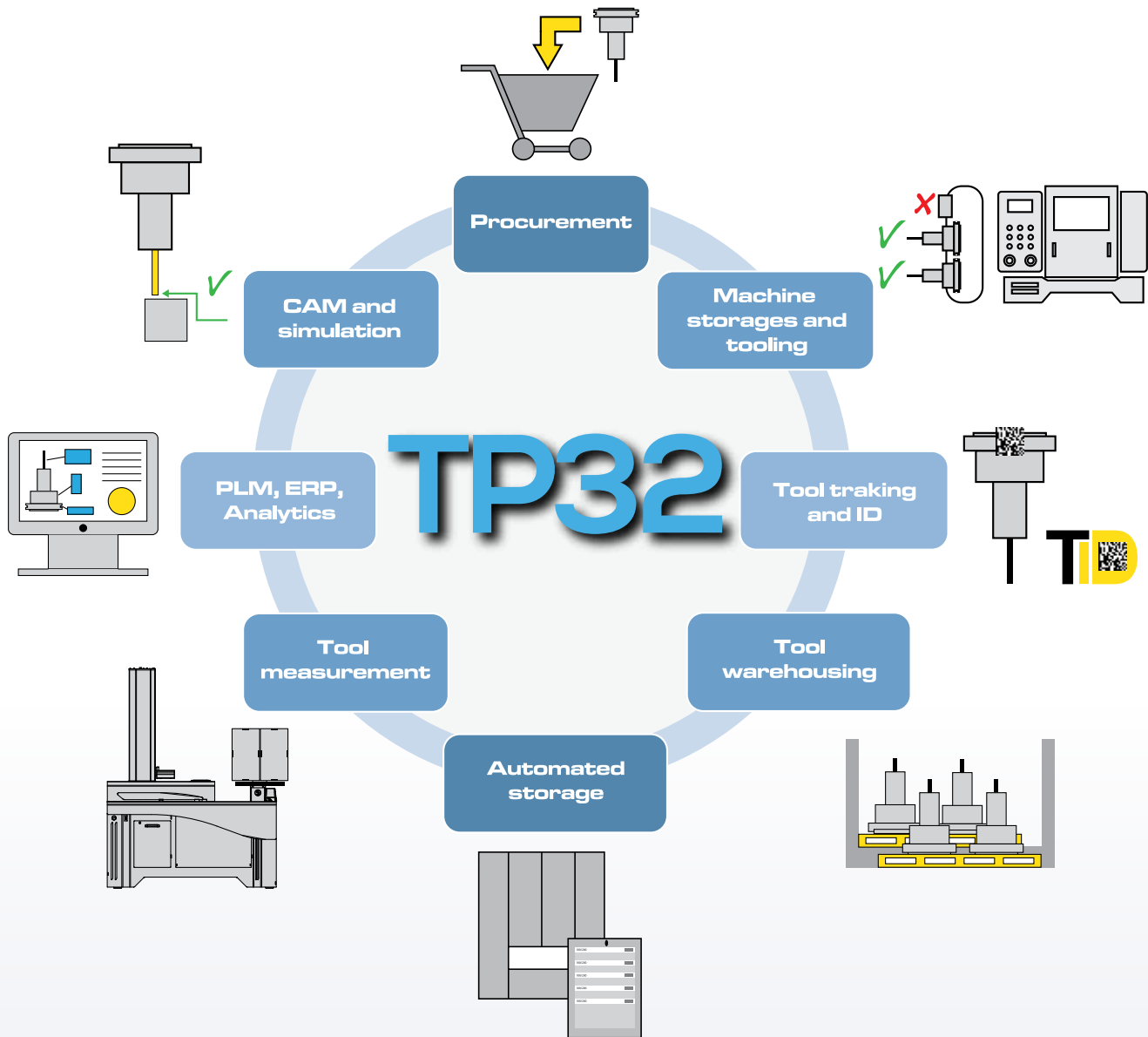
Structured to work with more than one workstation without additional costs.



ISO 13399

Automatic creation of 3D tool libraries for CAM and/or Simulation systems using ISO 13399 templates with real measurements derived from presetting.





How important is it to manage your tool inventory? Usually a manufacturing company has an excess of tools, spare parts, inserts, etc.: this is a result of a centralized control system. Proper control of your inventory leads to numerous advantages including:

- Reduction of production costs
- Resources available shown in real time
- Optimization of inventory prevents unnecessary waste
- Organization of the production cycle

Human errors are part and parcel of the working day, for example, forgetting to insert information or forgetting to update the inventory or just losing track of what tools are available. TP32 helps in all these delicate and important aspects. In fact, **you can interface it with all your systems in the workshop:** machine tools, management systems, CAD/CAM, presetters, etc. All in one software. **Easy. Flexible. Complete.**

How important is it to optimize the tool list preparation process? This depends on how productive and dynamic you want to make your workshop: our solution will help you during this process by bringing considerable benefits to the management phase and by reducing preparation times.

TP32 is a point of interaction between tools and applications. TP32 easily handles everything from the management of inventory stocks to the maintenance of distinct tool composition, from interfacing with automatic inventory to the management of sub-stocks, from resource planning to full integration with the presetter, from management of the tool supply to data exchange with ERP/CAD and offline simulation.

E236N

The entry level option for our advanced tool presetting machines.

Designed to be bench mounted, the E236N features a ground granite base and column, and ergonomic design combined with a 5.7" TFT LCD Touch Screen. This system provides full operator control and selection of options and functions via an intuitive icon system allowing operational and functional simplicity that is second to none.

Includes 9 machine tool origins and 9 tool tables. With the optional DPP Software, which includes a Data Post Processing file generator, more than 50 CNC machine-specific formats by the universal post-processors creator the user can transmit the data to his CNC Controller. User friendly backup and restore management of machine origins and tool-list are also included.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 5.7" high resolution color Touch Screen

SPECIFICATIONS

- Measuring Range:
 - Max. Diameter: 10.23" (260mm)
 - Max. Length: 14.17" (360mm)
 - Max. Tool Wgt.: 60 lbs.
- Width: 20.16"
- Height: 32.56"
- Depth: 15.98"
- Weight: 99 lbs.
- Power: 110V Single Phase

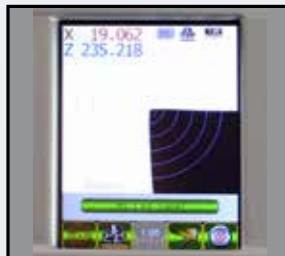
CONTROL FEATURES



Easiest Electronic Presetter in the industry. Simple and clear control layout makes this unit ideal for anyone to use.



Automatic Edge Targeting makes measuring fast and accurate.



Radius Comparator



Grid Layout for finer visualization.

ADDITIONAL FEATURES



Manual Spindle Lock for accurate measurements



20x Camera Magnification



Plug and play label printer (optional)



E346N

Our E346N Tool Presetter is the latest generation of advanced tool presetting machines.

Re-engineered from the ground up and featuring completely new mechanics and electronics the E346N features a ground granite base and column, electro-welded and de-tensioned steel construction with an ergonomic design. These features are combined with a new larger 9" TFT LCD Touch Screen that provides full operator control via an intuitive icon system allowing functional simplicity that is second to none. Also included as standard is the capability to inspect the cutting edge.

Includes 9 machine tool origins and 9 tool tables. Also includes TD346 (Tool Data 346) to manage backup and restore functions, machine origins and tool tables. Connection to the PC with an USB port and electronic Bios upgrade (Computer not included).

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 9" high resolution Color Screen

SPECIFICATIONS

- Measuring Range:
 - Max. Diameter: 14.17" (360mm)
 - Max. Length: 18.11" (460mm)
 - Max. Tool Wgt.: 60 lbs.
- Width: 23.54"
- Height: 35.47"
- Depth: 16.06"
- Weight: 154 lbs.
- Power: 110V Single Phase

CONTROL FEATURES



Edge Inspection



Automatic Edge Targeting



Angle Measurement

ADDITIONAL FEATURES



Manual Spindle Lock for accurate measurements



Micro adjustments in X and Z (1 μ m resolution)



25x Camera Magnification



E346+ E346V+

An exciting addition to the already bountiful offering of presetters. The newly designed E346+/E346V+ delivers the punch of larger, more sophisticated presetters but in a smaller footprint.

The E346+ and E346V+ features a ground granite base and column, electro-welded and de-tensioned steel construction with an ergonomic design. These features are combined with a new larger 15" TFT LCD Touch Screen that provides full operator control via an intuitive icon system allowing functional simplicity that is second to none. Also included as standard is the capability to inspect the cutting edge. Includes up to 9,999 machine tool origins and up to 999,999 tool table capacity.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15" TFT LCD Color Screen
- Vacuum spindle clamping (Only on Model E346V+).

SPECIFICATIONS (from Operator's position)

- Measuring Range:
 - Max. Diameter: 14.17" (360mm)
 - Max. Length: 18.11" (460mm)
 - Max. Tool Wgt.: 60 lbs.
- Width: 37.40"
- Height: 38.27"
- Depth: 16.93"
- Weight: 198 lbs.
- Power: 110V Single Phase

CONTROL FEATURES



Tool Measurement



With a Customizable Tool Table, all the information you need is in the right place, at the right moment: internal and external angles, radii, heights and diameters.



Inspection Mode

ADDITIONAL FEATURES



Manual Spindle Lock for accurate measurements



Micro adjustments in X and Z (1 μ m resolution)



25x Camera Magnification



E460N

The latest E460N Tool Presetter has been developed as the second level option for our new generation of advanced tool presetting machines.

The increased cross section and size of the column gives added stability up to 600mm in height and this theme is continued with revised axis slideways that also deliver increased reliability. The pneumatic axis brake and control system have been completely updated from the previous model and finally, and most noticeably, the original pendant & operator panel are now combined in to one single touch screen system that is located away from the camera and column.

These features are combined with a new, larger 15" TFT LCD Touch Screen that provides full operator control via an intuitive icon system allowing functional simplicity that is second to none. Also included as standard is the capability to inspect the cutting edge. Includes up to 9,999 machine tool origins and up to 999,999 tool table capacity.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15" high resolution Color Screen
- Vacuum Spindle Clamping
- Pneumatic Spindle Lock

SPECIFICATIONS (from Operator's position)

- Measuring Range:
 - Max. Diameter: 15.75" (400mm)
 - Max. Length: 23.62" (600mm)
 - Max. Tool Wgt.: 88 lbs.
- Width: 42.13"
- Height: 44.88"
- Depth: 23.43"
- Weight: 242 lbs.
- Power: 110V Single Phase

CONTROL FEATURES



Edge Inspection



Automatic Edge Targeting



Built in Post Processor to send offsets to a machine or network.

ADDITIONAL FEATURES



Pneumatic Automatic Axis Clamping.



Vacuum Spindle Lock for taper fitment confirmation.



30x Camera magnification.



HATHOR SIX AND SIX A

Hathor SIX features ground granite and stainless steel construction combined with a large digital camera and touch screen menu system.

The newly developed auto-measure function on the Hathor SIX A Presetter introduces a feature that is unique on this type of machine. When “auto-measure” is performed, the spindle rotates at a speed that is calculated based on the peripheral diameter of the tool to ensure the cutting edge is captured with the highest level of accuracy.

These features are combined with a new, larger 15” TFT LCD Touch Screen that provides full operator control via an intuitive icon system allowing functional simplicity that is second to none. Also included as standard is the capability to inspect the cutting edge. Includes up to 9,999 machine tool origins and up to 999,999 tool table capacity.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK and CAPTO
- 15” high resolution Color Screen
- CNC Automatic Tool Measurement for optimal consistency (1µm resolution) - Model Six A only

SPECIFICATIONS (from Operator’s position)

- Measuring Range:
 - Max. Diameter: 15.75” (400mm)
 - Max. Length: 23.62” (600mm)
 - Max. Tool Wgt.: 88 lbs.
- Width: 48.82”
- Height: 72.44”
- Depth: 21.97”
- Weight: 418 lbs.
- Power: 110V Single Phase

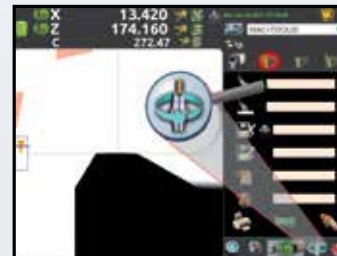
CONTROL FEATURES



CNC Automatic measurement feature provides the utmost consistency for diameter and length measurements.



Automatic measurement detects the highest values in X and Z to ensure the most accurate representation of the cutting tool.



360 measurement confirms a full rotation of the tool has been measured.

ADDITIONAL FEATURES



Mechanical Draw Bar clamping with any retention knob.



Pneumatic Axis and Spindle Locking System.



30x Camera magnification.



E46L, E46L IS, E46LA, E46LA IS

Redesigned with a larger granite base for the best measurement accuracy and repeatability.

The brand new concept ergonomic platform is completely free-standing on its own integral base; the NEW E46L features oversized ground granite and stainless steel construction combined and equipped with a 22" HD touch-screen monitor. The monitor provides full operator control via an intuitive icon system allowing functional simplicity that is second to none. Also included as standard is the capability to inspect the cutting edge. Includes up to 9,999 machine tool origins and up to 999,999 tool table capacity.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Automatic Spindle Identification System (SP-ID) - Optional
- Upload and Download DXF Tool Profile
- Complete Tool Table Management and post processing capabilities
- Automatic geometrical measurements on the Tool Profile
- 360° Tool Profile capture
- High Resolution Camera for Tool Inspection
- Thicker Granite for Thermal Stability and Repeatability

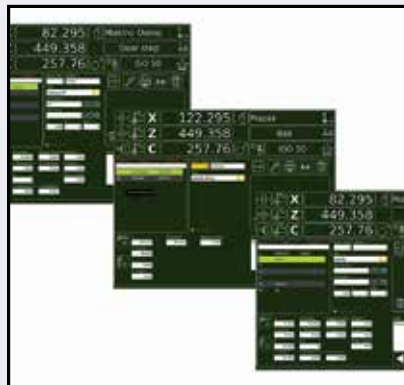
SPECIFICATIONS (from Operator's position)

- Measuring Range:
 - o Max. Diameter: 15.75" (400mm)
 - o Max. Length: 23.62" (600mm)
 - o Max. Tool Wgt.: 88 lbs.
- Width: 50.47"
- Height: 73.78"
- Depth: 26.46"
- Weight: 562 lbs. (E46L, E46L IS)
584 lbs. (E46LA, E46LA IS)
- Power: 110V Single Phase

CONTROL FEATURES



CNC Automatic measurement feature provides the utmost consistency for diameter and length measurements.



Fully Customizable Tool Tables to handle all of the measurements and tool features from the cutting edge: internal and external angles, radii, heights and diameters.

ADDITIONAL FEATURES



Ergonomic design and location of manual axis movements and controls.



Substantially larger base and column, made of ground granite.



Intuitive, logical touchscreen monitor to easy interactions with machine.



E46LTW

This presetter is a completely new model, redesigned and re-engineered from the ground up!

The brand new concept ergonomic platform is completely free-standing on its own integral base; the NEW E46LTW features oversized ground granite and stainless steel construction. The 22" HD touch screen system is portrait mounted for easy viewing and operation. The screen layout and simple to use icon based software design not only displays visible images of the current tool and profile, but additionally allows access to the full functionality and new capabilities of the software and integral tool management system.

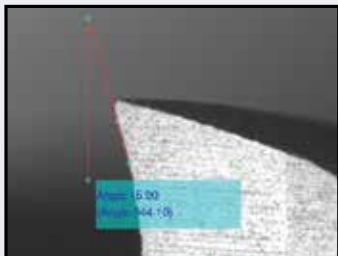
FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Automatic Spindle Identification System (SP-ID) - Optional
- On-Screen measurement for Tool Geometry
- Extended Tool Table function for Tool Report customization
- 3 Camera System for Tool Inspection (front, top and side)
 - Main Camera: Tool measurement (diascopic) and cutting-edge inspection (episcopic) Bi-telecentric lens. Magnification 26X, digital zoom 2x and 4x available.
 - Second/Third Camera: Cutting-edge inspection (episcopic) with on screen measurement Bi-telecentric lens. Opportunity to view the tool from the top (front) or from the side (chest). Thanks to the rotating support by 90 degrees, the camera can be removed from above not to obstruct the measurement operations. Magnification 60X, digital zoom 2x and 4x available.

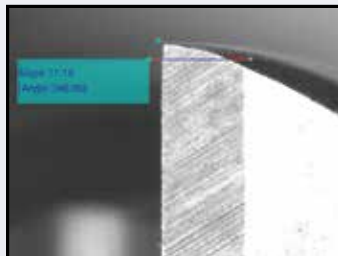
SPECIFICATIONS (from Operator's position)

- Measuring Range:
 - o Max. Diameter: 12.59" (320mm)
 - o Max. Length: 23.62" (600mm)
 - o Max. Tool Wgt.: 88 lbs.
- Width: 50.47"
- Height: 73.78"
- Depth: 26.46"
- Weight: 584 lbs.
- Power: 110V Single Phase

CONTROL FEATURES



Cylindrical cutter with 3 cutting edges, diameter 10mm. Front view: front extent rake (rake angle) determines the performance of tool's working conditions.



Cylindrical cutter with 4 cutting edges, diameter 6mm. Front view: checking back rake angles (1° and 2°), required to guarantee finish cutting without vibrations affecting the material being processed.



Cylindrical cutter with 4 cutting edges, diameter 6mm. Side view (chest): measure the propeller screw angle and rake angle, important to determinate to suit the type of application and the type of material being processed.

ADDITIONAL FEATURES



Substantially larger base and column, made of ground granite.



Equipped with 3 cameras for front, top and side views.



22" vertically-mounted touchscreen monitor for easy viewing.



E68B, E68BA, E68L, E68L IS, E68LA E68LA IS

Discover the whole E68 series, the complete integrated solution for your tool-room.

The E68B presetter machine is equipped, both for X and Z axes, with natural granite and glass. Unique scale in the world to use the granite as support structure, guarantee an accuracy and precision never reached so far.

Natural granite used for column and base with increased section compared to previous model. The thermal stability of this material allows to place the machine in the workshop. Great attention has been paid to machine structure and base sizing, by ensuring a particularly rigidity, high precision and dimensional stability to the whole machine.

FEATURES AND BENEFITS

- Granite Column and Base for utmost thermal stability
- Interchangeable Spindles for CAT 40/50, BT30/40/50, HSK & CAPTO
- Automatic Spindle Identification System (SP-ID) - Optional
- On-Screen measurement for Tool Geometry
- Extended Tool Table function for Tool Report customization

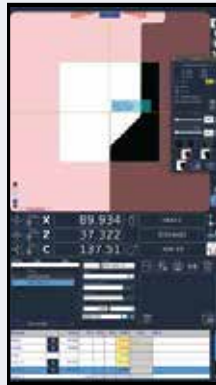
SPECIFICATIONS (from Operator's position)

- Measuring Range:
 - Max. Diameter: 23.62" (600mm)
 - Max. Length: 31.50" (800mm)
 - Max. Tool Wgt.: 88 lbs.
- Micrometric movements (electronic handwheels) are used for the tool profile collimation and measurement acquisition
- Width: 66.93"
- Height: 90.55"
- Depth: 27.56"
- Weight: 1,213 lbs.
- Power: 110V Single Phase

CONTROL FEATURES



Create a DXF by framing the tool with automatic geometrical measurements, acquire the tool profile and export it. (excluding E68B)



With a Customizable Tool Table, all the information you need is in the right place, at the right moment: internal and external angles, radii, heights and diameters.



A Universal Post Processor Generator to transmit instantly with zero errors. More than 50 post-processors are included.

ADDITIONAL FEATURES



Axis and Spindle Lock for accurate and repeatable measurements.



Micro adjustments in X and Z ($1\mu\text{m}$ resolution).



25x Camera magnification.



M.U.S.T. SOFTWARE MEASUREMENT USER SUPPORT TECHNOLOGY

A new and unique way to measure and preset your tools *automatically*.

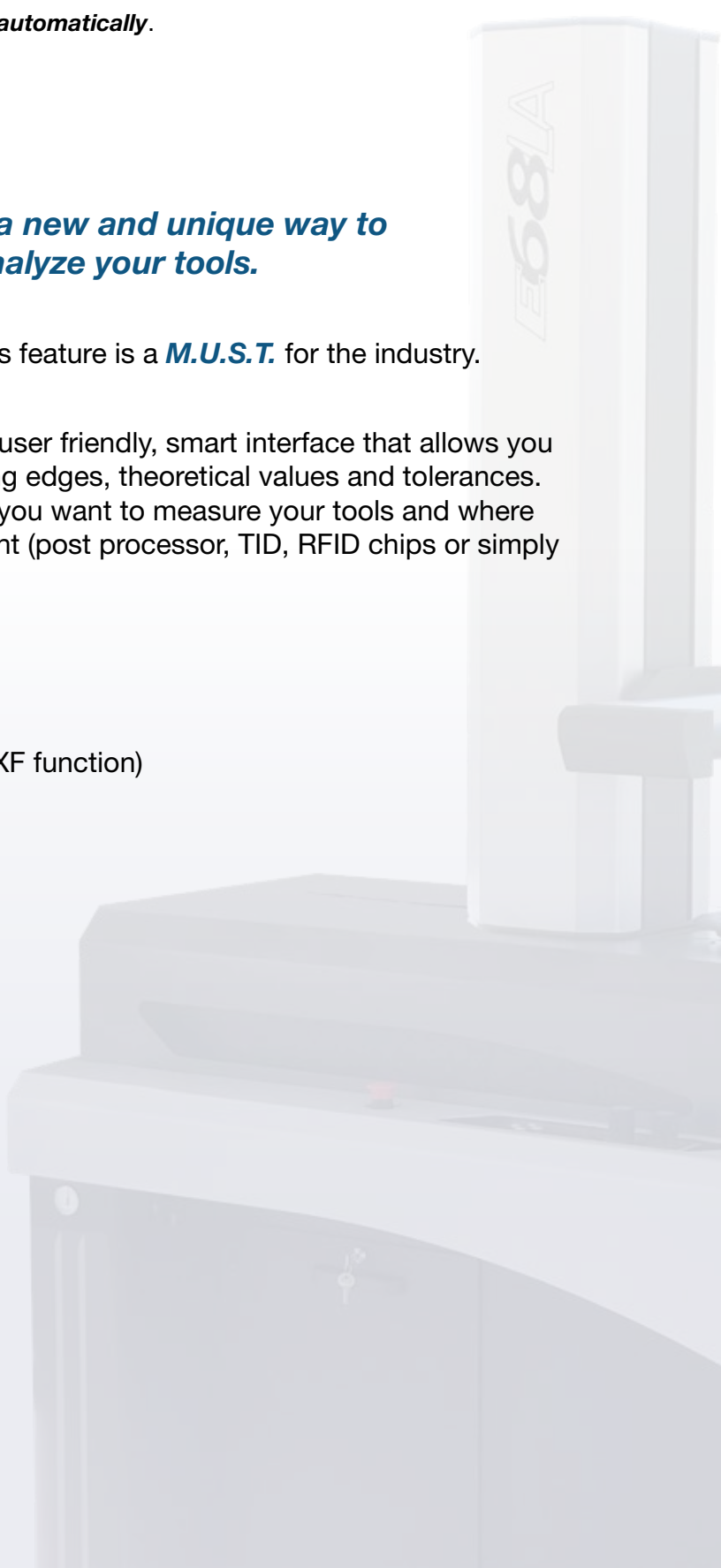
Elbo Controlli NIKKEN has developed a new and unique way to automatically measure, inspect and analyze your tools.

Available only on E68LA series of presetters, this feature is a **M.U.S.T.** for the industry.

Prepare your measuring program with our new, user friendly, smart interface that allows you to set all the measuring points, number of cutting edges, theoretical values and tolerances. Everything can be set in one page: decide how you want to measure your tools and where you want to export the result of the measurement (post processor, TID, RFID chips or simply save and print your tool report)

What's new?

- Tool measurement cycle
- Automatic tool profile acquisition (also DXF function)
- Smart geometry recognition
- Cutting edge auto-finder
- Tool integrity check
- Theoretical DXF comparison
- Dynamic tool report generator
- Automatic Data Export





MEASUREMENT USER SUPPORT TECHNOLOGY

Measurement point | Results

1
2
3
4

Point data

	Theoretical	Tolerance +	Tolerance -
X	34.550	0.020	0.020
Z	131.550	0.020	0.020

Cutters count: 4 Autofocus
C axis reference: SEARCH [v] -

ROI

Px: -2 Pz: -2 W: 4 H: 4

Axis lock

Lock X Lock Z

Geometry

Corner radius: 0.0 Angle 1: 0.0 Angle 2: 0.0

Data storage

Save X MAX [v]
 Save Z MAX [v]

elbo controlli NIKKEN

Measure		Value	Th.	Min.	Max.	Delta	Icon	Note
P1 - X	X	34.543	34.550	0.020	0.020	-0.009	Green	
P1 - Z	Z	131.548	131.550	0.020	0.020	-0.013	Green	
P2 - X	X	30.981	31.000	0.050	0.050	-0.017	Green	
P2 - Z	Z	113.523	113.550	0.020	0.020	-0.027	Red	
P3 - X	X	30.321	30.300	0.020	0.020	0.021	Green	
P3 - Z	Z	86.640	86.650	0.020	0.020	-0.010	Green	

MODEL COMPARISON



Feature Comparison

FEATURES	E236N	E346N	E346+	E346V+	E460N	HATHOR SIX	HATHOR SIX A
Granite Column and Base for utmost thermal stability	●	●	●	●	●	●	●
Touch Screen Monitor	5.7"	9"	15"	15"	15"	15"	15"
Interchangeable Spindle (BT30/40/50, CAT40/50, HSK40-100A, C5-C8)	●	●	●	●	●	●	●
Manual X-axis and Z-axis focusing control bars	—	●	●	●	●	●	●
Allows for Automatic Focusing of the C-Axis Spindle	—	—	—	—	—	—	●
Manual Braking of spindle-holder rotation	●	●	●	●	—	—	—
Pneumatic Mechanical Braking of spindle-holder rotation	—	—	—	—	●	●	●
Pneumatic Braking of spindle-holder rotation with three 120° pistons	—	—	—	—	—	—	—
One-handed Pneumatic Automatic Axis Clamping	—	—	—	—	●	●	●
Mechanical Draw Bar Clamping on most retention knob designs	—	—	—	—	—	●	●
Measurement capability by full screen Auto-Targeting	●	●	●	●	●	●	●
Measurement capability by full-screen Fixed Reticule	●	●	●	●	●	●	●
Micro adjustments in X and Z (40 millionths of an inch resolution)	●	●	●	●	●	●	●
Automatic Angle & Radius Measurement (40 millionths of an inch resolution)	—	—	●	●	●	●	●
Automatic Spindle Identification System (SP-ID)	—	—	—	—	—	●	●
Upload and Download DXF Tool Profile	—	—	—	—	—	—	—
Complete Tool Table Management & Post Processing capabilities	◇	●	●	●	●	●	●
Automatic geometrical measurements on the Tool Profile	—	—	●	●	●	●	●
360° Tool Profile Capture	—	—	—	—	—	—	—
Tool Inspection Function	—	●	●	●	●	●	●
Camera System Resolution	1µm	1µm	1µm	1µm	1µm	1µm	1µm
Camera System Magnification	20x	25x	25x	25x	30x	30x	30x
Three Camera System for Tool Inspection (side and top)	—	—	—	—	—	—	—
Provides an integrated solution for Tool Management Software	—	—	—	—	—	—	—
Industry 4.0 Ready	—	—	●	●	●	●	●
Label Printer	◇	◇	◇	◇	◇	◇	◇



LEGEND:
 - Not Available
 • Available
 ◊ Optional

E46L	E46L IS	E46LA	E46LA IS	E46LTW	E68B	E68BA	E68L	E68L IS	E68LA	E68LA IS
•	•	•	•	•	•	•	•	•	•	•
22" HD	22" HD	22" HD	22" HD	22" HD	15"	15"	22" HD	22" HD	22" HD	22" HD
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1µm	1µm	1µm	1µm	1µm	1µm	1µm	1µm	1µm	1µm	1µm
26x	26x	26x	26x	1st Cam: 26x 2nd Cam: 60x 3rd Cam: 60x	30x	30x	32x	32x	32x	32x
-	-	-	-	•	-	-	-	-	-	-
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◊	◊	◊	◊	◊	◊	◊	◊	◊	◊	◊

Feature Comparison

ACCESSORIES



LABEL PRINTER

Optional for ALL Models.



MACHINE STANDS

Stand with additional spindle storage.

*Available for E236, E346,
E346+, E346V+ and E460N Models.*



MASTER GAUGES

Precision Ground, Designed for presetter use with etched known dimensions.

Available for CAT 40/50, BT30/40/50, HSK 32-100 and C3-C8.



INTERCHANGEABLE SPINDLES

Constructed with triple re-circulating ball bearing supports, repeatable run out and perpendicularity can be achieved when spindles are interchanged.

Available for CAT 40/50, BT30/40/50, HSK 32-100 and C3-C8.

All Elbo Controlli tool presettters utilize natural granite for the column and base to insure the best thermal stability.



**COMPLETE
METALWORKING
SOLUTIONS**

(800) 991-4225

www.ahbinc.com

ISO Certified

customerservice@ahbinc.com

CAT2020-PRESETTER
JUNE 2020