New Generation of Tool Presetters from elbo controlli

Hathor SIX
Enhanced Measure & Inspect

Sethy SIX
Measure & Inspect

- Increased Measuring Range (400 mm x 600 mm)
- Large 15” touch screen
- New Optical Autofocus
- Advanced Tool Geometry Inspection
- Network Compatible

www.komaprecision.com | info@komaprecision.com | 1.800.249.5662
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Easy to use

Quickly measure length, diameter, radius & angles

Elbo Controlli proprietary high resolution vision system

Integrated LCD touchscreen / vision screen for quick and easy operation

Full screen auto targeting

Can store up to 9 different NC machine specifications and 9 Tool Sets (99 tools per set)

Label printer (optional)
ERGONOMICALLY DESIGNED CONTROLS
Ergonomically designed micrometric hand wheels for X and Z axes allows for precise and smooth fixed-target and auto adjustments. The operator can move the axis simultaneously or independently.

SPINDLE HOLDER OPTIONS
Fixed or interchangeable rotating spindle holder available.

VERSIONS
-ISO / BT 40, 50 / HSK / CAPTO / VDI
-Interchangeable Rotating Spindle
-ISO 40, 50 Fixed Rotating Spindle Holder & Adapters Available.

NATURAL GRANITE
All Elbo Controlli tool presetters utilize natural granite for the column and base to insure the best thermal stability. This solid base construction, together with Elbo Controlli’s excellence in manufacturing, all but eliminates the need for re-alignments and guarantees proper functioning over the life of the unit.

LARTH CONSTRUCTION
Bench Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions 512mm L x 406mm D x 827mm H
Weight 45 Kg / 99 lbs

AXIS MOVEMENT
X Axis (Radial) = 130mm / 5.188in
Z Axis = 360mm / 14.17in
Resolution X & Z Axis - 1 µm
Manual Rapid & Fine Adjustment Movement (Zero Backlash)

SPINDLE
Fixed or Interchangeable Rotating Spindles
ISO / HSK / CAPTO / VDI / Interchangeable Rotating Spindles Available
ISO 40, 50 Fixed Rotating Spindle Holder & Adapters Available
Manual Mechanical Brake
Concentricity - 4 µm
Maximum Tool Weight 30kg / 66 lbs.

OPERATING SYSTEM
5.7” Color LCD Touchscreen Display / Operator Interface / 640 x 480 Resolution
Connectivity - USB / RS-232
Printer Support (optional)
Capable of Storing 9 Different Machine Specifications
Capable of Storing 9 Different Tool Sets (99 tools per set)

CAPABILITIES
Measure - Full Screen Auto Targeting
Measure - X&Z Axis Focusing Control Bar
Measure - Automatic Radius & Angle Computing Cycle
Measure - Radius/Diameter, MM/Inches, Absolute/Incremental Modes
Measure radial and axial runout

VISION SYSTEM
Telecentric Lens / C-MOS Image Sensor with 0.001mm resolution / 20x Magnification

DPP SOFTWARE (Optional)
Tool List Management / Tool Sets & Post Processor Universal Generator
CNC Machine Origin Management
Free software upgrades

PROPRIETARY VISION SYSTEM
High resolution camera system utilizing Elbo Controlli’s realized technology. The telecentric lens with C-MOS sensor produce the most accurate lighting system available.

MECHANICS ELECTRONICS OPTICS SOFTWARE by
elbo controlli
Measurements & inspections

Elbo Controlli proprietary high resolution vision system

Elbo Controlli designed optical scales and slideways guarantees the highest degree of accuracy

Can store up to 9,999 different NC machine specifications and 1 million tool sets

TOOLINGUP Software
Tool Data Management Software for precision measuring, tool inspection, tool data management and networked communication
SETHY CONSTRUCTION

Bench Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions 894mm L x 540mm D x 1030 mm H
Weight 110 Kg / 242 lbs

AXIS MOVEMENT

X Axis (Radial) = 200mm / 7.874 in
Z Axis = 500mm / 19.685 in
Resolution X & Z Axis - 1 µm
Z Axis Constant Load Spiral Spring Counterbalance System
Manual Rapid & Fine Adjustment Movement

SPINDLE

Interchangeable ISO40 or 50 for Different Tapers
Optional Interchangeable Holders Available - HSK, VDI, Capto
Manual Mechanical Brakes
Concentricity - 4µm
Maximum Tool Weight 40kg / 88 lbs.

OPERATING SYSTEM

5.7” Color LCD Touchscreen Operator Interface
Connectivity - (2) RS-232 Printer / PC
LINUX
Printer Support
Capable of Storing 9,999 Different Machine Specifications
Capable of Storing 1M Different Tool Specifications

CAPABILITIES

Measure - Full Screen Auto Targeting
Measure - X&Z Axis Focusing Control Bar
Measure - Automatic Radius & Angle Computing Cycle
Measure - Radius/Diameter, MM/Inches, Absolute/Incremental Modes
Measure - Analog & Digital Visualization
Measure - Tool Profile Photograph - Difference Between Cutting Edges
Measure radial and axial runout
Inspection - 4 Color Tool Inspection

VISION SYSTEM

Cutting Edge Inspection for wear and tear
5.7” Color LCD Display Screen / 20x Magnification

TOOLINGUP SOFTWARE

Tool List Management / Tool Sets & Post Processor Universal Generator
CNC Machine Origin Management
RFID Tool Detection Designed for Systems Like Balluff, etc.
Free software upgrades

MANUAL AXES MOVEMENT

Axis un-clamping by means of a single pneumatic control system. Approach speed controlled via operating system software: 2 mm/sec.

ERGONOMICALLY DESIGNED CONTROLS

Ergonomically designed micrometric hand wheels for X and Z axes allows for precise and smooth fixed-target and auto adjustments. The operator can move the axis simultaneously or independently.

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.

NATURAL GRANITE

All Elbo Controlli tool presetters utilize natural granite for the column and base to insure the best thermal stability. This solid base construction, together with Elbo Controlli’s excellence in manufacturing, all but eliminates the need for re-alignments and guarantees proper functioning over the life of the unit.

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 µm.

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.

USER FRIENDLY INTERFACE

LCD touch panel display coupled with LINUX based software for a quick and easy operation.

TOOLINGUP

Tool Data Management Software
An intuitive, flexible and powerful software for applications that require precision measuring, tool inspection, tool data management and networked communication.
Sethy SIX

Measure & Inspect, Bench Model

Increased measuring range

New 15” TFT touch screen

Improved operating system

Elbo Controlli designed optical scales | slideways and revolutionary vision system guarantees the highest degree of accuracy

Can store up to 9,999 different NC machine specifications and 1 million tool sets

TOOLINGUP Software Tool Data Management Software for precision measuring, tool inspection, tool data management and networked communication
SETHY SIX CONSTRUCTION

Bench Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions 1070 mm L x 595mm D x 1140 mm H
Weight 110 Kg / 242 lbs

AXIS MOVEMENT
X Axis (Radial) = 200mm / 7.874 in
NEW Increased Measuring Range Z Axis = 600mm / 23.62 in
Resolution X & Z Axis - 1 µm
Double Pneumatic Axis Clamping
Manual Rapid & Fine Adjustment Movement

SPINDLE
Interchangeable ISO40 or 50 for Different Tapers
Optional Interchangeable Holders Available - HSK, VDI, Capto
Manual Mechanical Brakes
Concentricity - 4µm
Maximum Tool Weight 40kg / 88 lbs.

NEW OPERATING SYSTEM
NEW 15” TFT Touch Screen
INTEL® SSD Data Storge
Connectivity - (2) RS-232 Printer / PC
LINUX Printer Support
Capable of Storing 9,999 Different Machine Specifications
Capable of Storing 1M Different Tool Specifications

CAPABILITIES
Measure - Full Screen Auto Targeting
Optical Autofocus to determine largest and widest
X + Z dimensions
Measure radial and axial runout
Measure - X&Z Axis Focusing Control Bar
Measure - Automatic Radius & Angle Computing Cycle
Measure - Radius/Diameter, MM/Inches,
Absolute/Incremental Modes
Measure - Analog & Digital Visualization
Measure - Tool Profile Photograph - Difference Between
Cutting Edges
Inspection - 4 Color Tool Inspection

VISION SYSTEM
Telecentric Lens for Accurate Dimensional Measurements / C-MOS Image Sensor with 0.001mm resolution
Diascopic Illuminator for Greater Contrast and Enhanced
Clarity for Geometrical Profiling when Measuring
Episcopic Illuminator to Best Expose Tool Surfaces for
Inspection
Cutting Edge Inspection for wear and tear
30x Magnification | 15” TFT LCD Touch Screen

TOOLINGUP SOFTWARE
Tool List Management / Tool Sets & Post
Processor Universal Generator
CNC Machine Origin Management
RFID Tool Detection Designed for Systems Like Balluff, etc.
Free software upgrades

MANUAL AXES MOVEMENT
Axis un-clamping by means of a single pneumatic control system. Approach speed controlled via TOOLINGUP Software: 2 mm/sec.

ERGONOMICALLY DESIGNED CONTROLS
Ergonomically designed micrometric hand wheels for X and Z axes allows for precise and smooth fixed-target and auto adjustments. The operator can move the axis simultaneously or independently.

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.

NATURAL GRANITE
All Elbo Controlli tool preseters utilize natural granite for the column and base to insure the best thermal stability. This solid base construction, together with Elbo Controlli’s excellence in manufacturing, all but eliminates the need for re-alignments and guarantees proper functioning over the life of the unit.

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 µm.

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.

NEW

USER FRIENDLY INTERFACE
ergonomic design combined with a 15” 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.

POWERFUL COMPUTING SYSTEM
Tool Data Management
This powerful new operating system utilizing a Linux OS, features state-of-the-art tool measuring, inspection and data management solutions. Elbo Controlli’s preseters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.
Increased measuring range

New 15” TFT touch screen

Improved operating system

Precision spindle system is fully interchangeable

Elbo Controlli designed optical scales | slideways and revolutionary vision system guarantees the highest degree of accuracy

Can store up to 9,999 different NC machine specifications and 1 million tool sets

TOOLINGUP Software
Tool data management software for precision measuring, tool inspection, tool data management and communication
HATHOR SIX CONSTRUCTION

Floor Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions 1,240 mm L x 558mm D x 1,840mm H
Weight 135 Kg / 297 lbs

AXIS MOVEMENT

X Axis (Radial) = 200mm / 7.874 in
NEW Increased Measuring Range Z Axis = 600mm / 23.62 in
Resolution X & Z Axis - 1 µm
Double Pneumatic Axis Clamping
Manual Rapid & Fine Adjustment Movement

SPINDLE

Interchangeable ISO40 or 50 for Different Tapers
Optional Interchangeable Holders Available - HSK, VDI, Capto
Pneumatic Mechanical Brakes with Radial Compensation of Clamping Force
Concentricity - 2µm
Maximum Tool Weight 40kg / 88 lbs.
Tool Clamping - Automatic Pull-Stud Recognition

NEW OPERATING SYSTEM

NEW 15” TFT Touch Screen
INTEL®
SSD Data Storge
Connectivity - (2) RS-232 Printer / PC
LINUX
Printer Support
Capable of Storing 9,999 Different Machine Specifications
Capable of Storing 1M Different Tool Specifications

CAPABILITIES

Measure - Full Screen Auto Targeting
Measure - X&Z Axis Focusing Control Bar
Measure - Automatic Radius & Angle Computing Cycle
Measure - Radius/Diameter, MM/Inches, Absolute/Incremental Modes
Measure - Analog & Digital Visualization
Measure - Tool Profile Photograph - Difference Between Cutting Edges
Optical Autofocus to determine largest and widest X + Z dimensions
Measure radial and axial runout
Inspection - 4 Color Tool Inspection

VISION SYSTEM

Telescopic Lens for Accurate Dimensional Measurements / C-MOS Image Sensor with 0.001mm resolution
Diascopic Illuminator for Greater Contrast and Enhanced Clarity for Geometrical Profiling when Measuring
Episcopic Illuminator to Best Expose Tool Surfaces for Inspection
Cutting Edge Inspection for wear and tear
10.4” Color LCD Display Screen / 30x Magnification

TOOLINGUP SOFTWARE

Tool List Management / Tool Sets & Post Processor Universal Generator
CNC Machine Origin Management
RFID Tool Detection Designed for Systems Like Balluff, etc.
Free software upgrades

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 µm.

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.

NEW

USER FRIENDLY INTERFACE

ergonomic design combined with a 15” 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..

NEW

POWERFUL COMPUTING SYSTEM

Tool Data Management
This powerful new operating system utilizing a Linux OS, features state-of-the-art tool measuring, inspection and data management solutions. Elbo Controlli’s presetters increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.

MANUAL AXES MOVEMENT

Axis un-clamping by means of a single pneumatic control system. Approach speed controlled via TOOLINGUP Software: 2 mm/sec.

ERGONOMICALLY DESIGNED CONTROLS

Ergonomically designed micrometric hand wheels for X and Z axes allows for precise and smooth fixed-target and auto adjustments. The operator can move the axis simultaneously or independently.

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.

NATURAL GRANITE

All Elbo Controlli tool presetters utilize natural granite for the column and base to insure the best thermal stability. This solid base construction, together with Elbo Controlli’s excellence in manufacturing, all but eliminates the need for re-alignments and guarantees proper functioning over the life of the unit.

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ELBO CONTROLLI 68B

Advanced Large Capacity, Enhanced Measure & Inspect

Floor Model

Increased measuring range

New 15” TFT touch screen

Improved operating system

Larger capacity to handle bigger and heavier tools

Precision spindle system is fully interchangeable

Elbo Controlli designed optical scales | slideways and revolutionary vision system guarantees the highest degree of accuracy

Can store up to 9,999 different NC machine specifications and 1 million tool sets

TOOLINGUP Software

Tool data management software for precision measuring, tool inspection, tool data management and communication
**ERGONOMICALLY DESIGNED CONTROL**
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**
Micrometric movements (electronic handwheels) are used to collimate the tool profile and to acquire the measurement. The automatic clearance recovery system is patented.

**NEW**
A powerful PC with Linux operating system for the integrated management of the functions of measurement / inspection tools, machine origins and toolsets. Ease of use thanks to the integrated touch screen.

**NEW**
Large 15" touch screen for the best visualization of the tools and simple management functions to operate the measuring machine.

**PATENTED SPINDLE**

**NATURAL GRANITE**
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.

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**68B CONSTRUCTION**
- Floor Model
- Natural Granite Base & Column
- Stainless Steel Mechanical Elements
- Dimensions - 1,865mm L x 687mm D x 1,957mm H
- Weight Z 600 - 300 Kg / 660 lbs / Z 800 - 310 Kg / 682 lbs

**AXIS MOVEMENT**
- X Axis (Radial) = 300mm (11.81in)
- Z Axis = 600mm (23.6in) or 800mm (31.50in) Max.
- Resolution X & Z Axis - 1 µm
- Double Pneumatic Axis Clamping
- Servo Motor Rapid & Fine Adjustment Movement

**SPINDLE**
- Interchangeable ISO40 or 50 for Different Tapers
- Optional Interchangeable Holders Available - HSK, VDI, Capto
- Pneumatic Mechanical Brakes with Radial Compensation of Clamping Force
- Concentricity - 2µm
- Maximum Tool Weight 50kg / 110 lbs.
- Tool Clamping - Automatic Pull-Stud Recognition

**OPERATING SYSTEM**
- 15" Color TFT Saga Monitor / Keyboard / Mouse
- Celeron M Processor
- Connectivity - 1 USB / 10/100 Ethernet Card / Integrated Wireless (WiFi)
- Ubuntu LINUX
- Printer Support
- Capable of Storing Unlimited Machine Origins & Tool Specifications

**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 - Automatic Radius & Angle Computing Cycle
- Measure - Radius/Diameter, MM/Inches, Absolute/Incremental Modes
- Measure - Analog & Digital Visualization
- Measure - Tool Profile Photograph - Difference Between Cutting Edges
- Inspection - 4 Color Tool Inspection

**VISION SYSTEM**
- Telecentric Lens for Accurate Dimensional Measurements / 1.3 Mega Pixel / C-MOS Image Sensor with 0.001mm resolution
- Diascopic Illuminator for Greater Contrast and Enhanced Clarity for Geometrical Profiling when Measuring
- Episcopic Illuminator to Best Expose Tool Surfaces for Inspection
- Cutting Edge Inspection for wear and tear
- 30x Magnification

**TOOLINGUP SOFTWARE**
- Tool List Management / Tool Sets & Post Processor Universal Generator
- CNC Machine Origin Management
- RFID Tool Detection Designed for Systems Like Balluff, etc.
- Free Software Upgrades

**NEW ELECTRONIC CONTROL**
TOOLINGUP SIX 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.
Advanced measurements & inspections

Precision spindle system
fully interchangeable, one piece
cartridge eliminates the need for adapters
and the errors associated with their use

Automatic tool clamping

Elbo Controlli proprietary high
resolution vision system

Elbo Controlli designed optical scales
and slideways guarantees the highest
degree of accuracy

Can store unlimited
NC machine specifications and tool sets

Q-Presetter TDM Software
for basic tool measurement, inspection, and
label printing to high end networking
integration, geometric scanning and tool DXF
profile acquisition

Khyan
Mid-Level, Advanced Tool Presetting
**PRECISION SPINDLE SYSTEM**

An interchangeable revolving spindle with two preloaded ball bearings and a manual rotation brake system. An added enhancement is a pneumatic brake (with radial compensation of the clamping force) and tool clamping system with vacuum verification.

**USER FRIENDLY INTERFACE**

Utilizing Q-Presetter Tool Data Management Software, the speed for the adjustments to the axes can be controlled to eliminate errors and to increase efficiencies. The operator can move the axis simultaneously or independently.

**NATURAL GRANITE**

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

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**Q-Presetter TDM Software with Elbo Controlli Realized Vision System**

Q-Presetter Tool Data Management Software performs basic tool measurement, inspection, and label printing to high-end networking integration, geometric scanning and tool DXF profile acquisition.

DXF graphic files can be superimposed in real time to check the tool's outline. In addition, whole tool profiles can be captured, and exported in DXF format compatible with all CAD systems.

The system also includes an innovative measurement function for angle head tools. By simply setting and measuring the inclination angle of the angular head tools, the Q-Presetter Software can calculate the radius / diameter of the tool, as well as coordinate the axis rotation center.

Elbo Controlli’s Q-Presetter Tool Data Management Software utilizes a high resolution 1.3 mega pixel C-MOS image sensor, a regulated LED doubling lighting system for episcopal inspection, and telecentric lens for maximum magnification. For utmost stability and flexibility, the complete Elbo Controlli system is operated using Ubuntu LINUX.
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 23” Color LCD 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

Q-Presetter TDM Software for basic tool measurement, inspection, and label printing to high end networking integration, geometric scanning and tool DXF profile acquisition
KHYAN TW CONSTRUCTION

Floor Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions 1,417mm L x 570mm D x 1,730mm H
Weight 150 kg / 330 lbs

AXIS MOVEMENT
X Axis (Radial) = 160mm / 6.3" in
Z Axis = 500mm / 19.685 in
Resolution X & Z Axis - 1 µm
Double Pneumatic Axis Clamping
Manual Rapid & Fine Adjustment Movement

SPINDLE
Interchangeable ISO40 or 50 for Different Tapers
Optional Interchangeable Holders Available - HSK, VDI, Capto
Pneumatic Mechanical Brakes w Radial Compensation of Clamping Force
Concentricity - 2µm
Maximum Tool - Weight 40kg : 88lbs
Tool Clamping - Automatic Pull-Stud Recognition

OPERATING SYSTEM
Full HD 23” Color LCD Monitor / Keyboard / Mouse
Celeron M Processor
Connectivity - 1 USB / 10/100 Ethernet Card / Integrated Wireless (WiFi)
Ubuntu LINUX
Printer Support
Capability of Storing Unlimited Machine Origins & Tool Specifications

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 Axising Control Bar
Measure - Automatic Radius & Angle Computing Cycle
Measure Modes - Radius/Diameter, MM/In, Absolute/Incremental
Measure - Analog & Digital Visualization
Measure - Tool Profile Photograph - Difference Between Cutting Edges
Inspection - 4 Color Tool Inspection

VISION SYSTEM (Main Camera)
Main Camera - Bi-Telecentric Lens for Accurate Dimensional Measurements / 1.3 Mega Pixel / C-MOS Image Sensor with 0.001mm resolution / Framed Area 10 x 10mm (3x Bigger than Standard Values)
Cutting Edge Inspection for wear and tear
Episcopic Illuminator to Best Expose Tool Surfaces for Inspection (Red LEDs)

VISION SYSTEM (Second Camera)
Second Camera - Bi-Telecentric Lens for Accurate Dimensional Measurements / 1.3 Mega Pixel / C-MOS Image Sensor with 0.001mm resolution / Framed Area 4 x 4mm
Episcopic Illuminator for Diffused Light and Low Angles to Reduce Glare
Innovative 90 degree Rotating Support for Second Camera allows for Cutters to be Viewed from the Top Front and Sides

Q-PRESETTER SOFTWARE
Tool List Management / Tool Sets & Post Processor Universal Generator
CNC Machine Origin Management
RFID Tool Detection Designed for Systems Like Balluff, etc.
Network Integrations
Import & Display DXF Drawings / Capture Tool Profile & Export in DXF Format
Free software upgrades

The mechanical clamping of the tool holder is double checked by an innovative concentricity check function which signals a run-out error warning if improper contact of the cylindrical taper in the spindle is detected. The system will then troubleshoot for the operator in an intuitive, simple, effective way.

MOTORIZED UNIVERSAL TOOL-HOLDER CLAMPING SYSTEM
Motorized servo-assisted tool-holder clamping system simulates, on the presetter the working conditions found on a CNC machine. By pressing simultaneously the tool clamp button and the safety button the mechanism starts, stopping automatically when the maximum clamping force is reached.

INNOVATIVE TWIN CAMERA SYSTEM
The innovative 90 degree rotating support for the second camera allows for cutters to be viewed from the top and also the side. With this innovative set-up, it is possible to measure the tool with the traditional camera and check/inspect the geometry of the tools with the second camera without moving the presetter’s axis.

Q-Presetter TDM Software with Elbo Controlli Realized Vision System
Q-Presetter Tool Data Management Software performs basic tool measurement, inspection, and labeling to high end networking integration, geometric scanning and tool DXF profile acquisition.

DXF graphic files can be superimposed in real time to check the tool's outline. In addition, whole tool profiles can be captured, and exported in DXF format compatible with all CAD systems.

The system also includes an innovative measurement function for angle head tools. By simply setting and measuring the inclination angle of the angular head tools, the Q-Presetter Software can calculate the radius/diameter of the tool, as well as coordinate the axis rotation center.

Elbo Controlli’s Q-Presetter Tool Data Management Software utilizes a high resolution 1.3 mega pixel CMOS image sensor, a regulated LED doubling lighting system for episcopic inspection, and telecentric lens for maximum magnification. For utmost stability and flexibility, the complete Elbo Controlli system is operated using Ubuntu Linux.
Larger capacity to handle bigger and heavier tools

Patented spindle system with double-ball, high-precision spindle designed to allow for the lowest rotation inaccuracies with run out errors close to zero

Automatic tool clamping

Elbo Controlli proprietary high resolution vision system

Elbo Controlli designed optical scales and slideways guarantees the highest degree of accuracy

Can store unlimited NC machine specifications and tool sets

Innovative measurement function for angle head tools

Q-Presetter TDM Software for basic tool measurement, inspection, and label printing to high end networking integration, geometric scanning and tool DXF profile acquisition
AMON RA CONSTRUCTION

Floor Model
Natural Granite Base & Column
Stainless Steel Mechanical Elements
Dimensions - Z 600 - 1,873mm L x 687mm D x 1,960mm H
Z 800 - 1,873mm L x 687mm D x 2,160mm H
Weight Z 600 - 300 Kg / 660 lbs / Z 800 - 310 Kg / 682 lbs

AXIS MOVEMENT

X Axis (Radial) = 300mm (11.81in)
Z Axis = 600mm (23.6in) or 800mm (31.50in) Max.
Resolution X & Z Axis - 1 µm
Double Pneumatic Axis Clamping
Servo Motor Rapid & Fine Adjustment Movement

SPINDLE

Interchangeable ISO40 or 50 for Different Tapers
Optional Interchangeable Holders Available - HSK, VDI, Capto
Pneumatic Mechanical Brakes with Radial Compensation of Clamping Force
Concentricity - 2µm
Maximum Tool Weight 50kg / 110 lbs.
Tool Clamping - Automatic Pull-Stud Recognition

OPERATING SYSTEM

19” Color TFT Saga Monitor / Keyboard / Mouse
Celeron M Processor
Connectivity - 1 USB / 10/100 Ethernet Card / Integrated Wireless (WiFi)
Ubuntu LINUX
Printer Support
Capable of Storing Unlimited Machine Origins & Tool Specifications

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 - Automatic Radius & Angle Computing Cycle
Measure - Radius/Diameter, MM/Inches, Absolute/Incremental Modes
Measure - Analog & Digital Visualization
Measure - Tool Profile Photograph - Difference Between Cutting Edges
Inspection - 4 Color Tool Inspection

VISION SYSTEM

Telecentric Lens for Accurate Dimensional Measurements / 1.3 Mega Pixel / C-MOS Image Sensor with 0.001mm resolution
Cutting Edge Inspection for wear and tear
Episcopic Illuminator to Best Expose Tool Surfaces for Inspection
10.4” Color LCD Display Screen / 35x Magnification / 1280 x 1024 Resolution

TOOLINGUP SOFTWARE

Tool List Management / Tool Sets & Post Processor Universal Generator
CNC Machine Origin Management
RFID Tool Detection Designed for Systems Like Balluff, etc.
Import & Display DXF Drawings / Capture Tool Profile & Export in DXF Format
Free software upgrades

Q-Presetter TDM Software with Elbo Controlli Realized Vision System
Q-Presetter Tool Data Management Software performs basic tool measurement, inspection, and label printing to high end networking integration, geometric scanning and tool DXF profile acquisition.

DXF graphic files can be superimposed in real time to check the tool’s outline. In addition, whole tool profiles can be captured, and exported in DXF format compatible with all CAD systems.

The system also includes an innovative measurement function for angle head tools. By simply setting and measuring the inclination angle of the angular head tools, the Q-Presetter Software can calculate the radius / diameter of the tool, as well as coordinate the axis rotation center.

Elbo Controlli’s Q-Presetter Tool Data Management Software utilizes a high resolution 1.3 mega pixel C-MOS image sensor, a regulated LED doubling lighting system for episcopal inspection, and telecentric lens for maximum magnification. For utmost stability and flexibility, the complete Elbo Controlli system is operated using Ubuntu LINUX.