

# KOMMA



## HATHOR SIX A

elbo controlli 





## KOMA PRECISION

For over thirty years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

With over 30,000 rotary table installations, Koma is the largest distributor of Tsudakoma NC rotary tables and indexers in the world. With over 12,000 angle heads and live tools installed, Koma is the world's largest supplier for Alberti - the originator and the foremost innovator of productivity tooling.

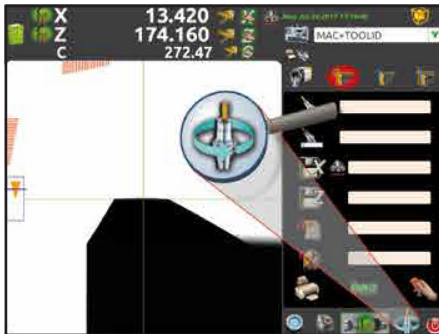


# HATHOR SIX A





## ***Autofocus***



Autofocus function: all new operating mode and capability that allows the machine to measure automatically the tools, without operator presence.



Possibility to acquire X and Z values with automatic recognition of the cutting edge. Possibility to set the measuring priority for X or Z axis. Absolute maximum measurement automatic searching with complete revolution of the spindle.



Software displays the measuring progression during the automatic acquisition cycle of the cutting edge by circular percentage loader.

## HATHOR SIX A CONSTRUCTION

---

Floor Model

Natural Granite Base & Column

Stainless Steel Mechanical Elements

Dimensions 1,240 mm L x 558mm D x 1,840mm H

Weight 190 Kg / 418 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  $\mu$ m

Double Pneumatic Axis Clamping

Manual Rapid & Fine Adjustment Movement

## SPINDLE

---

Interchangeable ISO40 or 50 for Different Tapers

Optional Interchangeable Holders Available - HSK, VDI, Capto

Motor providing automatic rotation of the spindle with pneumatic engagement or the motion transmission for zero backlash (patented system)

Peripheral speed of the spindle rotation is calculated and controlled based on the diameter of the current tool being measured

Pneumatic Mechanical Brakes with Radial Compensation of Clamping Force

Concentricity - 2 $\mu$ m

Maximum Tool Weight 40kg / 88 lbs.

Tool Clamping - Automatic Pull-Stud Recognition

## NEW OPERATING SYSTEM

---

**NEW** 15" TFT Touch Screen

INTEL®

SSD Data Storage

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

---

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

10.4" Color LCD Display Screen

30x Magnification | 15" TFT LCD Touch Screen

## TD SIX SOFTWARE

---

Tool List Management / Tool Sets & Post Processor Universal Generator

CNC Machine Origin Management

RFID Tool Detection Designed for Systems Like Balluff, etc.

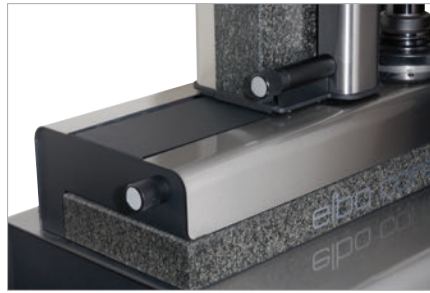
Free software upgrades



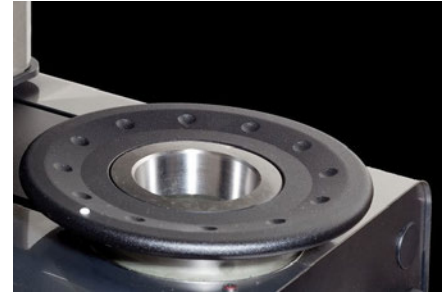
# FEATURES



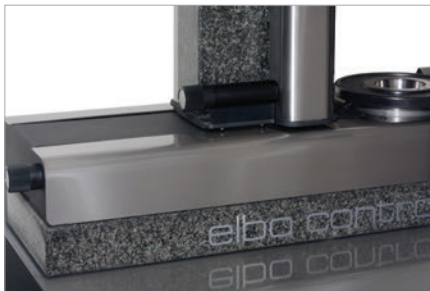
**MANUAL AXES MOVEMENT**  
Axis unclamping by means of a single pneumatic control system.



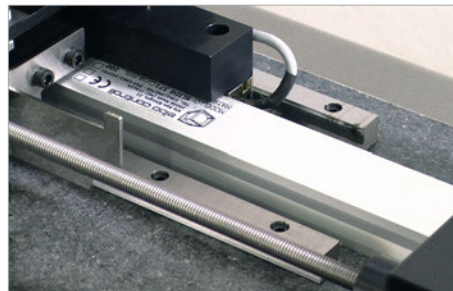
**ERGONOMICALLY DESIGNED CONTROLS**  
Ergonomically designed micrometric hand wheels for X and Z axes allows for precise and smooth fixed-target and auto adjustments. The operator can move the axis simultaneously or independently.



**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 presettlers 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.



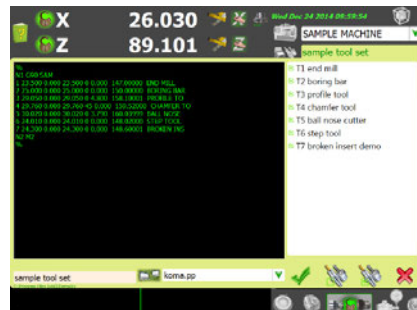
**SLIDEWAYS / OPTICAL SCALES**  
Elbo Controlli designed optical scales incorporated with a double rail system for the X axis movement with 3 double recirculating ball bearing sliding block grant the highest degree of accuracy. Both X & Z axes have a resolution of 1  $\mu$ m.



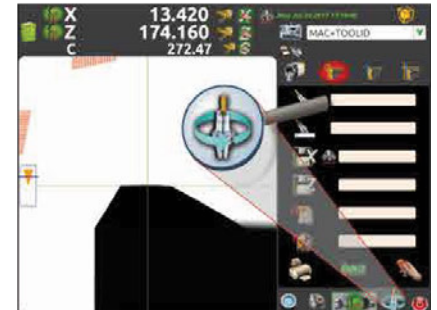
**PROPRIETARY VISION SYSTEM**  
High resolution camera system utilizing Elbo Controlli's realized technology. The double lit, variable LED arrangement in combination with a C-MOS sensor and telecentric lens produces the most accurate lighting system available.



**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 presettlers increase efficiency, reduce down time and are supported by extensive applications, technical support, and a global service network.



**AUTOFOCUS FUNCTION**  
All new operating mode and capability that allows the machine to measure tools automatically, without an operator present. Software displays the measuring progression during the automatic acquisition cycle of the cutting edge by circular percentage loader.



Tel: 1.800.249.5662  
Fax: 860.623.4132

info@komaprecision.com  
www.komaprecision.com

20 Thompson Road  
East Windsor, CT 06088

