

**OKUMA**



**Alberti**  
**SMARTCHANGE**



**KOMA**  
KOMAPRECISION.COM

20 Thompson Rd | East Windsor | CT 06088  
1.800.249.5662 | 860.623.4132 Fax  
[www.komaprecision.com](http://www.komaprecision.com) | [info@komaprecision.com](mailto:info@komaprecision.com)


**SmartChange System**

New from Alberti, a complete range of live tools with interchangeable adapters for Okuma are now available in stock. The **SmartChange** System units have a standard profile with **no additional projection** to reduce the chance of interference with the machine's


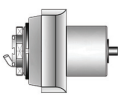
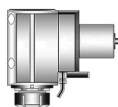


enclosures. Alberti's patent pending design creates **three points of contact**


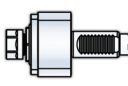
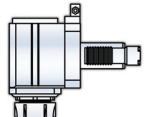
between the driven tool holder body and tool holder output surfaces so there is **no compromise in concentricity and rigidity** to gain the speed and convenience of quick-change tooling. With the **SmartChange** System

one set of live tools can always stay in the machine with only the adapters needing to be changed. This provides

**improved efficiency and flexibility**, plus a reduction in overall tooling costs.

				STRAIGHT TOOLS	90° TOOLS
					
Lathe Model	SPACE TURN LB2000EX LB2500EX LB3000EX	Standard		MA-3.5 GH-66492-00	M90-3.5 GH-66496-00
			Output	SC2*	SC2*
			Nm/ft.lbs.	-	50/37
			RPM	6,000	6,000
		Coolant Thru		MA-3.5 RI GH-66494-00	M90-3.5 RI GH-66498-00
			Output	SC2*	SC2*
			Nm/ft.lbs.	-	50/37
			RPM	6,000	6,000

Coolant Pressure Straight Tools = 70 Bar/1000 PSI • Coolant Pressure 90° Tools = 70 Bar/1000 PSI  
RPM = Maximum


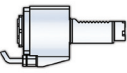
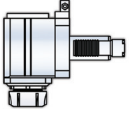
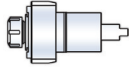
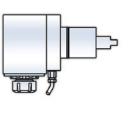
				STRAIGHT TOOLS	90° TOOLS
					
Lathe Model	ESL-10 LB-15 SERIES LU-15M LU-300M LB-300 SERIES L-370 CAPTAIN GENOS L300	Standard		MA-3.5 GH-66314-00	M90-3.5 GH-66315-00
			Output	SC2*	SC2*
			Nm/ft.lbs.	-	50/37
			RPM	6,000	6,000
		Coolant Thru		MA-3.5 RI GH-66331-00	M90-3.5 RI GH-66332-00
			Output	SC2*	SC2*
			Nm/ft.lbs.	-	50/37
			RPM	6,000	6,000

Coolant Pressure Straight Tools = 70 Bar/1000 PSI • Coolant Pressure 90° Tools = 70 Bar/1000 PSI  
RPM = Maximum


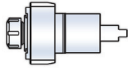
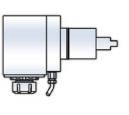
## The Alberti SmartChange System

A quick change system like no other...

QUICK • EASY • PRECISE

				STRAIGHT TOOLS	90° MAIN SPINDLE TOOLS
Lathe Model	LT-10M LT-200M LT-200MY	Standard			
				MA-2.5	M90-2.5
				GH-66387-00	GH-66106-00
			Output	SC2*	SC2*
		Coolant Thru	Nm/ft.lbs.	-	16/11.8
			RPM	6,000	6,000
				MA-2.5 RI	M90-2.5 RI
				GH-66418-00	GH-66419-00
Lathe Model	LT-2000 M/MY/MYW LT-2000EX	Standard			
				MA-2.5	M90-2.5
				GH-66810-00	GH-66811-00
			Output	SC2*	SC2*
		Coolant Thru	Nm/ft.lbs.	-	45/33
			RPM	6,000	6,000
				MA-2.5 RI	M90-2.5 RI
				GH-66812-00	GH-66813-00

Coolant Pressure Straight Tools = 70 Bar/1000 PSI • Coolant Pressure 90° Tools = 70 Bar/1000 PSI  
RPM = Maximum

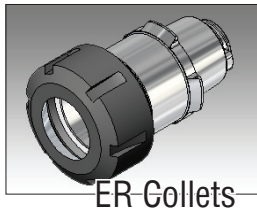
				STRAIGHT TOOLS	90° TOOLS
Lathe Model	LT-2000 M/MY/MYW LT-2000EX	Standard			
				MA-2.5	M90-2.5
				GH-66810-00	GH-66811-00
			Output	SC2*	SC2*
		Coolant Thru	Nm/ft.lbs.	-	45/33
			RPM	6,000	6,000
				MA-2.5 RI	M90-2.5 RI
				GH-66812-00	GH-66813-00

Coolant Pressure Straight Tools = 10 Bar/145 PSI • Coolant Pressure 90° Tools = 70 Bar/1000 PSI  
RPM = Maximum

\*Each tool comes standard with an ER SmartChange Adapter, a Main Spindle Anti-Rotation Wrench & a Long Handle Wrench for Lock / Unlock Nut. For additional adapters & accessories, see below.

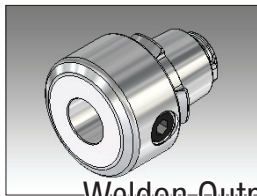
## Accessories

### Additional Adapters



ER Collets

ER Collets
SIZE
ER-20
ER-25



Weldon Outputs

Weldon Outputs
SIZE
1/2"
5/8"



Shell-Mill Arbors

Shell Mill Arbors
SIZE
3/4"

### Measuring Fixtures



Tool-Pot

SmartChange Tool Pot
SIZE
40 Taper
50 Taper



Holding-Fixture

SmartChange Holding Fixture
-----------------------------

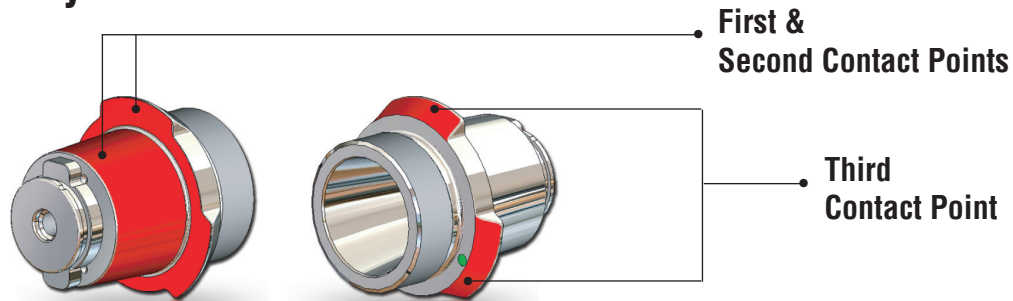
Note: Holding fixture does not include adapter and wrench.

# The Alberti SmartChange System

*A quick change system like no other...*

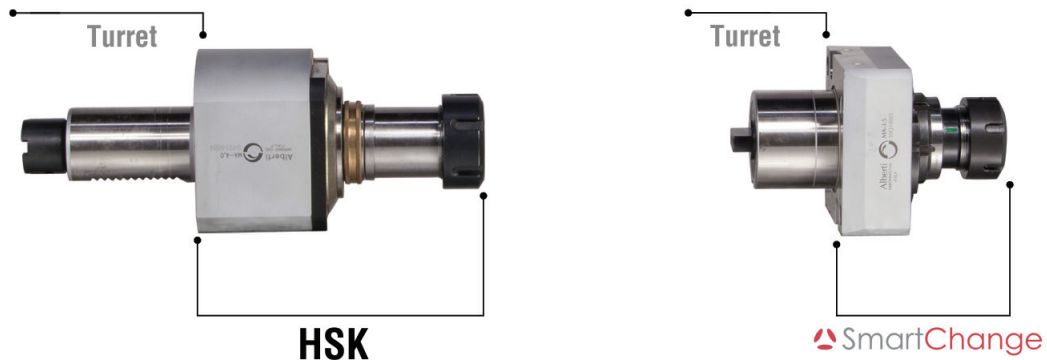
**QUICK • EASY • PRECISE**

## Triple Contact System

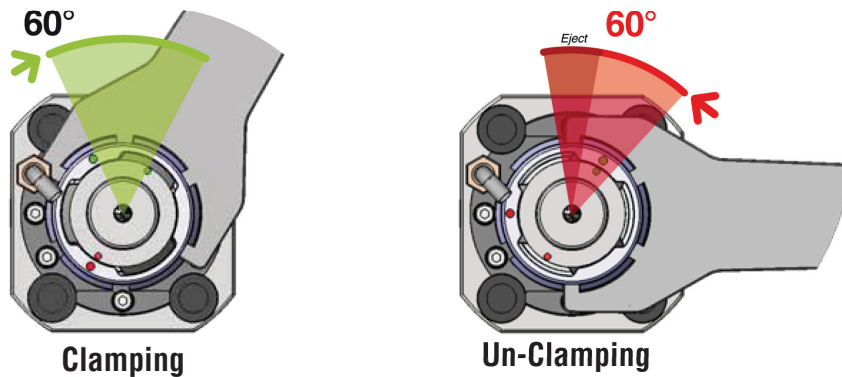


This system incorporates a triple contact support between the body and adapter for extreme rigidity and accuracy.

## Low Profile



## How It Works



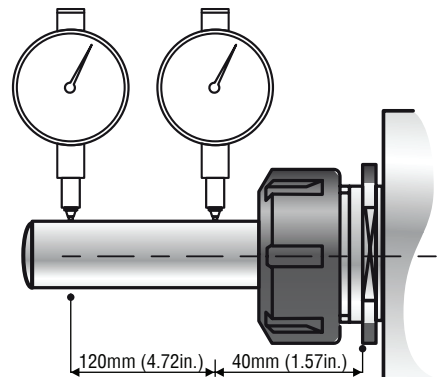
The patent pending Alberti  SmartChange collet clamp & wrench system quickly and precisely locks the quick change adapter, reducing tool cutter changing time to a minimum.

The  SmartChange System allows for tools to be externally preset for quick job change over and increased profitability.

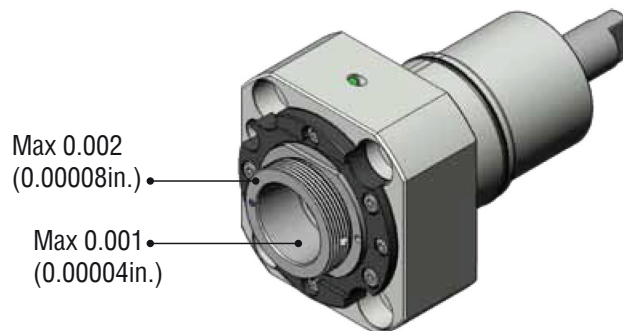
## Highest Accuracy & Repeatability

Run-Out of the Collet Chuck with Adapter Mounted Repeatability	0.006 $\mu$ m
Adapter Change Time	20 seconds
Repeatability	0.003mm (0.0001 in.)

### Accuracy with Gauge Bar Inserted in the Collet Chuck



### Run Out with SmartChange System



### Accuracy with Gauge Bar Inserted in the Collet Chuck

at 40mm = 0.008mm  
(1.57in. = 0.0003in.)

at 120mm = 0.01mm  
(4.72in. = 0.0004in.)

## Large Selection of Adapters





**elbo controllii** 



## Reinforced Construction

- Natural Granite Base & Column for Increased Thermal Stability
- Stainless Steel Mechanical Elements for Higher Resistance & Longer Life

## Spindle Interchangeability

- Fully Interchangeable to Handle a Multitude of Different Tool Shank Types (Optional)

## Axis Movements

- Fast & Precise Adjustments for Immediate Visualization of Tool Profiles
- Simple, Easy-to-Use, Maintenance Free Design

## Electronic Features

- Newly Upgraded Camera System with TFT Color LCD 5.7" Backlit Matrix Display for Improved User Interface
- C-MOS Sensor with 0.001 mm Resolution

## DDP System Software

- Easy to Use, Intuitive Software

<b>elbo controllii</b> 	<b>Larth Tool Presetter</b>
Larth w/ Built-in Spindle Holder	
Larth w/ Interchangeable Spindle Holder	

## SPECIFICATIONS

### 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  $\mu$ m  
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  $\mu$ m  
Maximum Tool Weight 30kg / 66 lbs.

### OPERATING SYSTEM

5.7" Color LCD Touchscreen Display / Operator Interface / 640 x 480 Resolution  
RISC 32 Bit Processor  
Data Storage on Flash  
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

### 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

## SmartChange

elbo controllii 

### Outside Presetting

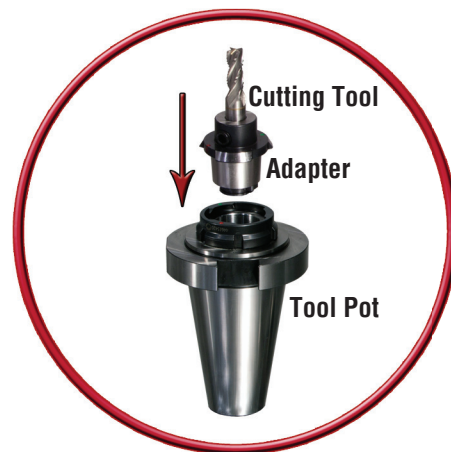
*Speeds Up Tool Change & Replacement Times • Eliminate Tool Offset Input Errors  
Minimize Spindle Down Time • Increase Productivity*



- 1** To speed up tool changes & replacement times, **SmartChange Adapters** are pre-staged.



- 2** Tools then are loaded into the **SmartChange Tool Pot** for measuring on the **elbo controllii LARTH Tool Presetter**.



- 3** **SmartChange Holding Fixture** is used to clamp / unclamp **Adapters** in **Tool Pot**.



- 4** **Tool Pot** is inserted on the **elbo controllii LARTH Tool Presetter** for measurement.





20 Thompson Rd | East Windsor | CT 06088  
1.800.249.5662 | 860.623.4132 Fax  
[www.komaprecision.com](http://www.komaprecision.com) | [info@komaprecision.com](mailto:info@komaprecision.com)

ROTARY TABLES | ANGLE HEADS | LIVE TOOLS | SWISS TOOLS | TOOL PRESETTERS