

# MILLING CNC LINEAR MCL SERIES

## Specifications

The machine is used for precision applications where extreme high accuracy and positioning is required. The measuring systems with a resolution of 1 nm and accuracy of 5 microns/m. The machine has linear motor and linear drives on all axes. The machine is equipped with: Table T-Slot, High speed spindle with 14kW power and 24000rpm HSK63, Automatic rotary tool changer that guarantees efficient processing, Tool length sensor.

The innovation of this machine involves the replacement of drives based on ball screws for linear drives. Linear actuators move the drive force without friction, only with the magnetic field, so that there is no backlash effect regardless of the age of the machine. The drive system, there are no expendable items, which can worsen the quality of the cut during the operation.

The machine can be equipped with a touch scanner fulfilling several functions. The first is the use of scanning 3D objects as well as to scan the outlines of flat element. Second, we can use it to assist in homing. This will exactly set the base in the corner, the middle hole or cylinder, determine the slope of the plane. The third option is to scan the surface of the treatment and to take into account the curvature of the material in carrying out the project. Rotary axis with tailstock with full simultaneous interpolation of all axes.

## Applications

- Steel
- Aluminum
- Graphite
- Copper
- Brass
- Composites
- Plastic



## TECHNICAL SPECIFICATIONS

<b>TABLE</b>	<b>UNITS</b>	<b>MCL</b>
<b>Work table size</b>	<b>Length (mm)</b>	<b>500, 625, 750, 1000, 1250, 1500, 2000 and larger</b>
	<b>Width (mm)</b>	<b>700, 1000, 1300, 1500 and larger</b>
	<b>Z axis range (mm)</b>	<b>200, 250, 300, 350, 400, 500, 600 and larger</b>
<b>Spindle</b>	<b>24 000 rpm/min</b>	<b>5kW</b>
	<b>40 000 rpm/min</b>	<b>340 13</b>
	<b>50 000 rpm/min</b>	<b>3kW</b>
	<b>Cooling</b>	<b>Air Water + Chiller</b>
<b>Driving system</b>	<b>Linear Drives</b>	<b>-</b>
<b>Table type</b>	<b>T-Slot , Vacuum, Hybrid</b>	<b>-</b>
<b>Automatic tool changer (ATC)</b>	<b>With ATC, Without ATC, Rotary</b>	<b>-</b>
<b>Automatic tool length sensor</b>	<b>-</b>	<b>-</b>
<b>Additional Options</b>	<b>Automatic</b>	<b>-</b>
<b>Sensor</b>	<b>Touch Probe,, Laser</b>	<b>-</b>
<b>Rotary axis</b>	<b>“B” table stock</b>	<b>-</b>
<b>Laser Barriers</b>	<b>-</b>	<b>-</b>
<b>Dust suction system for graphite</b>	<b>-</b>	<b>-</b>