



executive series model 16



Introduction

A real SMART hybrid milling solution

This series represents our most advanced design development working with the UCCNC controller on a small format CNC router platform. It caters to users with high production requirements in a small format offering high speed, torque and precision capabilities that can only be found high end machines but for fraction of the cost.

Technical specifications

X, Y and Z travel and feeds

X 1220 mm
Y 1220 mm
Z 180 mm
Rapid feedrate: 10.000 mm/min

Machine base

All steel frame - 10mm steel laser cut plates 80 x 40 steel box section with 5mm wall thickness. Precision machined on aerospace machining center before rail and ballscrew end condition assembly.

Full ballscrew system T7 Grade and linear and precision linear rails

Two Ballscrews on Y Axis
One Ballscrew on X and Z
20mm size profiled linear HIWIN rails with 4 carriages per axis for maximum strength and rigidity

Industrial grade control box

Conductive and high precision plunger Z probe sensor compatible
4th axis ready connection on the controller for motion and sensor of a 4th axis module
Air solenoid connection for air control with M-codes to allow automatic control of air cooling.

Laser engraving / cutting connection for connection to laser head (like OPT Lasers)

All machines come fully configure – you get the profiles and all settings so simply turn on and use the machine

High rigidity metal fabricated base with casters and shipping wooden crate INCLUDED



Steppers (ST) vs Servo (SE)

Steppers specifications

The **ST** version is equipped with:
Single Nema 34 High Torque Stepper motors on X.
Double Nema 34 High Torque Stepper motors on Y.
Single Nema 23 High Torque Stepper motors on Z.

Servo specifications

The **SE** version is equipped with:
X - Single Delta 400W closed loop AC servo
Y - Double Delta 400W servo with 17-bit rotary optical encoder on Y.
Z - Single Delta 400W closed loop AC



2.2KW ceramic bearings Spindle (made in Italy) Kit

MTC-E (M)

24.000 RPM max speed
Double angular contact bearings
Extremely low noise
Overheating thermal protection (PTC)
ER25 Collet system
Single phase DELTA 2.2kw VFD

QTC (Q)

Quick Tool Change HSK32 system
24.000 RPM max speed
Double angular contact bearings
Shaft driven cooling
IP 54 compliant
Single phase DELTA 2.2kw VFD
Pre-set torque wrench INCLUDED
3 X HSK32 ER20 toolholders
HSK32 Mounting device INCLUDED
INCLUDED
HSK32 taper cleaner INCLUDED
Inductive plunge sensor INCLUDED
ER20 collet set INCLUDED



T-Slot (MI) bed vs Dual pumps Vacuum table

T-Slot (MI)

High rigidity aluminium extrusion bed with T-slots

High flow vacuum system (VA)

Dual 2.2KW high flow rate vacuum pump setup
4 zones High density PE indexed plates
Pressure valves, fittings and 4 zones on/off valves
High rigidity aluminium extrusion bed with T-slots