High dynamics for complex parts

DYNAMILL

Gantry milling center for 5-axis machinings of superalloys, steel, aluminium and composite materials
**Dynamics and power**

Machining centre with a gantry structure and moving cross beam. Designed and developed by Mecof to satisfy new and demanding manufacturing requirements for the high-speed machining of complex and large workpieces.

**Ecological**

With significantly improved and more efficient energy management compared to traditional Mecof machines, the Dynamill requires up to 20% less electricity and up to 50% fewer consumables.
Rigidity and dynamics are distinctive features of the Dynamill: the ideal solution for high-speed machining for medium and large workpieces.

- Machining of a plastic injection mould for automotive industry
- 5-axis machining of a car model section for styling center
- High speed machining of injection mould for bumpers in automotive industry
- High speed machining of an aluminium car model
Efficient and innovative

Dynamill completes the advanced range of milling centres with solutions for industrial applications, from moulds and dies, design and styling to sophisticated machining for the aerospace industry.

5-axis machining of a titan landing gear for aerospace industry
[Available milling heads]

Universal milling head with automatic millesimal positioning

![Chart showing performance characteristics of different milling heads.](image)

Full 5-axis fork type milling head with high speed spindle

![Chart showing performance characteristics of different milling heads.](image)

Universal milling head with high speed spindle

![Chart showing performance characteristics of different milling heads.](image)
[Technical data]

DYNAMILL

**Linear axes**
- Longitudinal axis travel: 4550 mm (180") and more (in steps of 2500 mm – 98")
- Cross axis travel: 3000 – 4000 mm (118 – 158")
- Vertical axis travel: 1500 – 2000 – 2500 mm (59 – 79 – 98")
- Feedrate: 40 m/min (1575 ipm)

**RAM**
- Overall dimensions: 500 x 580 mm (19.6 x 22.8")

**Numerical control**
- Heidenhain iTNC 530 HSCI
- Siemens 840D sl

**Tool/workpiece cooling system**
- Low pressure: 28 l/min; 6 bar
- High pressure (through the spindle): 20 l/min; 20 bar

**Options**
- Universal milling head with automatic millesimal positioning: 6000 rpm
- Milling head with extended spindle: 4000 rpm
- Full 5-axis universal milling head: 6000 rpm
- Milling head with offset spindle: 3000 rpm
- Universal milling head with high speed spindle: 24000 rpm
- Full 5-axis fork type milling head with high speed spindle: 12000 / 24000 / 26000 rpm
- Automatic tool magazine: 24 / 40 / 64 / 96 pockets
- Automatic head magazine: 2 / 3 pockets

**Spindle**
- Power S1 / S6: 60 / 75 kW (80 – 100 HP)
- Torque S1 / S6: 600 / 750 Nm (443 – 553 lbf-ft)
- Rotation speed: 15 – 6000 rpm
- Tool taper standard: ISO 50 DIN 69871
- Option: HSK 100-A DIN 69893

### High speed spindle 25 / 32 kW
- Power S1 / S6: 25 / 32 kW (33.5 – 43 HP)
- Torque S1 / S6: 120 / 153 Nm (88.5 – 113 lbf-ft)
- Rotation speed: 12000 rpm
- Tool taper: HSK 100-A

### High speed spindle 42 / 55 kW
- Power S1 / S6: 42 / 55 kW (56 – 74 HP)
- Torque S1 / S6: 67 / 87.5 Nm (50 – 65 lbf-ft)
- Rotation speed: 24000 rpm
- Tool taper: HSK 63-A

### High speed spindle 41 / 52 kW
- Power S1 / S6: 41 / 52 kW (55 – 70 HP)
- Torque S1 / S6: 35.8 / 46 Nm (26 – 34 lbf-ft)
- Rotation speed: 26000 rpm
- Tool taper: HSK 63-A

---

**Vertical milling machines**

[Images of linearmill, megamill, and powermill]