

Milling Machine MIC3



Coming from a family of high tech micro-mechanic machines, the MIC3 milling machine was specifically designed for precision dry machining with small tools. Despite its small size, it is equipped with the latest technologies for precision machine tools.

The MIC3 is a 3,5 axes milling machine with vertical spindle, tool changer and piece holder flipper. The tool length is automatically measured. The tool wear is managed by the software.

Axes:

The three linear axes are driven by brushless motors and digital drivers. They are fully simultaneously interpolatable. They are fitted with linear glides with ball recirculation and ballscrews. The modular piece holder can be flipped pneumatically (0/180°). It is ready for two blanks.

Ways: X: 300 mm Z: 100 mm
Y: 210 mm

Feeds:
Machining : 0-10 m/mn Resolution : 0.01 mm
Rapid : 10 m/mn

Spindle:

High frequency spindle (Jäger Elektromaschinenbau GmbH - Germany)

Speed : 50'000 min⁻¹ Max. Tools : 3mm shaft
Power : 460W-100% / 630W-60% Tool release : Pneumatic
Driver : Static Frequency Inverter Cooling : by air

Automatic tool changer:

The fully automatic tool changer is mounted onto the XY table. Pneumatic opening of the protection cover. Totally enclosed and protected. Automatic tool length measuring sensor. Tool wear management by the software.

Number of positions : 6 Tool size : 3mm shaft with stop ring

Control:

Fully integrated Industrial PC (Fast/Cybelec)

Operating system : Windows XP Pro. Interfaces : USB on the front panel
Screen : TFT 15" Touchscreen LAN : Ethernet
Memory : 4Gb Compact-flash UPS with Battery

General:

Dimensions:

Width : 0,73m Height : 1,5m
Depth : 0,67m Weight : 160kg

Connections:

Electrical : 1 x 230V 50Hz, 3kVA

Pneumatic : 0,6MPa (6Bars)

Divers:

Work zone is lighted and protected. Automatic pneumatic flipping of the blank holder (0/180°).
Modular holder ready for two blanks. CE conform.

Included software:

- Interactive and simplified Man-Machine interface, enabling non specialists to work effectively without special knowledge.

Options:

- WorkNC® Dental: Project management, machine definition, choice of blanks, multiple import, job positioning in the blank, positioning optimization, dynamic orientation, automatic definition of holding lugs, automatic computation of 5 axes (3+2) machining tool paths for pre-sintered zircon and calcinable resin
- Industrial dust vacuum cleaner: 1,1kW, filter surface 0.7m², tank 25l with coupling and antistatic pipe.

Note: Characteristics, appearance and values can be modified anytime without prior information.