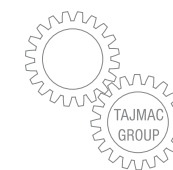




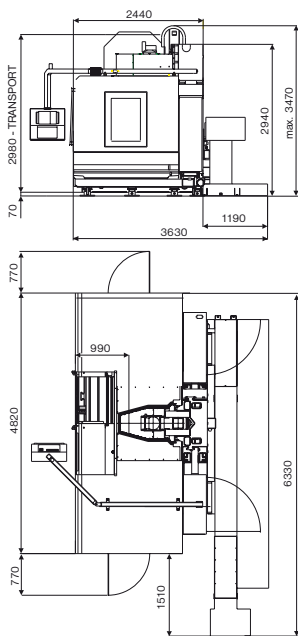
- High performance
- High strength and rigidity
- High dynamic and thermal stability
- Long-lasting high accuracy
- High reliability
- Guards making manipulation with workpieces easy
- Model flexibility
- Ecologically friendly

MCFV 2080

SPECIFICATIONS



The **MCFV 2080** vertical machining centre is a highly productive machine for the complex chip machining. The work table, whose upper surface serves for the workpiece clamping, moves in the longitudinal direction (X-axis) along the guideways on the cross saddle. The cross saddle moves along the guideways on the base in the cross direction (Y-axis). The spindle head moves in the vertical direction (Z-axis) along the guideways on the column. All movements of the machine are realized by means of the linear guideways with rolling elements. Their dimensions and locations allow high load of the table, saddle and spindle head while the high accuracy of dimensions and quality of workpieces are kept even at the interrupted cut. This constructional solution also ensures the machine long service life. The measurements of positions in the X, Y and Z axes are performed directly by the linear absolute measuring units. The machine is equipped with the electronic compensation of thermal dilatations. The machine functions are controlled by the CNC control system which also enables the machining of the spatially complicated shapes when the tool follows the path resulting from the 3D CAD program output.



Travels

X-axis (work table)	2 030 mm
Y-axis (cross saddle)	810 mm
Z-axis (spindle head)	810 mm
Distance of spindle nose to table	110 – 920 mm
Maximum working feed	30 m/min
Rapid traverse	30 m/min
Acceleration	3.5 m/sec ²

Table

Working area	2 200 × 780 mm
Number of T-slots × width × span	5 × 18 mm × 160 mm
Maximum load	3 000 kg

Accuracy (VDI/DGQ 3441)

Positioning accuracy (P)	0.009 mm
Repeatability (Ps max.)	0.005 mm
Measuring system	direct (linear absolute rulers)

Spindle

	ISO 40 (HSK-A 80)	ISO 50	ISO 50	ISO 40	ISO 50	ISO 40	HSK-A 63
Maximum speed	10 000 rpm	8 000 rpm	3 500 rpm	12 000 rpm	8 000 rpm	15 000 rpm	18 000 rpm
Continuous output S1 / overload S6 – 40 %	20/28 kW	17/25 kW	17/25 kW	17/25 kW	17/25 kW	25/31 kW	25/31 kW
Max. torque S1 / overload S6 – 40 %	244/342 Nm	519/764 Nm	893/1313 Nm	96/141 Nm	143/210 Nm	159/197 Nm	159/197 Nm
Transmission type	planetary gearbox*			belt drive		electrospindle*	

Tool magazine

Number of tool pots in magazine	24 pcs
Tool interchange time	4.5 sec
Tool maximum diameter:	
– fully occupied magazine	110 mm
– without adjacent tools	180 mm
Tool maximum length	300 mm
Tool maximum weight	15 kg
Total maximum weight	200 kg

Power supplies

Nominal voltage of mains	3 × 400 V/50 Hz
Operational power input – acc. to the motor	35 kVA
Compressed air	0.6 – 0.8 MPa

Complementary data

Floor layout of machine with chip conveyor	6 330 × 3 630 mm
Machine maximum working height	3 470 mm
Machine weight	14 600 kg

Control system

SIEMENS*, HEIDENHAIN, FANUC*

Descriptions of illustrations and specifications may not always correspond with the machine latest version.

Manufacturer
TAJMAC-ZPS, a. s.
 třída 3. května 1180
 763 02 Zlín, Malenovice
 CZECH REPUBLIC
 Tel.: +420 577 532 072
 Fax: +420 577 533 626
 www.tajmac-zps.cz
 e-mail: info@tajmac-zps.cz

Holding
TAJMAC-MTM, S. p. A.
 Via Gran Sasso 15
 20092 Cinisello Balsamo (MI)
 ITALY
 Tel.: + 39 02 66017878
 Fax: + 39 02 66011457
 www.tajmac-mtm.it
 e-mail: tajmac@tajmac-mtm.it

TIGRIS, s.r.o., Zlín 4/2018

STANDARD EQUIPMENT

- SIEMENS digital drives
- Linear optoelectric absolute measuring rulers
- Central lubrication system
- Tool magazine with tool change arm
- Tool holder automatic air blasting
- Coolant unit with tool cooling system
- Washing off of telescopic covers
- System of chip conveyors
- Electronic compensation

OPTIONAL EQUIPMENT*

- Spindle for BIG-PLUS tools
- SK 40 – tool magazine with capacity of 30 tools
- Tool interface CAT 50, BT 50, CAT 40, BT 40, ISO 40, HSK-A63, HSK-A80, HSK-A100
- Coolant unit with filtration unit for tool cooling through spindle axis
- High-speed spindle unit 50 000 rpm
- Tool cooling with coolant through spindle axis
- Tool cooling with air through spindle axis
- Tool cooling with oil mist
- Rotary table, 4th and 5th controlled axis
- Workpiece dimension checking probe
- Tool dimension checking probe
- Work zone washing-off
- Oil mist exhaustion from work zone
- Oil collector from coolant surface
- 2 tool magazines
- Remote diagnostics
- Vibrodiagnostics