

RAISSYSTEM

M800 / M800G M1000 / M1000G M2000 / M2000G

These vertical machining centers are designed to perform various machining operations on large-size work pieces in high cutting speed and feed conditions.



M800 / 1000 / 2000

- machines with belt driven or direct driven spindle

M800G / 1000G / 2000G

- machines with a gearbox between main motor and spindle

Optimum machine design: minimum temperature deformation; absence of vibrations in working process; high and stable geometry accuracy.



Directly coupled to the ball screws AC servo motors along all axes.

All ball screws - high precision, class P3, Ø50 mm OD, with a double nut, pre-loaded to control backlash. Screw pre-tensioned to compensate for temperature variations.

Two-step gear box. All gear wheels are hardened and precisely ground to size. Low noise and excellent smoothness during the process. High torque.

Reinforced spindle assembly, 4 - 6 slide way configuration on Y axis.

Fully enclosed electrical cabinet with heat exchanger, accordance to CE requirements.



Wide and hardened precise grinded prismatic slide ways on the three axes. Guaranteed stable work by heavy cutting conditions. Super high grade "Turcite-B" fitted to X, Y, Z slide ways.

24 ATC fast tool change magazine - 2.8 sec. Automated air blow during tool change.



TECHNICAL PARAMETERS	UNIT	M800 / M800G	M1000 / M1000G	M2000 / M2000G
CAPACITY				
X axis travel	mm	1600	2000	2000 / 2200
Y axis travel	mm	800	900	900 / 1000
Z axis travel	mm	800	800	800
Spindle nose to table	mm	200 - 1000	200 - 1000	200 - 1000 / 250 - 1050
Table size	mm	1800 x 840	2200 x 850	2200 x 850 / 2400 x 1000
T - slots: number x size x pitch	mm	5 x 22 x 150	5 x 22 x 150	5 x 22 x 150 / 7 x 22 x 150
Max workpiece weight	kg	2 200	2 500	2 500 / 3 000
Guideways		Flat	Flat	Flat
Floor to table	mm	900	900	910
SPINDLE				
Spindle speed range	rpm	6 000	6 000	6 000
Main motor power (100% ED / 30 min.)	kW	15 / 18.5	15 / 18.5	15 / 18.5
Main motor torque (100% ED / 30 min.)	Nm	71.6 / 117.8	71.6 / 117.8	71.6 / 117.8
Spindle taper		SK / ISO / BT50 (40)*	SK / ISO / BT50 (40)*	SK / ISO / BT50 (40)*
ATC				
Tool capacity		24 (40 / 60)*	24 (40 / 60)*	24 (40 / 60)*
Max tool diameter	mm	130	130	130
Max tool diameter (adjacent pockets empty)	mm	150	150	150
Max tool length	mm	300	300	300
Max tool weight	kg	6	6	6
FEED				
Rapid traverse X / Y / Z	m/min	20 / 20 / 15	20 / 20 / 15	20 / 20 / 15
Max cutting feedrate	m/min	10	10	10
Z axis motor: type / power (100% ED)	kW	Fanuc β i S 30/2000 / 3 kW	Fanuc β i S 30/2000 / 3 kW	Fanuc β i S 30/2000 / 3 kW
Z axis motor torque (100% ED)	Nm	27	27	27
X / Y axes motor: type / power (100% ED)	kW	Fanuc β i S 30/2000 / 3 kW	Fanuc β i S 30/2000 / 3 kW	Fanuc β i S 30/2000 / 3 kW
X / Y axes motor torque (100% ED)	Nm	27	27	27
SIZE				
Machine weight	kg	14 500 / 15 000	16 000 / 16 500	24 000 / 24 500
Machine dimensions (approx.): L x B x H	mm	4 400 x 3 300 x 3 300	5 500 x 3 435 x 3 310	6 130 x 4 200 x 3 660
CNC CONTROL				
		Fanuc 0i (Fanuc 32i / Siemens 828D / Siemens 840D / Heidenhain iTNC620)**		
ACCURACY OF THE MACHINE		DIN8605-8607	DIN8605-8607	DIN8605-8607

(*) option
(**) on customer request

OPTIONAL ACCESSORIES

- ✓ 4-th & 5-th axes, table diameter 320, 350 mm
- ✓ Tool setter
- ✓ Touch probe with infra-red connection
- ✓ Direct drive spindle 6000 rpm
- ✓ Tool magazine 32, 40 or 60 tools with arm
- ✓ Coolant trough spindle with pump 20 or 70 Bar