

RAISSYSTEM

M700 M700G

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



Optimum construction: minimum heat deformation; absence of vibrations in working process; high geometry accuracy of finished surfaces.

M700

- machine with belt driven or direct driven spindle

M700G

- machine with a gearbox between main motor and spindle

Reinforced spindle assembly with precise grinded parts. Increased size of bearings. High processing speeds under heavy operating conditions.

Telescopic guards along the three axes: long life of the ball screws and the linear guide ways; fast and efficient flushing of chips by means of coolant liquid.

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

Fully enclosed machine guarding design provides a safe, dry, clean working environment. Swivel panel of the CNC control. Highest convenience for easy setup and manipulating.

Wide and hardened precise grinded flat slide ways on all axes. Stable work by heavy cutting conditions. Super high grade "Turcite-B" fitted to X, Y, Z slide ways gives 40 % greater stability.

All ball screws - high precision, class P3, Ø40 mm OD, with a double nut, pre-loaded to control backlash. High precision of positioning and smooth operation.

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

Guaranteed precision and stability in the long transverse stroke of the four flat guideways surfaces on Y-axis.



TECHNICAL PARAMETERS

UNIT

M700

M700G

CAPACITY

X axis travel	mm	1300
Y axis travel	mm	700
Z axis travel	mm	710
Spindle nose to table	mm	130 - 840
Table size	mm	1500 x 650
T - slots: number x size x pitch	mm	5 x 18 x 100
Max workpiece weight	kg	1000
Guideways		Flat
Floor to table	mm	820

SPINDLE

Spindle speed range	rpm	8 000 (6 000 / 12 000 / 15 000)*
Main motor power (100% ED / 30 min.)	kW	11 / 15
Main motor torque (100% ED / 30 min.)	Nm	52.5 / 95.5
Spindle taper		SK40 / ISO40 / BT40 (50)*

ATC

Tool capacity		24 (30 / 40)**
Max tool diameter	mm	80 / 125*
Max tool diameter (adjacent pockets empty)	mm	150 / 200*
Max tool length	mm	300
Max tool weight	kg	6 / 15*

FEED

Rapid traverse X / Y / Z	m/min	20 / 20 / 20
Max cutting feedrate	m/min	10
Z axis motor: type / power (100% ED)	kW	Fanuc β i S 22/2000 / 2.5 kW
Z axis motor torque (100% ED)	Nm	20
X / Y axes motor: type / power (100% ED)	kW	Fanuc β i S 22/2000 / 2.5 kW
X / Y axes motor torque (100% ED)	Nm	20

SIZE

Machine weight	kg	9 200	9 600
Machine dimensions (approx.): L x B x H	mm	3200 x 2825 x 3080	

CNC CONTROL

Fanuc 0i
(Fanuc 32i / Siemens 828D / Siemens 840D / Heidenhain iTNC620)***

ACCURACY OF THE MACHINE

DIN8605-8607

(*) option with BT / ISO 50

(**) option

(***) on customer request

OPTIONAL ACCESSORIES

- ✓ 4-th & 5-th axes, table diameter 320 mm
- ✓ Tool setter
- ✓ Touch probe with infra-red connection
- ✓ ZF gear box
- ✓ Coolant trough spindle 20 or 70 Bar
- ✓ Tool magazine 30, 40 or 60 tools with arm
- ✓ Direct drive spindle 10 000 rpm
- ✓ Chip conveyor

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M700L / M700LG

TECHNICAL PARAMETERS	UNIT	M700L	M700LG
CAPACITY			
X axis travel	mm	1300	
Y axis travel	mm	700	
Z axis travel	mm	700	
Spindle nose to table	mm	130 - 830	
Table size	mm	1450 x 700	
T - slots: number x size x pitch	mm	5 x 18 x 125	
Max workpiece weight	kg	1000	
Guideways		Linear	
Floor to table	mm	820	
SPINDLE			
Spindle speed range	rpm	8 000 (6 000 / 12 000 / 15 000)*	
Main motor power (100% ED / 30 min.)	kW	11 / 15	
Main motor torque (100% ED / 30 min.)	Nm	52.5 / 95.5	
Spindle taper		SK40 / ISO40 / BT40 (50)*	
ATC			
Tool capacity		24 (30 / 40)**	
Max tool diameter	mm	80 / 125*	
Max tool diameter (adjacent pockets empty)	mm	150 / 200*	
Max tool length	mm	200 / 300*	
Max tool weight	kg	6 / 15*	
FEED			
Rapid traverse X / Y / Z	m/min	20 / 20 / 20	
Max cutting feedrate	m/min	10	
Z axis motor: type / power (100% ED)	kW	Fanuc <i>β</i> i S 22/2000 / 2.5 kW	
Z axis motor torque (100% ED)	Nm	20	
X / Y axes motor: type / power (100% ED)	kW	Fanuc <i>β</i> i S 22/2000 / 2.5 kW	
X / Y axes motor torque (100% ED)	Nm	20	
SIZE			
Machine weight	kg	7 000	7 400
Machine dimensions (approx.): L x B x H	mm	3650 x 2915 x 3027	
CNC CONTROL			
Fanuc 0i (Fanuc 32i / Siemens 828D / Siemens 840D / Heidenhain iTNC620)***			
ACCURACY OF THE MACHINE			
DIN8605-8607			

(*) option with BT / ISO 50

(**) option

(***) on customer request

M700 L - is a linear guideway variant of M700

M700 LG - linear guideway variant of M700 with a gearbox between main motor and spindle

M700LL - machine with linear guideways and long X-axis travel

M700LLG - variant of M700LL with a gearbox between main motor and spindle

RAISSYSTEM

M700LL / M700LLG

TECHNICAL PARAMETERS	UNIT	M700LL	M700LLG
CAPACITY			
X axis travel	mm	1600	
Y axis travel	mm	700	
Z axis travel	mm	700	
Spindle nose to table	mm	130 - 830	
Table size	mm	1750 x 700	
T - slots: number x size x pitch	mm	5 x 18 x 125	
Max workpiece weight	kg	2200	
Guideways		Linear	
Floor to table	mm	900	
SPINDLE			
Spindle speed range	rpm	8 000 (6 000 / 12 000 / 15 000)*	
Main motor power (100% ED / 30 min.)	kW	15 / 18.5	
Main motor torque (100% ED / 30 min.)	Nm	71.6 / 117.8	
Spindle taper		SK40 / ISO40 / BT40 (50)*	
ATC			
Tool capacity		24 (30 / 40)**	
Max tool diameter	mm	80 / 125*	
Max tool diameter (adjacent pockets empty)	mm	150 / 200*	
Max tool length	mm	200 / 300*	
Max tool weight	kg	6 / 15*	
FEED			
Rapid traverse X / Y / Z	m/min	20 / 20 / 15	
Max cutting feedrate	m/min	10	
Z axis motor: type / power (100% ED)	kW	Fanuc <i>β</i> i S 30/2000 / 3 kW	
Z axis motor torque (100% ED)	Nm	27	
X / Y axes motor: type / power (100% ED)	kW	Fanuc <i>β</i> i S 30/2000 / 3 kW	
X / Y axes motor torque (100% ED)	Nm	27	
SIZE			
Machine weight	kg	10 000	10 400
Machine dimensions (approx.): L x B x H	mm	4370 x 2915 x 3027	
CNC CONTROL			
Fanuc 0i (Fanuc 32i / Siemens 828D / Siemens 840D / Heidenhain iTNC620)***			
ACCURACY OF THE MACHINE			
DIN8605-8607			

(*) option with BT / ISO 50

(**) option

(***) on customer request

OPTIONAL ACCESSORIES FOR M700L / M700LG / M700LL / M700LLG

- ✓ 4-th & 5-th axes, table diameter 320 mm
- ✓ Tool setter
- ✓ Touch probe with infra-red connection
- ✓ ZF gear box
- ✓ Coolant trough spindle 20 or 70 Bar
- ✓ Tool magazine 30, 40 or 60 tools with arm
- ✓ Direct drive spindle 10 000 rpm
- ✓ Chip conveyor