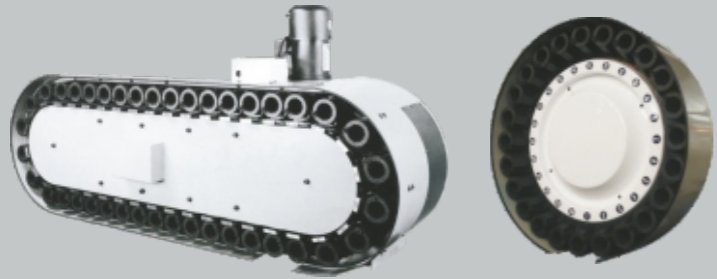
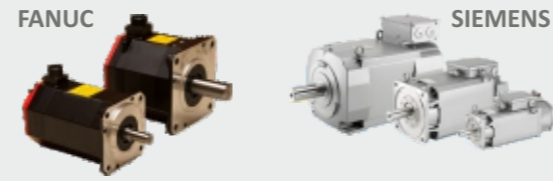


SELECTABLE TOOL MAGAZINE

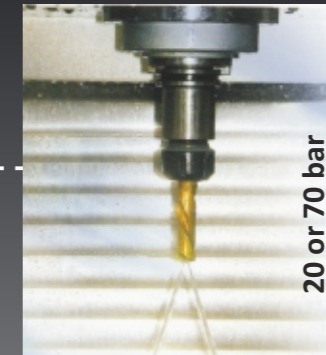


Machine	M400/M450	M500/M550	M650/M700	M800/1000/2000	GM350	VMC350
Magazine						
24 Arm - BT40	X	X	X	X		X
24 Arm - BT50			X	X		
32 Arm - BT40	X	X	X	X		X
32 Arm - BT50			X	X		
40 Chain - BT40		X	X	X		X
40 Chain - BT50			X	X		
60 Chain - BT40		X	X	X		X
60 Chain - BT50			X	X		
30 Pick up - BT40					X	

SPINDLE MOTORS



COOLANT THROUGH SPINDLE



CNC ROTARY TABLES

4-th axis

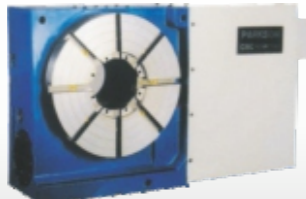


Table diameter:
125; 170; 200; 250; 320 mm

4-th & 5-th axes

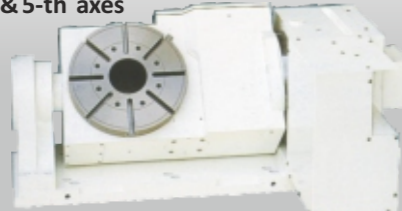


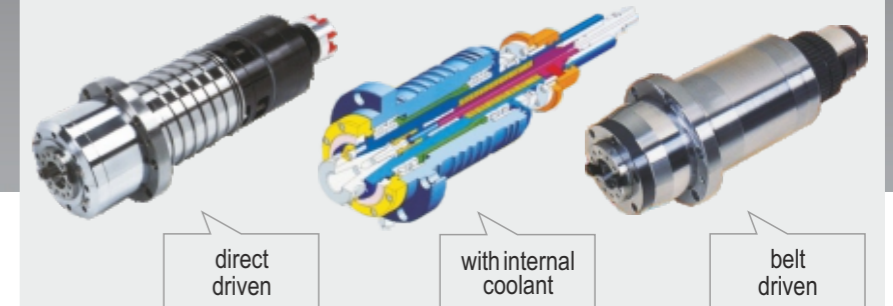
Table diameter:
170; 200; 250; 320 mm

AUTOMATIC PALLETTE CHANGER

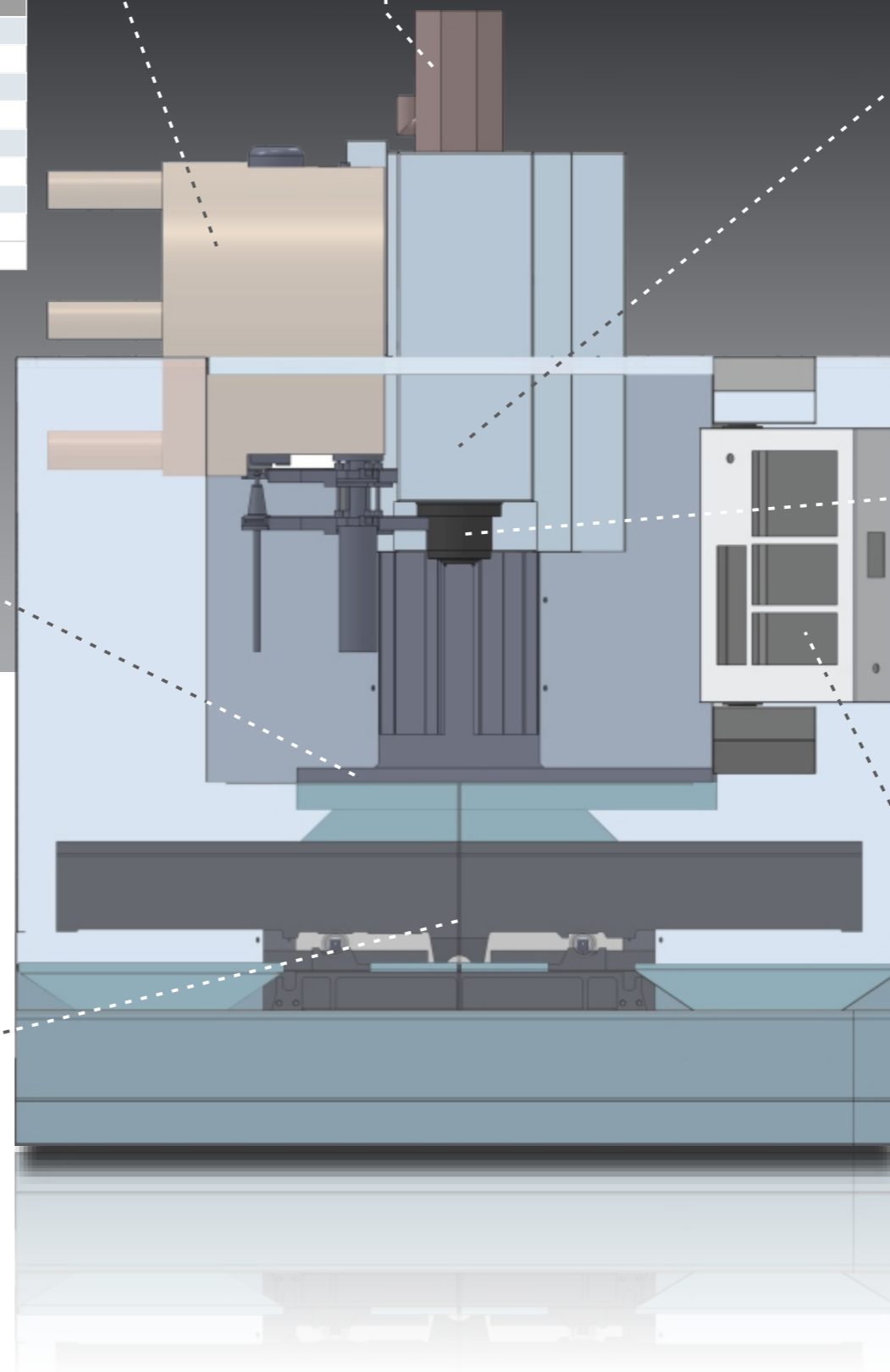


SELECTABLE SPINDLE

Toolholder ISO / SK / BT. Precise bearings. Minimum taper play. Increased tightening force.



SELECTABLE CNC CONTROL



RAIS SYSTEM M500

The vertical machining centers M500 and M550 RAIS are designed to perform various machining operations on medium-size workpieces in high cutting speed and feed conditions.



Cartridge type spindle, without need of maintenance. High precision bearings (P4 class). The increased axial tightening force eliminates vibrations at heavy cutting conditions.

Linear guide ways along the three axes - size 35, zero clearance. Stable cutting under full load conditions. Minimum friction when in motion. High precision and high speed with no need for adjustment during operational life.

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: guaranteed excellent interpolation accuracy.

Telescopic guards along the three axes: long life of the ball screws and the linear guideways; 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 ensures cleaning of the spindle cone and holder.

High-quality housing castings of grey cast iron. Optimum ribbed base, column, spindle casing and table. Ensured for maximum rigidity and minimum bending under applied load conditions..

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

Ability to implement with Automatic Palette Changer.

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

RAIS SYSTEM M550



TECHNICAL PARAMETERS	UNIT	M500	M550
CAPACITY			
X axis travel	mm	850	1200
Y axis travel	mm	500	600
Z axis travel	mm	510	610
Spindle nose to table	mm	125 - 635	150 - 760
Table size	mm	1000 x 500	1300 x 600
T - slots: number / size / pitch	mm	5 / 18 / 93	5 / 18 / 93
Max workpiece weight	kg	800	1000
Guideways		Linear	Linear
Floor to table	mm	870	870
SPINDLE			
Spindle speed range	rpm	8 000 / 12 000* / 15 000**	8000 / 10 000* / 15 000**
Main motor power (100% ED / 30 min.)	kW	11 / 15	11 / 15
Main motor torque (100% ED / 30 min.)	Nm	52.5 / 95.5	52.5 / 95.5
Spindle taper		SK40 / ISO40 / BT40	SK40 / ISO40 / BT40
ATC			
Tool capacity		24 (32 / 40 / 60)***	24 (32 / 40 / 60)***
Max tool diameter	mm	90	90
Max tool diameter (adjacent pockets empty)	mm	110	110
Max tool length	mm	300	300
Max tool weight	kg	6	6
FEED			
Rapid traverse X / Y / Z	m/min	30 / 30 / 30	30 / 30 / 30
Max cutting feedrate	m/min	10	10
Z axis motor power (100% ED)	kW	2.5	2.5
Z axis motor torque (100% ED)	Nm	20	20
X / Y axes motor power (100% ED)	kW	1.4	1.4
X / Y axes motor torque (100% ED)	Nm	11	11
SIZE			
Machine weight	kg	5000	6500
Machine dimensions (approx.): L x B x H	mm	2900 x 2420 x 2850	3450 x 2805 x 2950
CNC CONTROL			
		Fanuc 0i (Fanuc 32i / Siemens 828D / Siemens 840D / Heidenhain iTNC620)****	
ACCURACY OF THE MACHINE		DIN8605-8607	DIN8605-8607

(*) with direct drive
 (**) with motor spindle
 (***) option
 (****) on customer request

OPTIONAL ACCESSORIES

- 4-th axis, table diameter 250 / 320 mm
- 4-th & 5-th axes, table diameter 200 / 250 / 320 mm
- Direct drive spindle 15 000 rpm
- Tool magazine 32, 40 or 60 tools with arm
- Tool setter
- Touch probe with infra-red connection
- Coolant trough spindle with pump 20 Bar
- Chip conveyor