

ST4 CNC & ST5 CNC

SLOTING MACHINES WITH CONTROLLED MOVEMENT OF 4 AND 5 AXES

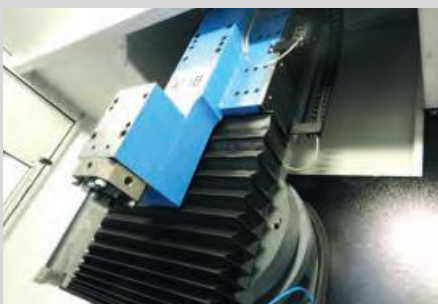


INNOVATIVE AND TECHNOLOGICAL

New design, cutting-edge technology. The newest Cabe model promises the implementation of ground-breaking articulated machining. With great simplicity in its design, also supported by a constant cutting speed, it allows the execution of complex figures, which until now has not been possible using traditional models.

Monolithic structure made of cast iron to ensure precision cutting with vibration absorption during machining.

BENEFITS



TOOL HOLDER BLOCK

The innovative tool holder with high repeatability guarantees that the tools are always at the centre of the hole. Combined with the tool holder, the "VCT" system, virtual tool change, allows two processes with different tools without having to stop the machine to make the change. Both are Cabe patents.



CONTROLLED CUTTING AXIS

Four axes controlled by brushless motors ensure:

- quick set-up of the machine;
- constant cutting rate thanks to the elimination of the traditional rod-crank system for the movement of the head;
- processes so far impossible to realize.

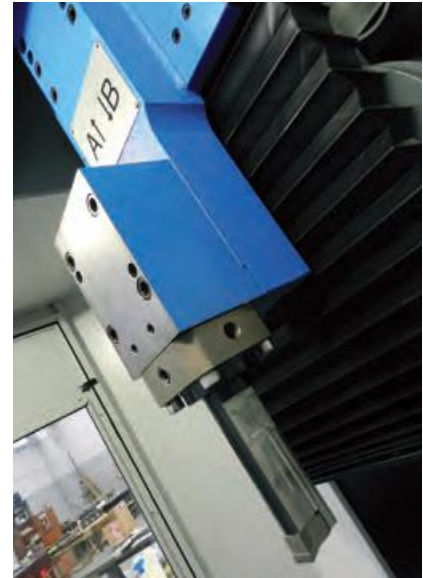
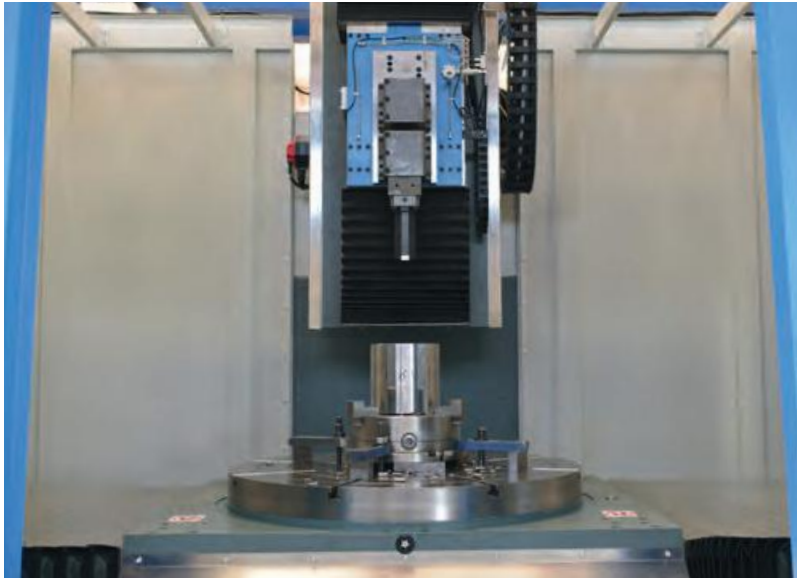
Thanks to the interpolation of the axes, it is not necessary to incline the head to realize conical slots.



INNOVATIVE PROCESSES

A break-through technology to achieve superior performances and new and unique processing:

- Conical slots obtained with the interpolation of 2 axes (Z and X or Y).
- Helical slots obtained with the interpolation of 2 axes (Z and C).
- Blind slots without the discharge hole: a specific software program allows processes impossible with other slotting machines, with discharge inclinations of up to 45°.



CHARACTERISTICS

- FANUC control, Oi-MF touch screen 10.4" model.
- Controlled swivel pieceholder table (C axis).
- Automatic disconnection of the tool during ascent phase.
- Net oil cooling system.
- The controlled axes:
 - are driven by brushless FANUC motors;
 - are managed directly by the controller and the movement in manual mode is guaranteed by a remote handwheel.
- Direct reading of the position on all linear axes.
- The linear axes slide on recirculating roller guides to ensure dynamicity and precision of the movements, preloaded with centralized forced lubrication.
- The command screws for X and Y axes are ball recirculation type, rectified and preloaded.
- The Z axis command screw is:
 - models 310/410: ball recirculation type;
 - model 610: planetary roller type, due to the high loading torque.
- The 5th axis, Z¹, in the model 610 allows the regulation of the ram thanks to the brushless motor. This system helps to reduce or increase the distance between the underhead and the swivel table according to the slot to be realized.
- Practical and removable chip collection tank, located below the table.

- Safety around the illuminated work area is guaranteed by practical guards (2 doors) that at the same time facilitate the positioning of the pieces and prevent accidents.
- Service keys and user manual supplied.

OPTIONALS

- "V" universal tool holder block.
- Tower signalling machine status.
- "Fine" adjustment of the tilting head with handwheel.
- Pneumatic air blow kit for cleaning blind holes.
- Automatic chip conveyor: if present, the maximum workpiece length for machining is reduced.





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BREAKTHROUGH RESULTS

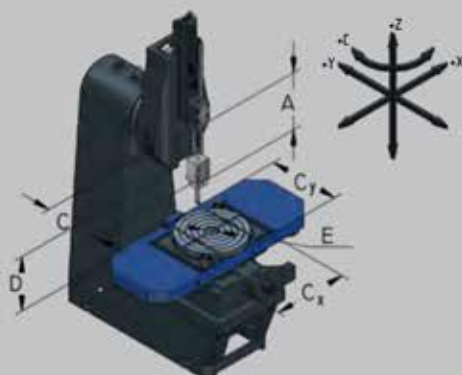
With the slotting ST4 and ST5 it is possible to perform machining processes previously impossible to achieve.

The traditional rod-crank system for moving the tool has been replaced by a servo-controlled linear axis which guarantees a constant cutting speed, optimizing tool life. The software includes functionalities to realize decreasing progress, and chamfering of the corners, tangential slots. A breakthrough technology to achieve superior performances and new and unique processing:

- Blind slots without discharge hole
- Helical slots
- Conical slots
- Squares
- Hexagons
- Single and double trapezoidal slots
- Maag cutting method

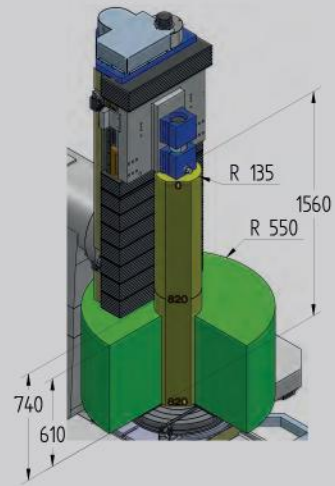
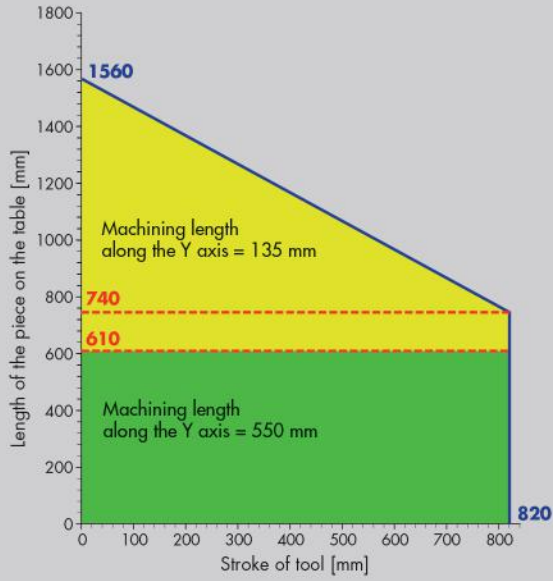
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CHARACTERISTICS	DIMENSIONS	ST4-410	ST5-610
Settable stroke of tool [mm]	A	0-575 according to Ø piece	0-820 according to Ø piece
Distance between tool holder and column [mm]	C	470	700
Distance underhead / Swivel table [mm]	D	420	200-620 adjustable with 5° motor
Diameter of swivel table [mm]		Ø500	Ø600
Centre table hole diameter [mm]	E	Ø100	Ø200
Strokes of the table [mm]	C _x x C _y	410x320	600x600
Motor / brake power [kW]		6,5	25
Adjustable work speed [mm/min.]		0-15.000	0-15.000
Maximum workpiece length for machining [mm]		Ø95x1200	Ø190x1500
Electrical power		400V-50Hz-3phase	400V-50Hz-3phase
Approx.net weight [Kg]		2400	12000
Machine dimensions LxWxH [mm]		2000x2050x2620	4331x3326x3729



MACHINING CAPACITY

ST5-610



ST4-410

