

FA 270/320/350



MAIN FEATURES

BEARING STRUCTURES

All structures are made of high-resisting perlitic cast-iron and are thermically stabilized so to be very suitable for induction hardening of the guideways in order to obtain a hardness of approx. 500 Brinell. The geometrical features of the guideways and the correct proportions of the machine-bed create a unit of considerable non-deformability which is necessary to resist the heavy stress coming from the turning process.

HEADSTOCK

The spindle line is largely dimensioned so to have a bar passage which is larger than the usual one and to support chucks with automatic clamping of high performance.

The transmission of power is obtained by a stepless variable speed drive at constant power of brushless motor type using high-quality Vee-belts.

In order to increase the torque-rate at low speed a three-stage gearbox is provided with manual shifting of gears on splined shafts. These shafts are made of NiCrMo case-steel of high resistance and are hardened and ground. A direct transmission of the transducer is provided so to control the electric axis between the spindle and the lead-screw.

The spindle with Cam-lock N° 11 runs on high-precision angle ball bearings made purposely for spindles. The spindle is provided either with manual or pneumatic or hydraulic chuck. The lubrication uses a continuous and forced system inside of the headstock.



WORK AXES

The work axes (Z-X) are driven by brushless AC motors which are connected directly to the preloaded ballscrews conforming to the DIN 5 precision class. The structure of the slides is well proportioned in order to allow heavy working without loosing the initial accuracy control.

Read-out of positions is carried out by two rotary transducers, which are directly connected to the respective ball-screws. A lubrication system delivers the oil and controls pressure, delivery-rate and lubrication intervals.

TOOL-HOLDERS

One or two turrets with either manual or electro-mechanical tool-holders can be mounted on the slide of the X axis. These can be either of the 4-position type with vertical rotation or of the 8-position disk type with horizontal rotary axis.

TAILSTOCK

The tailstock is largely dimensioned in order to support heavy duty jobs and can be positioned and locked by hand. A hydraulic drive for the tailstock quill can be provided.

CONTROL PANEL

This panel is located on the sliding door and comprises all controls for manual, semi-automatic, self-learning cycle or automatic operation from program.

The electronic display for all functions to be entered in the different operation modes is located at the upper side. The machine is prepared also for other types of Numerical controls which should be similar to the present control on the machine..





CARATTERISTICHE TECNICHE

		FA270	FA320	FA350
Height of centres	mm	270	320	350
Max. swing in gap	mm	730	830	890
Max. swing over bed	mm	540	640	700
Max. swing over carriage	mm	308	408	468
Max distance between centres	mm	1500 2000 3000 4000	1500 2000 3000 4000	1500 2000 3000 4000
Controlled Z-axis travel	mm	1300 1800 2800 3800	1300 1800 2800 3800	1300 1800 2800 3800
Controlled X-axis travel	mm	360	400	440
Spindle bore	mm	105-154	105-154	105-154
CAMLOCK nose	n	8-11	8-11	8-11
Speed-ranges	n	2	2	2
Max speed in range 1	Ø 105 Ø 154	107/470 96/400	107/470 96/400	107/470 96/400
Max speed in range 2	Ø 105 Ø 154	450/2000 409/1600	450/2000 409/1600	450/2000 409/1600
Rapid travel on Z and X axis	mm/1'	8	8	8
Width of bed	mm	400	400	400
Tailstock quill diameter	mm	100	100	100
Tailstock quill stroke	mm	250	250	250
Morse taper	mm	5	5	5
Spindle power-rate	Kw	15	18,5	18,5
Totally installed power-rate	Kw	18	20	20
Length	mm	3600 4100 5100 6100	3600 4100 5100 6100	3600 4100 5100 6100
Width	mm	1900	1900	1900
Height	mm	1850	1850	1850
Approx.net weight for centre distance 1500	Kg	3500	3600	3700
Approx.net weight for centre distance 2000	Kg	3700	3800	3900
Approx.net weight for centre distance 3000	Kg	4000	4100	4200
Approx.net weight for centre distance 4000	Kg	4500	4600	4700

Technical specifications are subject to change without notice.