



TISENG GROUP

Vertical Milling Machines

The **Vertical milling machines** from our List designed for various milling, drilling and boring operations. These types of milling machines can be used for machining of small and heavy work pieces, for single, small and big series productions. The design of the machines provides possibilities for high precision machining with high productivity in operations with work pieces with dimensions up to 1600 mm, and weight up to 1000 kg. By customer's request the machines can be equipped with a big variety of accessories and cutting tools. Choosing the smallest or the heaviest milling machine you always choose quality, which we guarantee.





Technical characteristics		FV 251M	FV 301	FV 321M	FV 361	FV 401
Table size	mm	250x1120	300x1250	320x1350	360x1500	400x1600
"T" slots – number x size	mm	3x14	5x14	5x18	5x18	5x18
Table swivel – left and right	(°)	45	45	45	45	45
Longitudinal table travel						
- manual	mm	820	950	1000 (1250)	1150 (1250)	1250
- automatic	mm	800	930	980 (1230)	1130 (1230)	1230
Cross table travel						
- manual	mm	280	320	360	360	360
- automatic	mm	260	300	340	340	340
Vertical table travel						
- manual	mm	410	410	460	460	460
- automatic	mm	390	390	440	440	440
Spindle nose taper	ISO	40	40	50	50	50
Number of spindle speeds		18	18	18	18	18
Spindle speed range	rpm	40-2000 (50-2500)*	40-2000 (50-2500)*	32-1600 (40-2000)*	32-1600 (40-2000)*	32-1600 (40-2000)*
Number of table feeds		18	18	18	18	18
Table feed rate						
- x,y	mm/min	12.5-630 (16-800)* (20-1000)**	12.5-630 (16-800)* (20-1000)**	12.5-630 (16-800)* (20-1000)**	12.5-630 (16-800)* (20-1000)**	12.5-630 (16-800)* (20-1000)**
- z	mm/min	5-262 (7-334)* (8-415)**	5-262 (7-334)* (8-415)**	5-262 (7-334)* (8-415)**	5-262 (7-334)* (8-415)**	5-262 (7-334)* (8-415)**
Table rapide traverse	mm/min	2500/1040	2500/1040	2500/1040	2500/1040	2500/1040
Main motor power	kW	4	4	7.5	7.5	5.5
Feed motor power	kW	1.5	1.5	2.2	2.2	2.2
Machine weight	kg	2275	2325	3100	3150	3175

NOTE: All the milling machines could be manufactured with control of the movement of the axes by joystick, and frequency adjustment of the feeds