Microcut machining Center type VMC-Series



MICROCUT box way vertical machining centers are high-quality machines with maximum productivity and performance and wide applications for molding industry, automobile industry and general workshops.

The machine structure is designed with FMEA to ensure durability and consistency, featuring high level of rigidity and enabling an unsurpassed performance in heavyduty cutting. Structural components are made from Meehanite cast iron, heat-treated to relieve stress thereby assuring max. rigidity and accuracy.

Triangulate wide-stance base incorporates a durable ribbed box design for max. structural loading. All castings are reinforced with heavy ribs to resist flex and damp vibrations. Hardened and precision ground ways on the 3 main axes. Way bearing surface are plated with Turcite B for smooth and stable movement.

Various features and opportunities for the VMC machining centers:

Pneumatic counter weight - VMC-1100/1300/1600F - Mechanical counter weight - VM-1000/VMC-1600/2100 Column & saddle - Y-axis guideways - Double-anchored ballscrew - Direct-coupled axes motor - Spindle dynamic balancing - High capacity cartridge spindle - One-piece design headstock - Spindle oil cooler - Geared head for ISO50 taper - Spindle temperature tracing - Chip management - Auxiliary coolant filter

Controls:

Fanuc 0iMF control (31iMB on request), Fagor 8055 power control, Heidenhain iTNC530 HSCI control, Siemens Sinumerik 828D control

Standard equipment:

- CNC control
- Z-axis with upgraded motor & built-in brake
- High-speed precision spindle, 10000 rpm/ISO40 6000 rpm/ISO50 with spindle oil cooler
- Rigid tapping function
- Arm type ATC
- Box sliding way for axes
- Telescopic covers for X & Y axes
- Fully enclosed splash guard w. interlock device

- Enlarged coolant tank and chip pan
- Automatic lubrication system
- Work light
- Portable MPG
- Leveling pads & bolts for installation
- Tool box & kits
- · CE marking declaration conformity for EU
- · Lamp of cycle finish & alarm
- · Heat exchanger

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Best Quality

Optional equipment:

- Enlarged spindle motor
- · Coolant through spindle w. high pressure pump
- · Wash down device
- Chip conveyor & bucket
- Air conditioner
- EMC
- 4th axis rotary table

- 4th/5th axis rotary table
- Oil skimmer
- Spindle oil cooler for #40
- Tool setting probe
- · Workpiece measuring probe
- Special machine colour on request
- Safety module





VIVIC-1300 Harrie								
		VM-1000	VMC-1100	VMC-1300	VMC-1600F	VMC-1600	VMC-2100	VMC-3100
Table size	mm	1300 x 600	1300 x 660	1500 x 660	1800 x 800	1900 x 900	2400 x 900	3400 x 900
Table height	mm	880	880	880	880	1000	1000	1050
Max. table load	kg	800	1200	1200	2000	2000	2500	3000
Travel X-axis	mm	1000	1100	1300	1600	1600	2100	3100
Travel Y-axis	mm	600	710	710	800	900	900	900
Travel Z-axis	mm	600	710	710	710	850	850	850
Spindle taper		ISO40 40/50						
Spindle speed - standard	rpm	10000	10000 10000/6000					
Main motor (conti./30 min)	kW	11/15 (ISO40)			15/18,5 (ISO40)			
X/Y/X rapid feed	m/min.	24/24/24				20/20/18 10/10/1		10/10/10
X/Y/X feed rate	m/min.	10						
Guideway type		Box way						
Position accuracy	mm	0,01/300						
Repeatability	mm	±0,01						
Automatic tool changer type		Arm						
Pocket		24(std)/32(opt) ISO40: 24T(std)/32T(opt) ISO50:24T(opt) ISO40:40T/ISO50:32					32T	
Weight machine #40/#50	kg	5500	7880/8880	8100/9100	10000/11000	20000	22500	30000