



# CNC 5-axis vertical machining center

## V-Mill X CNC

39x31x27"



- Massive machine bed made of high quality cast iron for better vibration damping
- Rigid gantry frame construction consists of base, double racks and stable crossbeam to ensure high rigidity and cutting performance
- Powerful spindle: 16,000 rpm, 15/22.5 kW (20/30 Hp) (48/72 Nm) (35/53 ftlb), Spindle taper BT 40
- 40 station tool magazine
- High-strength, precision ground guides and high-quality ball screws ensure high-precision machining
- Large work table 1000x800 mm (39x31"), max. table load 1500 kg (3,300 lbs)

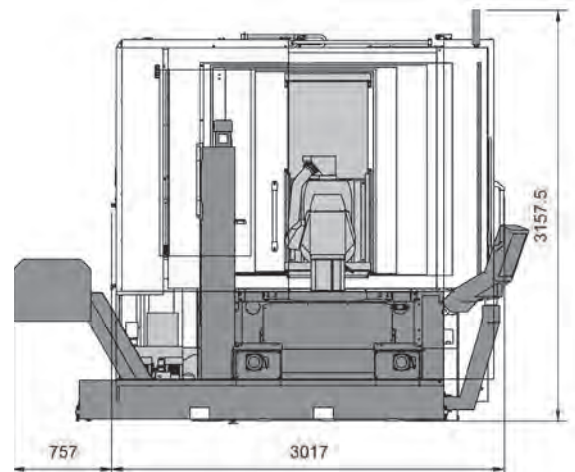
### Standard configuration

- Heidenhain iTNC 530 CNC control
- 40-position turret
- Chip conveyor
- Automatic lubrication
- Electrical handwheel (MPG)
- Spindle blow out function
- Spindle water cooling
- Automatic spindle lubrication
- Coolant system
- Safety couplings in X/Y/Z axes
- Leveling and mounting pads and bolts
- Work light
- Operation manual

### Optional configuration

- Tool measurement
- Faster spindle motor, 29.3/35 kW (40/45 Hp) 14,000 rpm
- Faster spindle motor, 25/35 kW (30/45 Hp) (90/95 Nm) 18,000 rpm, HSK-A63
- Coolant through spindle, 20 bar (290 psi)
- Coolant through spindle, 40 bar (580 psi)
- Work piece measurement, Heidenhain TS 640
- Work piece measurement, Heidenhain TT 140

Specifications		V-Mill 1000.5X CNC	
		39" x 31" x 27"	
CNC control		Heidenhain iTNC 530	
Axis travel	X	mm	1000 (39")
	Y	mm	800 (31")
	Z	mm	700 (27")
Table dimensions (W/L)		mm	1000x800 (39x31")
Floor-table height		mm	1000 (39")
Max. workpiece diameter		mm	Ø800 (31")
Max. table load		kg	1500 (3,300 lbs)
Min. increment of table rotation		deg	0.001° 360°
T-slots		mm	7x18x100 (7pc.x0.7x3.9")
Spindle-table distance	Horizontal pos.	mm	50-750 (1.95-29")
	Vertical pos.	mm	150-850 (5.85-33")
Speed		rpm	16,000
Spindle taper		BT 40	
Tool pull-stud		MAS BT 403 P40 T1	
Min. increment of milling head		deg	0.001° (360°)
Diameter of front spindle bearing		mm	Ø70 (2.75")
Cutting feed rate		m/min	10 (390"/min)
Rapid traverse – X/Y/Z axes		m/min	24 (940"/min)
Tool magazine		#	40 positions
Max. tool diameter		mm	Ø120 (4.5")
Max. tool length		mm	300 (11")
Max. tool weight		kg	7 (15 lbs)
Main spindle motor		kW	15/22.5 - 48/72 Nm (20/30 Hp - 35/53 ftlb)
Total power consumption		kW	40 (54 Hp)
Dimensions (L/W/H)		mm	3700x4500x3000 (144x175x117")
Weight		kg	15000 (33,000 lbs)

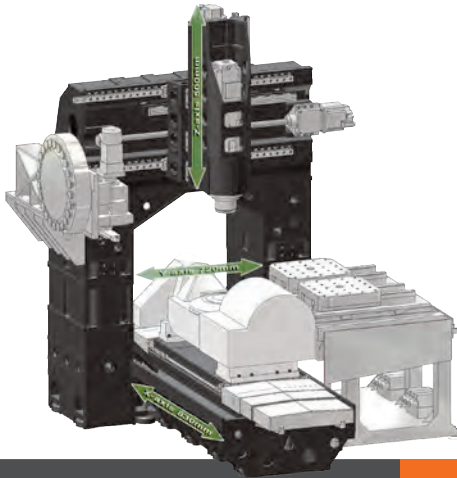




# CNC 5-axis vertical machining center

## V-Mill X CNC

32x28x19"



Specifications			V-Mill 600.5X CNC	
			32" x 28" x 19"	
CNC control			Heidenhain iTNC 530	
Axis travel	X	mm	830 (32")	
	Y	mm	720 (28")	
	Z	mm	500 (19")	
Table diameter		mm	Ø600 (23")	
Table bore diameter		mm	Ø50 (1.9") H7	
Floor-table height		mm	1160 (45")	
Min. increment		deg	0.001°	
Table inclination angle		deg	-110°/+30°	
Max. table load	0°	kg	400 (880 lbs)	
	90°	kg	300 (660 lbs)	
Spindle taper			BT 40	
Speed		rpm	15000	
Spindle-table distance		mm	15-515 (0.6-20")	
Cutting feed rate		m/min	20 (780"/min)	
Rapid traverse – X/Y/Z axes		m/min	48 (1,872"/min)	
Tool magazine		#	30	
Max. tool diameter		mm	Ø75 (2.9")	
Max. tool length		mm	300 (11.7")	
Max. tool weight		kg	7 (15 lbs)	
Coolant tank		l	280 (74 gal)	
Air pressure		kg/cm <sup>2</sup>	7	
Main spindle motor		kW	11/14.75 - 70/94 Nm (15/20 Hp - 50/70 ftlb)	
Power of axis drive motor	X	kW	8.6 (11.5 Hp)	
	Y	kW	5.6 (7.5 Hp)	
	Z	kW	5.1 (6.5 Hp)	
	A	kW	8.6 (11.5 Hp)	
	C	kW	3.1 (4 Hp)	
Tool magazine		kW	0.375 (0.5 Hp)	
Cam mechanism		kW	0.375 (0.5 Hp)	
Air condition		kW	0.96/1.17 (1.25/1.5 Hp)	
Spindle cooling		kW	3.5 (60 Hz) (5 Hp)	
Spindle lubrication		kW	0.15 (0.2 Hp)	
Conveyor motor		kW	1.5 (2 Hp)	
Power consumption		kW	55 (73 Hp)	
Dimensions (L/W/H)		mm	4410x3880x3270 (172x151x127")	
Weight		kg	13400 (29,480 lbs)	
Item No.			6530003	

- Massive gantry structure ensures high rigidity and cutting performance
- Cooled ballscrews paired with high-quality linear roller guides
- Generously sized worktable with a diameter of Ø600 mm (23"), max. Table load - 400 kg (880 lbs)
- Powerful, high-speed spindle with ceramic bearings for superior milling surface
- 30 tool magazine for flexibility



Universal-type turntable



Table rotary mechanism



Tool magazine



Coolant supply system



Spindle

### Standard configuration

- Heidenhain iTNC 530 CNC control with 2 additional functions
- 30-position turret
- Chip conveyor
- Glass linear scales for A/C-axes
- Automatic lubrication
- Spindle oil cooling
- Automatic lubrication of spindle bore
- Coolant system
- Air cooler for electric cabinet
- Internal cooling of all ballscrews
- Spindle oil cooling
- Work light
- Operation manual

### Optional configuration

- Work piece measurement, Renishaw OMP 60, mechanical
- Automatic pallet changer
- Faster spindle motor, 24000 rpm, HSK-63A (Nm 20/36) (15/27 ftlb)
- Coolant through spindle, 20/80 bar (280/150 psi)
- Siemens or Fanuc CNC control