### **VERTICAL MACHINING CENTERS**

## 40 TAPER | VM SERIES

The Milltronics VM Series vertical machining centers offer a great combination of features and performance at an attractive price. The VM Series machines are belt-driven and include standard features such as full enclosures, swing-arm tool changers, 10,000 RPM BIG-PLUS® dual contact spindles, the 9000 Series control, and more.



# ONLINE PRICING AT

#### **INCLUDED AT NO EXTRA COST**

#### **STANDARD FEATURES**

- ✓ Heavily ribbed one piece fine grain cast iron casting.
- Fully enclosed machine guard with side doors
- √ 30/35 mm linear way technology
- ✓ Precision ground ballscrews supported at both ends
- ✓ Precision ground table surface
- ▼ Telescopic metal way covers
- ✓ 20 pocket double arm ATC
- ✓ BIG-PLUS\* ISO No. 40
- ✓ Automatic positive displacement lubrication system
- ✓ High torque AC digital servo drives
- ✓ High torque closed loop vector spindle drive system
- ✓ Work light (right side)
- ✓ LCD hour meter
- ✓ Spindle taper blow-out and tool release button
- ✓ Spare "M" function with CNC "wait" channel
- ✓ Programmable on/off flood coolant system
- ✓ Rigid tap
- ✓ Edit kev lockout switch
- Spindle load meter
- Feedrate and spindle speed overrides
- ✓ Spindle air purge
- End of cycle light
- One year warranty
- 9000 Series Control

#### **OPTIONS**

- · Coolant through spindle system
- Part and tool probes
- 4th axis options
- 5th axis options
- Chip auger chip removal system
- · Lift up chip conveyor chip removal system
- Remote handwheel
- Auxiliary industrial grade keyboard
- Electronic spindle chiller
- Air gun
- · Coolant wash down gun
- Additional work light (left side)
- BT style tooling
- ChipBoss<sup>™</sup> Trochoidial Milling Software
- Milltronics Shop View
- Digital Setup Assistant

SPECIFICATIONS	VM2515	VM3018	VM4020	VM5020	VM5020EZ
TABLE					
TABLE WORKING SURFACE	30 x 16 in (762 x 406 mm)	34 x 18 in (864 x 457 mm)	46 x 20 in (1,168 x 508 mm)	52 x 20 in (1,321 x 508 mm)	52 x 20 in (1,321 x 508 mm)
TABLE T-SLOTS	.71 in (18 mm)	.71 in (18 mm)	.71 in (18 mm)	.71 in (18 mm)	.71 in (18 mm)
MAXIMUM WEIGHT ON TABLE	3,140 lbs (1,420 kg)	3,770 lbs (1,710 kg)	3,770 lbs (1,710 kg)	3,770 lbs (1,710 kg)	3,770 lbs (1,710 kg)
TRAVELS					
X-AXIS	25 in (635 mm)	30 in (762 mm)	40 in (1016 mm)	50 in (1270 mm)	50 in (1270 mm)
Y-AXIS	15 in (381 mm)	18 in (457 mm)	20 in (508 mm)	20 in (508 mm)	20 in (508 mm)
Z-AXIS	20 in (508 mm)	20 in (508 mm)	20 in (508 mm)	20 in (508 mm)	20 in (508 mm) WITH 150 MM RISER
SPINDLE MOTOR					
SPINDLE POWER (MAXIMUM)	15/10 HP (11/7.5 kW)	20/15 HP (15/11 kW)	20/15 HP (15/11 kW)	20/15 HP (15/11 kW)	20/15 HP (15/11 kW)
SPINDLE TORQUE (MAXIMUM)	54 ft-lbs (73 Nm)	75 ft-lbs (102 Nm)	75 ft-lbs (102 Nm)	75 ft-lbs (102 Nm)	75 ft-lbs (102 Nm)
SPINDLE					
SPINDLE TAPER	BIG-PLUS® ISO. No. 40	BIG-PLUS® ISO. No. 40	BIG-PLUS® ISO. No. 40	BIG-PLUS® ISO. No. 40	BIG-PLUS® ISO. No. 40
SPINDLE NOSE TO TABLE	4-24 in (101-610 mm)	4-24 in (101-610 mm)	4-24 in (101-610 mm)	4-24 in (101-610 mm)	9.9-29.9 in (251-759 mm)
SPINDLE SPEED (MAXIMUM)	10,000 RPM	10,000 RPM	10,000 RPM	10,000 RPM	10,000 RPM
TOOL CHANGER					
TOOL CAPACITY / TYPE	20 / DOUBLE ARM	20 / DOUBLE ARM	20 / DOUBLE ARM	20 / DOUBLE ARM	20 / DOUBLE ARM
TOOL SHANK	CT40	CT40	CT40	CT40	CT40
RETENTION KNOB	MAS 60	MAS 60	MAS 60	MAS 60	MAS 60
MAXIMUM TOOL DIAMETER	3.15 in (80 mm)	3.15 in (80 mm)	3.15 in (80 mm)	3.15 in (80 mm)	3.15 in (80 mm)
MAXIMUM TOOL LENGTH	9.45 in (240 mm)	9.45 in (240 mm)	9.45 in (240 mm)	9.45 in (240 mm)	9.45 in (240 mm)
MAXIMUM TOOL WEIGHT	15.4 lbs (7 kg)	15.4 lbs (7 kg)	15.4 lbs (7 kg)	15.4 lbs (7 kg)	15.4 lbs (7 kg)
FURTHER DETAILS					
X/Y/Z RAPID TRAVERSE RATE	945 IPM (24 m/min)	945 IPM (24 m/min)	945 IPM (24 m/min)	945 IPM (24 m/min)	945 IPM (24 m/min)
MACHINE HEIGHT	101.5 in (2,565 mm)	101.5 in (2,565 mm)	101.5 in (2,565 mm)	101.5 in (2,565 mm)	107.3 in (2,725 mm)
FOOTPRINT: MAXIMUM SERVICE SPACE - (WIDTH x DEPTH)	130 x 119 in (3,303 x 3,023 mm)	136.5 x 126.4 in (3,466 x 3,210 mm)	146.5 x 126.4 in (3,722 x 3,210 mm)	160.9 x 126.4 in (4,086 x 3,210 mm)	160.9 x 126.4 in (4,086 x 3,210 mm)
FOOTPRINT: NOMINAL OPERATING - (WIDTH x DEPTH)	82.5 x 97.6 in (2,095 x 2,480 mm)	92.7 x 111.7 in (2,356 x 2,836 mm)	97.7 x 111.7 in (2,483 x 2,836 mm)	130 x 111.7 in (3,303 x 2,836 mm)	130 x 111.7 in (3,303 x 2,836 mm)
MACHINE WEIGHT	6,200 lbs (2,818 kg)	9,000 lbs (4,100 kg)	9,100 lbs (4,125 kg)	9,400 lbs (4,270 kg)	9,600 lbs (4,364 kg)
POWER REQUIRED	15 KVA/38 Amps	22 KVA/54 Amps	22 KVA/54 Amps	22 KVA/54 Amps	22 KVA/54 Amps
VOLTAGE REQUIRED	208-240 Volts/ 3 Phase	208-240 Volts/ 3 Phase	208-240 Volts/ 3 Phase	208-240 Volts/ 3 Phase	208-240 Volts/ 3 Phase