

FADAL



VMC 4020FX
Vertical Machining Center
Fadal GE Fanuc Oi-MC CNC Control



FADAL MACHINING CENTERS

Blue Technologies



VMC 4020FX

SPECIFICATIONS

| General | Imperial | Metric |
|-------------------------------|---------------------------------|---|
| FLOOR TO TABLE SURFACE | 32" | 812.8 mm |
| MACHINE WEIGHT | 11,000 lbs. | 4,990 kg |
| CONSTRUCTION | Cast Iron Box Way X/Y/Z | |
| Table | | |
| TABLE SIZE | 48" x 20" | 1,219.2 mm x 508 mm |
| T-SLOTS (NO. x WIDTH x SPAN) | 5 x .709" x 3.74" | 5 x 18 mm x 95 mm |
| CUTTING FEED RATE (X/Y/Z) | 800 ipm max | 20.32 mpm max |
| RAPID TRAVEL RATE (X/Y/Z) | 1,000 ipm | 25.4 mpm |
| MAX. WEIGHT ON TABLE | 3,641 lbs. ^c | 1,651 kg ^c |
| BALL SCREW SIZE (X/Y/Z) | 1.26" Dia. Dual Mounted | 32 mm Dia. Dual Mounted |
| LONGITUDINAL (X AXIS) | 40" | 1,016 mm |
| LATITUDINAL (Y AXIS) | 20" | 508 mm |
| VERTICAL (Z AXIS) | 20" (Opt. 28") | 508 mm (Opt. 711.2 mm) |
| SPINDLE NOSE TO TABLE | 4"-24" | 101.6 mm - 609.6 mm |
| | (4"-32" Opt.) | (101.6 mm - 812.8 Opt.) |
| SPINDLE CENTER TO COLUMN WAYS | 20.11" | 510.794 mm |
| Accuracy | | |
| AXIS POSITIONING** | +/- .0002" | +/- .0050 mm |
| AXIS REPEATABILITY** | +/- .0001" | +/- .0025 mm |
| Spindle | | |
| POWER TRANSFER | VECTOR Drive (1:1) | |
| SPINDLE SPEED | 10-8,000 RPM | |
| SPINDLE ORIENTATION | Electromechanical | |
| SPINDLE TAPER | No. 40 | |
| Tools | | |
| ATC, NUMBER OF TOOLS | 21 | |
| ATC, TOOL SELECTION | Random / Bi-directional | |
| MAX. TOOL DIAMETER | 3" | 76.2 mm |
| (WITHOUT ADJACENT TOOLS) | 4.5" | 114.3 mm |
| MAX. TOOL LENGTH | 15" | 381 mm |
| MAX. TOOL WEIGHT | 15 lbs. | 6.8 kg |
| Motor | | |
| SPINDLE DRIVE MOTOR | AC, VECTOR Drive | |
| HORSEPOWER | 14.75 HP/ 22.1 HP* | 11 kW/ 17 kW* |
| TORQUE | 38.7 ft.-lbs./ 77.5 ft.-lbs.* | 52.5 N-m/ 105 N-m* |
| OPTIONAL HIGH TORQUE SPINDLE | 16.2 HP*/ 227 ft.-lbs* | 12.1 kW*/ 308 N-m* |
| AXIS DRIVE MOTOR (X/Y) | AC, 3,260 lbs.* thrust | AC, 1,479 kg* thrust |
| AXIS DRIVE MOTOR (Z) | AC, 3,260 lbs.* thrust | AC, 1,479 kg* thrust |
| Miscellaneous | | |
| AIR PRESSURE REQUIREMENT | 80-120 PSI, 15 SCFM (Momentary) | 5.5-8.3 Bar, .42m ³ /min (Momentary) |
| POWER REQUIREMENT (3-Phase) | 76 A @ 230 VAC | |
| SINGLE PHASE (Optional) | Not Available | |

^c Evenly Distributed Weight

* Peak

** All accuracies are quoted at 68°F.

Fadal reserves the right to change standard and optional machine accessories.

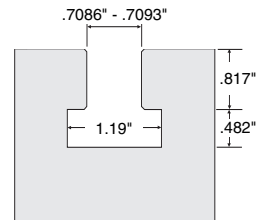
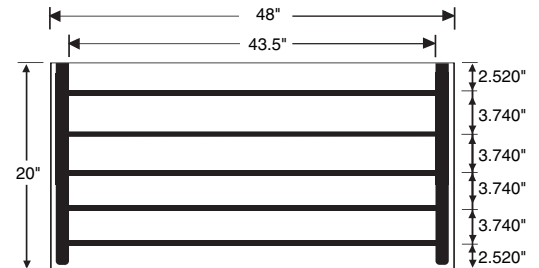
Extended column add 8" to height

Continuous equivalent A-weighted sound pressure at workstation is 77 db(A) or less during normal cutting operations.

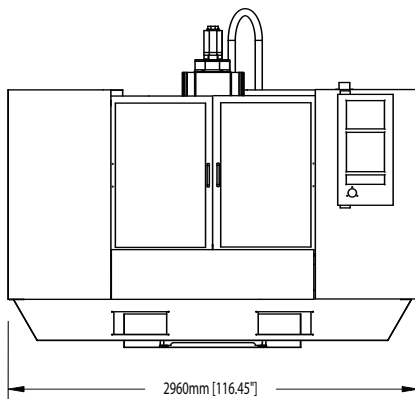
Options

- 28" Z Travel & Column (Standard 20")
- 30-Position ATC (CAT or BT)
- 24-Position DATC (CAT or BT)
- Spindle Options
 - 10,000 RPM High Torque
 - 15,000 RPM Air/Oil Spindle
- 380/480 Volt - 3 Phase External Transformer
- Flood Coolant Tank Assembly
- Coolant thru Spindle (250 psi)
- Chip Conveyor System
- Flat Sheet Metal Cover
- Ship Machine Un-Caulked
- Auto Aim Servo Coolant
- Advanced Control Package
 - Manual Guide i
 - AI/CC (Artificial Intelligence Contour Control)
 - Machining Condition Selecting Function
 - 256 MB PCMCIA Flash Card
- Data Server (Includes High Speed Ethernet)
- Additional Work Light
- Heidenhain Glass Scales
- Renishaw Touch Probes
 - TS-27R Tool Setter Probe
 - OMP40 Probe System (CAT or BT)
- Rotary Products
 - VH-165 mm
 - VH-175 mm
 - VH-225 mm
 - VH-275 mm
 - V-300 mm
 - V-400 mm
 - Rotary Accessories
- Tooling Packages
 - (11) Tool Starter Package
 - (20) Tool Premium Package
 - Tooling Certificates

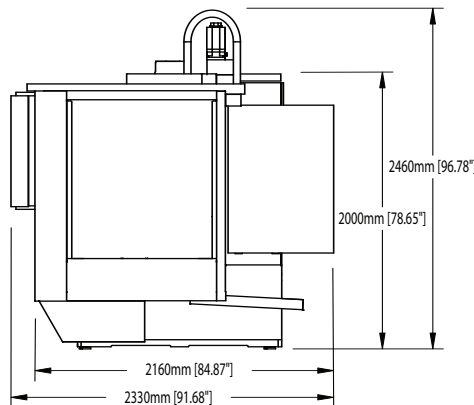
VMC 4020FX TABLE DIMENSIONS



T-SLOT



Front View



Side View

www.fadal.com



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