BRIDGEPORT XR1320

HIGH PERFORMANCE VERTICAL MACHINING CENTER

Bridgeport®

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FEATURES

- Fanuc 0i-MF Plus 15" Color LCD, Touch Screen Control with USB
- Coolant Chip Flush System
- 12,000 RPM Greased Direct Coupled Spindle with Chiller
- CT40 Spindle (BT opt)
- Dual Contact Big-Plus® Spindle
- Hand-Held Manual Pulse Generator
- On board (2) SD Card Slots
- Fully Interlocked Machine Guarding
- Manual Chip Wash Gun
- 4th Axis Pre-wiring
- ECO Friendly Centralized Grease Lubrication
- Smart light LED with wireless
- One Year Machine Warranty Parts and Labor
- Three Year Control Warranty Parts and Labor
- Program and Data Protect Key
- Prep for 1000 PSI Through-Spindle Coolant (with rotary union)
- Automatic Power Off
- Retention Knobs
- Bright Dual Work Lights, and a Third Adjustable
- Inverter Drive ATC for Fast Recovery AIS System
- Renishaw OMP40-2+OMI-2T+OTS, Pre-Wiring Interface
- Cutter Air Blast

Manufactured to the highest industry standards, the Bridgeport XR1320 is packed with features to meet and exceed the requirements of the demanding metal-cutting market.

MACHINE OPTIONS

- 40 Position 40 Taper Tool Magazine
- 12,000 RPM Air/Oil Spindle, 30 HP DDS
- 15,000 RPM Air/Oil Spindle, 30 HP DDS
- Absolute Linear Encoder
- Ball Screw Nut Cooling
- Through Spindle Coolant
- 4th Rotary Axes Interface
- Renishaw Probe Package OMI-2T + OMP- 40-2 + OTS
- ATC Auto Door
- Auto Central Grease System
- Spare M-Codes (8 Sets)
- Chiller for Power Case

BRIDGEPORT XR1320

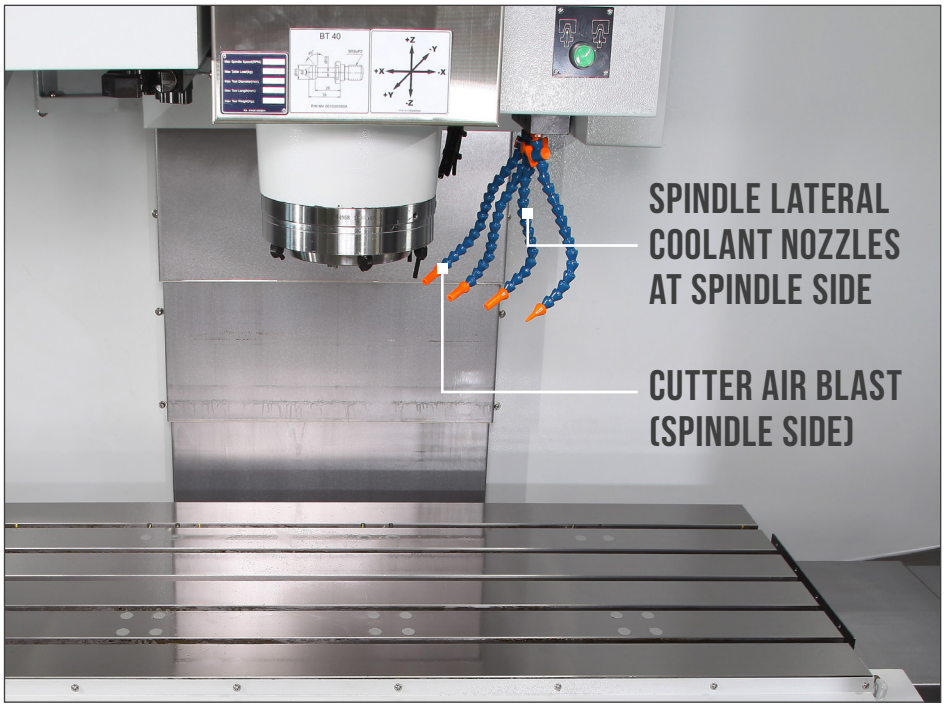
STANDARD FEATURES

SMART LIGHT LED
WITH WIRELESS

AUTOMATIC X/Y/Z AXES
GREASE LUBRICATION

SPINDLE LUBRICATION
OIL AIR

SPINDLE MOTOR
STAINLESS DECO



KEY FEATURES

BEST OVERALL WORKING CUBE IN ITS CLASS

- 52 Inches in the X-Axis
- 24.8 Inches in the Y-Axis
- 26.7 Inches in the Z-Axis

HEAVY DUTY LINEAR GUIDEWAYS, BALL SCREWS AND AXIS DRIVES

To provide superior machine accuracy and repeatability the XR1320 comes complete with high-class 45mm double nut ballscrews on X & Z, and (2) 40mm ball screws on Y, fixed and pre-tensioned. Large 45mm high-quality linear guideways supported by 6 trucks on the X and Z Axis.

POWERFUL SPINDLE MOTORS

Big Plus, 40 taper, 12,000-rpm Direct Drive spindle powered dual-wound spindle motor.

- 14.7/20/30 hp (Cont./30 min/Peak).
- 55/75/110 ft-lbs Torque (Cont./30 min/Peak).

Quad set of 70mm angular contact bearings and a 60mm rear taper roller bearing provide superior thermal stability, significant radial and axial stiffness and high accuracy.

1984 lbf tool retention for aggressive cutting applications.

DUAL Y AXIS BALLSCREWS

- Driven at the Center of Gravity Effect
- Improved Surface Quality
- Outstanding Acceleration
- Reduction of Vibration
- Improved Roundness
- Longer Tool Life

ADVANCED DIGITAL CONTROL SYSTEMS

POWER & TORQUE TO MACHINE THE TOUGHEST MATERIALS

FANUC

FANUC 0iMF-PLUS

- 15" LCD Color Display
- Programmable Data Input
- PCMCIA Card Slot
- Workpiece Coordinate System
- Manual Pulse Generator (Handwheel)
- Coordinate System Rotation
- Rigid Tapping
- Tool Life Management
- Tool Length compensation
- Background Editing
- Ethernet Ready/ RS232 Ready/ USB Slot
- Additional Workpiece Coordinate System
- Manual Guide i

SPECIFICATIONS

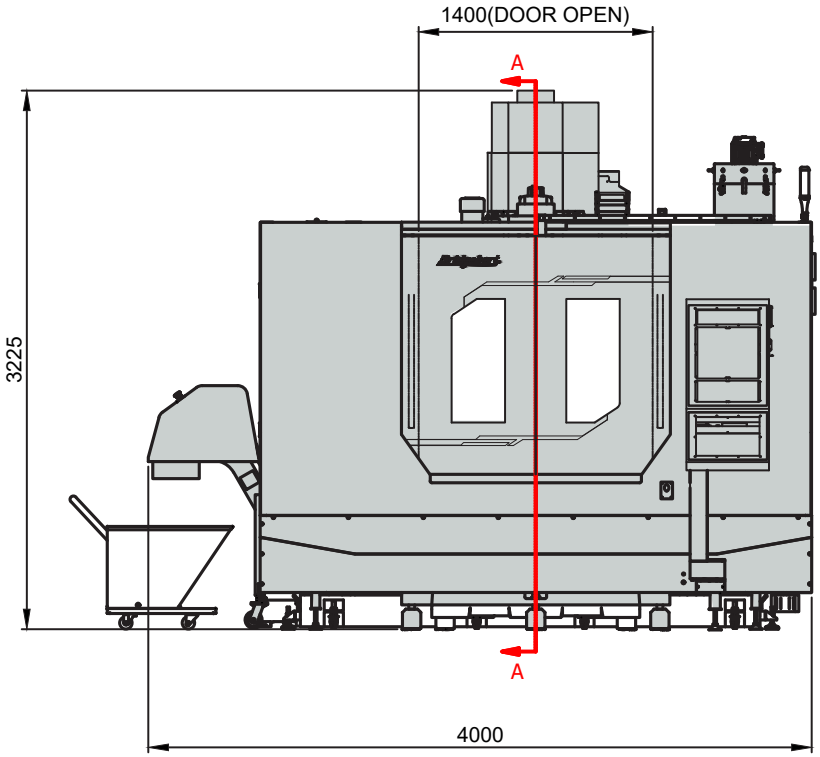
CONTROL UNIT	FANUC 0i-MF PLUS
TRAVELS	
X-Axis	1320mm (51.96")
Y-Axis	630mm (24.8")
Z-Axis	680mm (26.77")
Gage Line Height (Min-Max)	150-830mm (5.9"-32.67")
Y-Axis Throat Distance	638mm (25.11")
TABLE	
X Length	1400mm (55.11")
Y Width	600mm (23.62")
Load Capacity	1000kg (2200lb)
T-Slots (# & Size)	5×18mm (0.708")×100mm (3.94")
DRAW BAR	
Actuation	Pneumatic
Clamp force	900kg
Clamp method	Helical disk springs
AUTOMATIC TOOL CHANGER (ATC)	
Taper (ISO No.)	40
Type	Swing Arm
Tool Holder Type	BT or CAT or ANSI or DIN (SK)
Pull Stud Type	1. BT or modified BT for CAT 2. CT or modified CT for BT 3. ANSI or modified ANSI 4. DIN
Tool Selection	Random Bi-directional
Tool Capacity	30 / 40
Maximum Tool Diameter (Full Drum)	75 mm
Max. Tool Diameter (Adj. Pockets Empty)	150mm / 130mm
Maximum Tool Length	300 mm
Maximum Tool Weight	7 Kg / 8kg
Tool Change Time (T-T)	1.8 Sec
Tool Change Time (C-C) ISO10791-9	7 Sec
ATC Transmission	Cam
AXES DRIVES	
X axes servo motors	3.0 KW (AIF12/4000, 12 Nm)
Y axes servo motors	3.0 KW (AIF12/4000, 12 Nm)
Z axes servo motors With Brake	4.0 KW (AIF22B/3000, 22Nm)
Continuous Thrust Rating X/Yaxes	4712N
Continuous Thrust Rating Zaxes	11519N
X, Y, Z-Axis Acceleration	4.7 /4.2/ 4 (m/s^2)
BALL SCREWS	
Ball Screw Size/Support	Fixed pre-tensioned
X-Axis	45mm
Y-Axis	40mm
Z-Axis	45mm
Double Nut (Ball Nut)	STD
Lubrication	Automatic Central Lubrication
Ball Screw Pitch	X/Y: 16mm, Z: 12mm

LINEAR GUIDEWAY	
Type	Ball Guide
Way Size(X/Y/Z)	35/45/45
Linear Ways X-Axis	2
Linear Ways Y-Axis	2
Linear Ways Z-Axis	2
Linear Guide Trucks X-Axis	6
Linear Guide Trucks Y-Axis	4
Linear Guide Trucks Z-Axis	6
Lubrication	Automatic Central Lubrication
X, Y, and Z-Axis Rapid Traverse Rate	X/Y: 43m/min, Z: 36m/min
Max. programmable feed rates (all axes)	20m/min
ACCURACY	ISO 230-2 2σ
Positioning X	0.015mm
Repeatability X	0.009mm
Positioning Y, Z	0.010mm
Repeatability Y, Z	0.005mm
GENERAL SPECIFICATIONS	
Machine Weight	8800kg
Machine Overall Width	3300mm (Chip conveyor not included)
Machine Overall Height	3165/2555 mm (Z at heighest/lowest)
Machine Overall Depth	2265mm
Front Door opening	1400mm
Window material	Laminated Panel (Lexan/Glass)
Coolant Tank Capacity (Liters)	430L
Coolant Flow Rate for Cutter (L/min)	TPHK-4T 3-2, 130L/min, 1.5kg/cm2 (60HZ) / TPHK-4T 3-3, 130L/min, 1.25kg/cm2 (50HZ)
Coolant Flow Rate for Flush (L/min) (OPT)	TPHK-4T 6-6, 130L/min, 4.0kg/cm2 (60HZ) / TPHK-4T 7-7, 130L/min, 2.15kg/cm2 (50HZ)
Chip Removal	Chip conveyor
Air Requirements (PSI/SCFM)	5.5 kg/cm^2 minimum

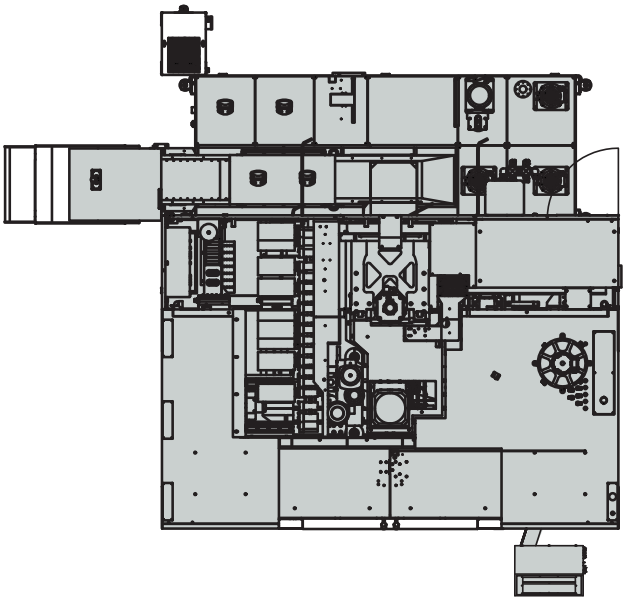
To maintain the accuracy of this machine, we recommend that the machine is sited on a flat area free from cracks and expansion joints. The composition of the floor and sub-structure should be of suitable construction to bear the weight of this machine. Any friable areas should be using accepted building construction techniques (to code).

Once a suitable foundation is in place, we recommend that the machine is rigidly bolted to the floor using the bed fixing/jacking positions to prevent movement or vibration.

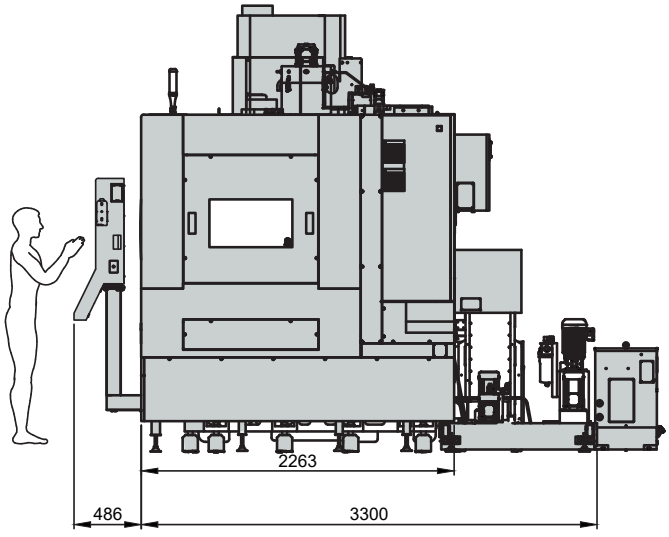
FLOOR PLAN



FRONT VIEW



TOP VIEW



SIDE VIEW