



Model SB1028F

10" x 54" 5 HP Single-Phase Mill with DRO

Product Dimensions

Weight..... 3017 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 66 x 77 x 89 in.
Footprint (Length x Width)..... 41-1/2 x 24-1/2 in.
Space Required for Full Range of Movement (Width x Depth)..... 95 x 63 in.

Shipping Dimensions

Type..... Wood Crate
Content..... Machine
Weight..... 3344 lbs.
Length x Width x Height..... 79 x 60 x 66 in.

Electrical

Power Requirement..... 220V, Single-Phase, 60 Hz
Prewired Voltage..... 220V
Full-Load Current Rating..... 17.2A
Minimum Circuit Size..... 20A
Connection Type..... Cord & Plug
Power Cord Included..... No
Recommended Power Cord..... "S"-Type, 3-Wire, 12 AWG, 300 VAC
Plug Included..... No
Recommended Plug Type..... 6-20
Switch Type..... Control Panel w/Magnetic Switch Protection
Inverter (VFD) Type..... Yaskawa VS-606V7
Inverter (VFD) Size..... 5 HP

Motors

Main

Horsepower..... 5 HP
Phase..... 3-Phase
Amps..... 14A
Speed..... 1720 RPM
Type..... AEVF Induction
Power Transfer Belt Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... N/A

Coolant Pump

Horsepower.....	1/8 HP
Phase.....	Single-Phase
Amps.....	0.45A
Speed.....	3440 RPM
Type.....	TEFC Capacitor-Start Induction (Class F)
Power Transfer	Direct Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

Table Elevation

Horsepower.....	1/4 HP
Phase.....	Single-Phase
Amps.....	1.95A
Speed.....	1700 RPM
Type.....	TEFC Capacitor-Start Induction
Power Transfer	Gear Drive
Bearings.....	Shielded & Permanently Lubricated

Feed

Horsepower.....	1/10 HP
Phase.....	Single-Phase
Amps.....	0.8A
Speed.....	0 – 200 RPM
Type.....	Universal
Power Transfer	Belt Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

Main Specifications

Operation Info

Spindle Travel.....	5 in.
Max Distance Spindle to Column.....	26 in.
Max Distance Spindle to Table.....	16-1/2 in.
Longitudinal Table Travel (X-Axis).....	35 in.
Cross Table Travel (Y-Axis).....	16 in.
Vertical Table Travel (Z-Axis).....	14-1/4 in.
Ram Travel.....	19-1/2 in.
Turret or Column Swivel (Left/Right).....	360 deg.
Head Tilt (Left/Right).....	90 deg.
Head Tilt (Front/Back).....	45 deg.
End Milling Capacity.....	1 in.
Face Milling Capacity.....	4 in.

Table Info

Table Length.....	54 in.
Table Width.....	10 in.
Table Thickness.....	3 in.
Number of T-Slots.....	3
T-Slot Size.....	5/8 in.
T-Slots Centers.....	2-1/2 in.
Number of Longitudinal Feeds.....	Variable
X/Y-Axis Travel per Handwheel Revolution.....	0.200 in.
Z-Axis Travel per Handwheel Revolution.....	0.100 in.

Spindle Info

Spindle Taper.....	R-8
Number of Vertical Spindle Speeds.....	Variable
Range of Vertical Spindle Speeds.....	60 – 5000 RPM
Drawbar Thread Size.....	7/16-20
Drawbar Length.....	23-3/8 in.
Spindle Bearings.....	Angular Contact P4 (ABEC-7)

Construction

Spindle Housing/Quill.....	Chrome-Plated & Precision-Ground Steel
Table.....	Hardened & Precision-Ground Cast Iron
Head.....	Meehanite Cast Iron
Column/Base.....	Meehanite Cast Iron
Base.....	Cast Iron
Paint Type/Finish.....	Urethane

Other

Country of Origin	Taiwan
Warranty	2 Years
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ID Label on Right Side of Belt Housing
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features

Fagor DRO
Align Power Drawbar
Allen-Bradley Electronic Components
High-Quality, Low-Vibration AEVF Spindle Motor
Built-In Single-Phase to 3-Phase Yaskawa Power Inverter
P4 (ABEC-7) High-Quality Angular Contact Spindle Bearings
X & Y Leadscrew Nuts Double-Bronzed for Ultra-Smooth Movement w/Minimal Backlash
Lever-Action One-Shot Pump Way Lubrication System
Control Panel Mounted on Adjustable Arm
Complete Built-In Coolant System
Table Elevation Power Feed (Z-Axis)
Variable Speed Longitudinal Power Feed (X-Axis)
Auto-Downfeed with Micro-Adjustable Stop
Hardened and Precision-Ground Table Surface
Chromed Steel Quill
Heavy-Duty Spindle Brake