



# Product Specifications

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## 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