



Model SB1070F

42" x 132" Big Bore Lathe, 9" Bore

Product Dimensions

Weight..... 11,539 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 197 x 71 x 64 in.
Footprint (Length x Width)..... 207 x 31 in.

Shipping Dimensions

Type..... Wood Crate
Content..... Machine
Weight..... 14991 lbs.
Length x Width x Height..... 209 x 73 x 82 in.
Must Ship Upright..... Yes

Electrical

Power Requirement..... 230V or 460V, 3-Phase, 60 Hz
Prewired Voltage..... 230V
Full-Load Current Rating..... 71.6A at 230V, 35.8A at 460V
Minimum Circuit Size..... 90A at 230V, 50A at 460V
Connection Type..... Permanent (Hardwire to Shutoff Switch)
Switch Type..... Control Panel w/Magnetic Switch Protection
Voltage Conversion Kit..... SB460VSB1070F (For 460V)

Motors

Main

Horsepower..... 30 HP
Phase..... 3-Phase
Amps..... 69.3A/34.7A
Speed..... 1720 RPM
Type..... TEFC Induction
Power Transfer Belt
Bearings..... Shielded & Permanently Lubricated

Coolant Pump

Horsepower..... 1/8 HP
Phase..... 3-Phase
Amps..... 0.23A/0.12A
Speed..... 3450 RPM
Type..... TEFC Induction
Power Transfer Direct
Bearings..... Shielded & Permanently Lubricated

Feed

Horsepower.....	1/4 HP
Phase.....	3-Phase
Amps.....	2.1A/1.05A
Speed.....	850 RPM
Type.....	TEFC Induction
Power Transfer	Direct
Bearings.....	Shielded & Permanently Lubricated

Main Specifications

Operation Info

Swing Over Bed.....	42 in.
Distance Between Centers.....	132 in.
Max Weight Between Centers.....	2992 lbs.
Swing Over Cross Slide.....	32 in.
Swing Over Saddle.....	32 in.
Swing Over Gap.....	54 in.
Maximum Tool Bit Size.....	1-1/4 in.
Compound Travel.....	13 in.
Carriage Travel.....	70-7/8 in.
Cross Slide Travel.....	18-7/8 in.

Headstock Info

Spindle Bore.....	9 in.
Spindle Taper.....	MT#7 / 1/20 OPT
Number of Spindle Speeds.....	12
Spindle Speeds.....	6 - 500 RPM
Spindle Type.....	A2-15
Spindle Bearings.....	SKF Tapered Roller
Spindle Length.....	33-1/8 in.

Tailstock Info

Tailstock Quill Travel.....	10 in.
Tailstock Taper.....	MT#6
Tailstock Barrel Diameter.....	4 in.

Threading Info

Number of Longitudinal Feeds.....	36
Range of Longitudinal Feeds.....	0.02 - 0.27 in./rev.
Number of Cross Feeds.....	36
Range of Cross Feeds.....	0.01 - 0.14 in./rev.
Number of Inch Threads.....	36
Range of Inch Threads.....	2 - 28 TPI
Number of Metric Threads.....	29
Range of Metric Threads.....	0.8 - 14mm
Number of Modular Pitches.....	15
Range of Modular Pitches.....	0.4 - 7 MP
Number of Diametral Pitches.....	36
Range of Diametral Pitches.....	4 - 56 DP

Dimensions

Bed Width.....	20 in.
Carriage Leadscrew Diameter.....	1-13/16 in.
Leadscrew TPI.....	2 TPI
Carriage Leadscrew Length.....	45-9/16 in.
Feed Rod Diameter.....	1-1/4 in.
Floor to Center Height.....	50-1/2 in.
Height With Leveling Jacks.....	50-5/16 in.

Other

Carriage Handwheel Graduations.....	0.010 in.
Carriage Handwheel Revolution.....	1.00 in.
Cross Slide Handwheel Graduations.....	0.002 in.
Cross Slide Handwheel Revolution.....	0.4 in.
Compound Handwheel Graduations.....	0.002 in.
Compound Handwheel Revolution.....	0.200 in.
Tailstock Handwheel Graduations.....	0.001 in.
Tailstock Handwheel Revolution.....	0.200 (H), 0.065 (L) in.

Construction

Base.....	Cast Iron
Headstock.....	Cast Iron
End Gears.....	Flame-Hardened Steel
Bed.....	Induction-Hardened, Precision-Ground, Meehanite Cast Iron
Body.....	Cast Iron
Stand.....	Cast Iron
Paint Type/Finish.....	Urethane

Fluid Capacities

Headstock Capacity.....	60 qt.
Headstock Fluid Type.....	ISO 32 (eg. Grizzly T23963, Mobil DTE Light)
Gearbox Capacity.....	12 qt.
Gearbox Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Apron Capacity.....	12 qt.
Apron Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Coolant Capacity.....	96 qt.

Other

Country of Origin	Taiwan
Warranty	2 Years
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	Machine ID Label
ISO 9001 Factory	Yes

Features

- Double Clamping Tailstock
- 2-Speed Tailstock Gearbox for Large-Diameter End Drilling
- 4-Position Apron Stop
- Adjustable Feed Clutch
- Magnetic Motor Brake & Mechanical Hand Brake
- Z-Axis Rapid Traverse: 12.14 FPM
- X-Axis Rapid Traverse: 5.9 FPM
- Safety Chuck Guard with Micro-Switch Shut-Off
- Meehanite Castings with Induction-Hardened Ways
- Complete Coolant System with Built-In Reservoir
- One-Piece Bed and Stand
- Completely Enclosed Universal Gearbox for Cutting Inch, Metric, Modular, and Diametral Pitches
- Threading Dial Indicator
- Headstock Gears Run in an Oil Bath
- Fagor DRO
- SKF German Spindle Bearings
- Full-Length Leadscrew Cover
- Foot Brake
- Signature South Bend 3 V-Way Bed

Included Accessories

- Two MT#6 Dead Centers (1 Carbon Steel and 1 Carbide Tipped)
- MT#7 to MT#6 Spindle Sleeve
- 14 Leveling Pads
- Service Tools
- Toolbox
- USA-Written Manual