



# Product Specifications

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## Model SB1012F 14" x 40" Lathe with DRO

### Product Dimensions

Weight.....	2976 lbs.
Width (side-to-side) x Depth (front-to-back) x Height.....	91-1/2 x 39-1/2 x 59 in.
Footprint (Length x Width).....	82 x 19-1/2 in.

### Shipping Dimensions

Type.....	Wood Slat Crate
Content.....	Machine
Weight.....	3086 lbs.
Length x Width x Height.....	90 x 42 x 75 in.

### Electrical

Power Requirement.....	220V, 3-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, 4-Wire, 12 AWG, 300 VAC
Plug Included.....	No
Recommended Plug Type.....	15-20
Switch Type.....	Control Panel w/Magnetic Switch Protection
Inverter (VFD) Type.....	Yaskawa G7A23P7
Inverter (VFD) Size.....	5 HP

### Motors

#### Main

Horsepower.....	5 HP
Phase.....	3-Phase
Amps.....	15.5A
Speed.....	3450 RPM
Type.....	TEFC Induction
Power Transfer .....	V-Belt Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

### **Coolant Pump**

Horsepower.....	1/8 HP
Phase.....	3-Phase
Amps.....	0.3A
Speed.....	3450 RPM
Type.....	TEFC Induction (Class F)
Power Transfer .....	Direct Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

### **Oil Pump**

Horsepower.....	1/4 HP
Phase.....	3-Phase
Amps.....	1.4A
Speed.....	1725 RPM
Type.....	TEFC Induction
Power Transfer .....	Direct Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

## **Main Specifications**

### **Operation Info**

Swing Over Bed.....	14 in.
Distance Between Centers.....	40 in.
Max Weight Between Centers.....	660 lbs.
Swing Over Cross Slide.....	8.375 in.
Swing Over Saddle.....	13.78 in.
Swing Over Gap.....	20.98 in.
Maximum Tool Bit Size.....	3/4 in.
Compound Travel.....	5.1 in.
Carriage Travel.....	38.58 in.
Cross Slide Travel.....	9-1/4 in.

### **Headstock Info**

Spindle Bore.....	2.0625 in.
Spindle Taper.....	MT#6
Number of Spindle Speeds.....	Variable
Spindle Speeds.....	20 – 2500 RPM
Spindle Type.....	D1-6 Camlock
Spindle Bearings.....	NSK or NTN Tapered Roller
Spindle Length.....	24-1/4 in.
Spindle Length with 3-Jaw Chuck.....	30-1/4 in.
Spindle Length with 4-Jaw Chuck.....	28-3/4 in.
Spindle Length with Faceplate.....	26-1/4 in.

### **Tailstock Info**

Tailstock Quill Travel.....	6 in.
Tailstock Taper.....	MT#4
Tailstock Barrel Diameter.....	2.047 in.

## **Threading Info**

Number of Longitudinal Feeds.....	17
Range of Longitudinal Feeds.....	0.002 – 0.067 in./rev.
Number of Cross Feeds.....	17
Range of Cross Feeds.....	0.001 – 0.034 in./rev
Number of Inch Threads.....	45
Range of Inch Threads.....	2 – 72 TPI
Number of Metric Threads.....	39
Range of Metric Threads.....	0.2 – 14.0 mm
Number of Modular Pitches.....	18
Range of Modular Pitches.....	0.3 – 3.5 MP
Number of Diametral Pitches.....	21
Range of Diametral Pitches.....	8 – 44 DP

## **Dimensions**

Bed Width.....	10-1/4 in.
Carriage Leadscrew Diameter.....	1-1/8 in.
Leadscrew TPI.....	4 TPI
Carriage Leadscrew Length.....	61-1/2 in.
Steady Rest Capacity.....	5/16 – 4-5/16 in.
Follow Rest Capacity.....	5/8 – 3-1/8 in.
Faceplate Size.....	12 in.
Feed Rod Diameter.....	3/4 in.
Floor to Center Height.....	42 in.
Height With Leveling Jacks.....	43-1/2 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.....	16.9 qt.
Headstock Fluid Type.....	ISO 32 (eg. Grizzly T23963, Mobil DTE Light)
Gearbox Capacity.....	1.4 qt.
Gearbox Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Apron Capacity.....	1.2 qt.
Apron Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Coolant Capacity.....	11.1 qt.

## **Other**

Country of Origin .....	Taiwan
Warranty .....	2 Years
Approximate Assembly & Setup Time .....	2 Hours
Serial Number Location .....	ID Label on Rear of Left Stand
ISO 9001 Factory .....	No
Certified by a Nationally Recognized Testing Laboratory (NRTL) .....	No

## **Features**

Allen Bradley Electrical Components  
Fagor 2-Axis DRO  
Meehanite Casting, Signature South Bend 3 V-Way Bed  
Safety Chuck Guard with Micro-Switch Shut-Off  
Halogen Work Light  
4-Way Tool Post  
Complete Recycling Coolant System  
Micrometer Carriage Stop  
Threading Dial Indicator  
NSK or NTN Japanese Spindle Bearings  
Full-Length Splash Guard  
Front-Removable Sliding Chip Tray  
Yaskawa G7A23P7 Inverter  
Completely Enclosed Universal Gearbox for Cutting Inch, Metric, Modular, and Diametral Pitches  
Pressurized Lubrication System for Headstock Gears and Bearings  
Dial Controlled, Variable Spindle Speeds with Digital Read-Out  
Jog and Emergency Stop Buttons

## **Included Accessories**

8" 3-Jaw Scroll Chuck Mounted to 8" D1-6 Back Plate  
10" 4-Jaw Independent D1-6 Chuck  
12" D1-6 Faceplate  
Follow Rest  
Steady Rest with Roller Bearing Tips  
MT#4 to MT#6 Morse Taper Spindle Sleeve  
2 MT#4 Dead Centers (1 Carbon Steel and 1 Carbide-Tipped)  
Eight Leveling Pads, Service Tools, Tool Box, and USA Written Manual