



# Product Specifications

P.O. Box 2027, Bellingham, WA 98227 U.S.A.  
PHONE: (360) 734-1540 • © South Bend Tools  
[www.southbendtools.com](http://www.southbendtools.com)



## Model SB1061PF 18" x 80" Electronic Variable-Speed Lathe with Fagor DRO

### Product Dimensions

Weight.....	5940 lbs.
Width (side-to-side) x Depth (front-to-back) x Height.....	130-1/4 x 27 x 62-1/4 in.
Footprint (Length x Width).....	142 x 71-3/4 in.

### Shipping Dimensions

Type.....	Wood Crate
Content.....	Machine
Weight.....	5866 lbs.
Length x Width x Height.....	141 x 45 x 74 in.

### Electrical

Power Requirement.....	440V, 3-Phase, 60 Hz
Prewired Voltage.....	440V
Full-Load Current Rating.....	18.83A
Minimum Circuit Size.....	30A
Connection Type.....	Permanent (Hardwire to Shutoff Switch)
Switch Type.....	Control Panel w/Magnetic Switch Protection
Inverter (VFD) Type.....	Yaskawa G7A4011
Inverter (VFD) Size.....	10 HP

### Motors

#### Main

Horsepower.....	12.5 HP
Phase.....	3-Phase
Amps.....	18A
Speed.....	0 – 3000 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.....	0.23A
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.....	0.6A
Speed.....	1720 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.....	18 in.
Distance Between Centers.....	80 in.
Max Weight Between Centers.....	1100 lbs.
Swing Over Cross Slide.....	11.02 in.
Swing Over Saddle.....	18 in.
Swing Over Gap.....	27.95 in.
Maximum Tool Bit Size.....	1 in.
Compound Travel.....	5.39 in.
Carriage Travel.....	79 in.
Cross Slide Travel.....	11 in.

### **Headstock Info**

Spindle Bore.....	3.15 in.
Spindle Taper.....	MT#7
Number of Spindle Speeds.....	Variable
Spindle Speeds.....	18 – 1800 RPM
Spindle Type.....	D1-8 Camlock
Spindle Bearings.....	Tapered Roller
Spindle Length.....	26-7/8 in.
Spindle Length with 3-Jaw Chuck.....	34-1/2 in.
Spindle Length with 4-Jaw Chuck.....	32-3/8 in.
Spindle Length with Faceplate.....	29-1/8 in.

### **Tailstock Info**

Tailstock Quill Travel.....	6-1/2 in.
Tailstock Taper.....	MT#5
Tailstock Barrel Diameter.....	3 in.

### **Threading Info**

Number of Longitudinal Feeds.....	15
Range of Longitudinal Feeds.....	0.0015 – 0.0400 in./rev.
Number of Cross Feeds.....	15
Range of Cross Feeds.....	0.00075 – 0.02000 in./rev
Number of Inch Threads.....	38
Range of Inch Threads.....	2 – 72 TPI
Number of Metric Threads.....	40
Range of Metric Threads.....	0.4 – 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.....	13.58 in.
Carriage Leadscrew Diameter.....	1-3/8 in.
Leadscrew TPI.....	4 TPI
Carriage Leadscrew Length.....	105 in.
Steady Rest Capacity.....	5/8 – 7-1/16 in.
Follow Rest Capacity.....	5/8 – 5-1/8 in.
Faceplate Size.....	14 in.
Feed Rod Diameter.....	15/16 in.
Floor to Center Height.....	45.08 in.
Height With Leveling Jacks.....	46-1/4 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.....	15.9 qt.
Headstock Fluid Type.....	ISO 32 (eg. Grizzly T23963, Mobil DTE Light)
Gearbox Capacity.....	3.2 qt.
Gearbox Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Apron Capacity.....	2.1 qt.
Apron Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Coolant Capacity.....	25.4 qt.

## **Other**

Country of Origin .....	Taiwan
Warranty .....	2 Years
Approximate Assembly & Setup Time .....	1 Hour
Serial Number Location .....	ID Label on Rear Side of Left Stand
Sound Rating .....	69 dB
ISO 9001 Factory .....	No
Certified by a Nationally Recognized Testing Laboratory (NRTL) .....	No

## **Features**

Allen Bradley Electrical Components  
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 Coolant System  
Micrometer Carriage Stop  
Threading Dial Indicator  
FAG German Spindle Bearings  
Full Length Splash Guard  
Front Removable Sliding Chip Tray  
Yaskawa G7A4011 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 Button and Emergency Stop  
Fagor DRO  
Foot Brake

## **Included Accessories**

12" 3-Jaw Scroll Chuck Mounted to 12" D1-8 Back Plate  
14" 4-Jaw Independent Chuck D1-8  
14" Faceplate D1-8  
Follow Rest  
Steady Rest with Roller Bearing Tips  
#7 to #5 Morse Taper Spindle Sleeve  
Two Morse Taper #5 Dead Centers (1 Carbon Steel and 1 Carbide-Tipped)  
Eight Leveling Pads  
Service Tools  
Tool Box  
USA Written Manual