



# South Bend Lathe Co.<sup>®</sup>



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**\*\*\*For Immediate Release\*\*\***

## **Introducing the New South Bend Model SB1051F Heavy 13<sup>®</sup> 13" x 40" EVS Toolroom Lathe w/Fagor DRO**

**New**



### **Remarkable Features (see attached sheet for specifications):**

- Features 13.38" swing over bed and 40" distance between centers.
- Fagor ProKit 2-Axis Digital Readout (DRO).
- Signature South Bend 3 V-way bed constructed of precision-hardened and ground Meehanite cast iron.
- Allen Bradley electrical controls, Yaskawa inverter, and Japanese high-precision spindle bearings.
- Complete coolant system with pull-out chip tray and full-length, rounded-corner splash guard.
- Foot brake, chuck safety shield with micro-switch shut-off, and adjustable feed rod stop.
- D1-5 spindle powered by a 5 HP, 220V, 3-phase motor.

See attached machine specifications page for complete information on this machine.

For more information, contact the South Bend Lathe Co. through the South Bend website located at [www.southbendlathe.com](http://www.southbendlathe.com). Email inquiries can be sent to [sales@southbendlathe.com](mailto:sales@southbendlathe.com).



*A Tradition of Quality With Hundreds of Thousands of Lathes Sold Since 1906*



# Product Specifications



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## Model SB1051F Heavy 13 - 13" x 40" EVS Lathe with Fagor DRO

### Product Dimensions

Weight..... 2442 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 83-1/2 x 38-1/2 x 59 in.  
Footprint (Length x Width)..... 80-3/4 x 19-1/2 in.

### Shipping Dimensions

Type..... Wood Slat Crate  
Content..... Machine  
Weight..... 2640 lbs.  
Length x Width x Height..... 45 x 90 x 75 in.

### Electrical

Power Requirement..... 220V, 3-Phase, 60 Hz  
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 Type..... Yaskawa G7A25P5  
Inverter Size..... 7.5 HP  
Recommended Phase Converter..... G7978

### Motors

#### Main

Type..... TEFC Induction  
Horsepower..... 5 HP  
Phase..... 3-Phase  
Amps..... 15.5A  
Speed..... 0 – 4500 RPM  
Power Transfer ..... V-Belt Drive  
Bearings..... Shielded & Permanently Lubricated

**Coolant Pump**

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

**Oil Pump**

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

**Main Specifications**

**Operation Info**

Swing Over Bed..... 13.38 in.  
Distance Between Centers..... 40 in.  
Max Weight Between Centers..... 440 lbs.  
Swing Over Cross Slide..... 8.26 in.  
Swing Over Saddle..... 11.02 in.  
Swing Over Gap..... 20 in.  
Maximum Tool Bit Size..... 3/4 in.  
Compound Travel..... 4 in.  
Carriage Travel..... 36-1/2 in.  
Cross Slide Travel..... 7 in.

**Headstock Info**

Spindle Bore..... 1.65 in.  
Spindle Taper..... MT#5  
Number of Spindle Speeds..... Variable  
Spindle Speeds..... 100 – 3000 RPM  
Spindle Type..... D1-5 Camlock  
Spindle Bearings..... NSK or NTN Tapered Roller  
Spindle Length..... 20-7/8 in.  
Spindle Length with 3-Jaw Chuck..... 27 in.  
Spindle Length with 4-Jaw Chuck..... 25 in.  
Spindle Length with Faceplate..... 22-1/2 in.

**Tailstock Info**

Tailstock Quill Travel..... 4-1/2 in.  
Tailstock Taper..... MT#3  
Tailstock Barrel Diameter..... 1.968 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.....	9 in.
Carriage Leadscrew Diameter.....	1-1/8 in.
Leadscrew TPI.....	4 TPI
Carriage Leadscrew Length.....	59 in.
Steady Rest Capacity.....	5/16 – 4-5/16 in.
Follow Rest Capacity.....	5/8 – 3-1/8 in.
Faceplate Size.....	10 in.
Feed Rod Diameter.....	3/4 in.
Floor to Center Height.....	42-1/4 in.
Height With Leveling Jacks.....	59 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.....	Urethane

## Fluid Capacities

Headstock Capacity.....	21.7 qt.
Headstock Fluid Type.....	ISO 32 (e.g., Grizzly T23963, Mobil DTE Light)
Gearbox Capacity.....	1.4 qt.
Gearbox Fluid Type.....	ISO 68 (e.g., Grizzly T23962, Mobil Vactra 2)
Apron Capacity.....	1.2 qt.
Apron Fluid Type.....	ISO 68 (e.g., Grizzly T23962, Mobil Vactra 2)
Coolant Capacity.....	11.1 qt.

## Other

Country Of Origin .....	Taiwan
Warranty .....	1 Year
Approximate Assembly & Setup Time .....	2 Hours
Serial Number Location .....	ID Label on Rear Side of Right Stand
Sound Rating .....	71 – 76 dB
ISO 9001 Factory .....	No

## **Features**

- Allen Bradley Electrical Components
- 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
- Meehanite Castings with Induction-Hardened Ways
- Micrometer Carriage Stop
- Threading Dial Indicator
- NSK or NTN Japanese Spindle Bearings
- Full-Length Splash Guard with Rounded Corner
- Yaskawa G7A25P5 Inverter
- Front Removable Sliding Chip Tray
- Completely Enclosed Universal Gearbox for Cutting Inch, Metric, Modular, and Diametral Pitches
- Jog and Emergency Stop Buttons
- Pressurized Lubrication System
- Fagor DRO

## **Included Accessories**

- 7" 3-Jaw Scroll Chuck D1-5 (2-Piece Jaws)
- 8" 4-Jaw Independent Chuck D1-5
- 10" Faceplate D1-5
- Follow Rest
- Steady Rest with Roller Bearing Tips
- MT#5 to MT#3 Spindle Sleeve
- 2 MT#3 Dead Centers (1 High-Speed Steel and 1 Carbide-Tipped)
- Service Tools
- Toolbox
- USA-Written Manual
- Six Leveling Pads