



# Model SB1042PF

## 21" x 60" Turn-Nado EVS Lathe with DRO

### Product Dimensions

Weight..... 5830 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 110-1/2 x 27 x 62-1/4 in.  
Footprint (Length x Width)..... 122 x 71-3/4 in.

### Shipping Dimensions

Type..... Wood Slat Crate  
Content..... Machine  
Weight..... 5592 lbs.  
Length x Width x Height..... 0 x 0 x 0 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.....                            | 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.....             | 21 in.    |
| Distance Between Centers.....   | 60 in.    |
| Max Weight Between Centers..... | 1430 lbs. |
| Swing Over Cross Slide.....     | 14 in.    |
| Swing Over Saddle.....          | 21 in.    |
| Swing Over Gap.....             | 31.10 in. |
| Maximum Tool Bit Size.....      | 1 in.     |
| Compound Travel.....            | 5.39 in.  |
| Carriage Travel.....            | 59 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.....   | 85-3/8 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.....      | 46-11/16 in.     |
| Height With Leveling Jacks.....  | 48 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  
Signature South Bend 3 V-Way Bed  
Safety Chuck Guard with Micro-Switch Shut-Off  
Meehanite Castings with Induction-Hardened Ways  
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 Headstock Lubrication System with Oil Pressure Safety Switch  
Dial Controlled, Variable Spindle Speeds with Digital Read Out  
Jog Button and Emergency Stop  
Fagor DRO

## **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 Ball 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