



Product Specifications



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Model SB1045PF 21" x 120" Turn-Nado EVS Lathe with DRO

Product Dimensions

Weight..... 8140 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 169-3/4 x 27 x 62-1/4 in.
Footprint (Length x Width)..... 182 x 71-3/4 in.

Shipping Dimensions

Type..... Wood Crate
Content..... Machine
Weight..... 7202 lbs.
Length x Width x Height..... 183 x 45 x 73 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..... | 21 in. |
| Distance Between Centers..... | 120 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..... | 119 in. |
| Cross Slide Travel..... | 11 in. |

Headstock Info

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|--------------------------------------|----------------|
| 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

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

Threading Info

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|-----------------------------------|---------------------------|
| 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..... | 145-7/16 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..... | 46.65 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
- SKF 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
- Foot Brake
- 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
- MT#7 to MT#5 Spindle Sleeve
- Two MT#5 Dead Centers (1 Carbon Steel and 1 Carbide-Tipped)
- Ten Leveling Pads
- Service Tools
- Tool Box
- USA Written Manual