



Product Specifications



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

Model SB1063 12" x 58" CNC Knee Mill

Product Dimensions

Weight..... 3814 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 124 x 105-1/2 x 93-1/2 in.
Footprint (Length x Width)..... 47 x 38 in.

Shipping Dimensions

Type..... Wood Crate
Content..... Machine
Weight..... 4015 lbs.
Length x Width x Height..... 106 x 79 x 100 in.
Must Ship Upright..... Yes

Electrical

Power Requirement..... 220V, 3-Phase, 60 Hz
Full-Load Current Rating..... 25A
Minimum Circuit Size..... 30A
Connection Type..... Permanent (Hardwire to Shutoff Switch)
Switch Type..... Control Panel w/Magnetic Switch Protection
Inverter (VFD) Type..... Delta VFD-B
Inverter (VFD) Size..... 5 HP

Motors

Spindle

Horsepower..... 5 HP
Phase..... 3-Phase
Amps..... 14A
Speed..... 1730 RPM
Type..... Induction
Power Transfer Belt Drive
Bearings..... Shielded & Permanently Sealed

Coolant Pump

Horsepower..... 1/8 HP
Phase..... 3-Phase
Amps..... 0.38A
Speed..... 3450 RPM
Type..... Induction
Power Transfer Direct Drive
Bearings..... Shielded & Permanently Sealed

X-Axis Feed

Horsepower.....	1 HP
Phase.....	3-Phase
Amps.....	5.1A
Speed.....	3000 RPM
Type.....	Servo
Power Transfer	Belt Drive
Bearings.....	Shielded & Permanently Sealed

Y-Axis Feed

Horsepower.....	1 HP
Phase.....	3-Phase
Amps.....	5.1A
Speed.....	3000 RPM
Type.....	Servo
Power Transfer	Belt Drive
Bearings.....	Shielded & Permanently Sealed

Z-Axis Feed

Horsepower.....	1/2 HP
Phase.....	3-Phase
Amps.....	2.6A
Speed.....	3000 RPM
Type.....	Servo
Power Transfer	Belt Drive
Bearings.....	Shielded & Permanently Sealed

Main Specifications

Operation Info

Spindle Travel.....	3.5 in.
Max Distance Spindle to Column.....	27 in.
Max Distance Spindle to Table.....	19 in.
Longitudinal Table Travel (X-Axis).....	32 in.
Cross Table Travel (Y-Axis).....	15.7 in.
Vertical Table Travel (Z-Axis).....	16.5 in.
Ram Travel.....	20 in.
Turret or Column Swivel (Left /Right).....	320 deg.
Head Tilt (Left/Right).....	90 deg.
Head Tilt (Front/Back).....	45 deg.
Drilling Capacity for Cast Iron.....	1 in.
Drilling Capacity for Steel.....	15/16 in.
Tapping Capacity.....	3/4 in.
End Milling Capacity.....	3/4 in.
Face Milling Capacity.....	3-15/16 in.

Table Info

Table Length.....	58 in.
Table Width.....	12-1/2 in.
Table Thickness.....	3-3/8 in.
Table Weight Capacity.....	660 lbs.
Number of T-Slots.....	3
T-Slot Size.....	5/8 in.
T-Slots Centers.....	3-1/4 in.
Number of Longitudinal Feeds.....	Variable Speed
X-Axis Table Power Feed Rate.....	16 FPM
Y-Axis Table Power Feed Rate.....	16 FPM

Spindle Info

Spindle Taper.....	NT40
Number of Vertical Spindle Speeds.....	Variable Speed
Range of Vertical Spindle Speeds.....	50 - 5000 RPM
Quill Diameter.....	4-1/8 in.
Quill Feed Rates.....	Variable: 0 - 0.98 FPM
Drawbar Thread Size.....	5/8-11
Drawbar Length.....	25-9/16 in.
Spindle Bearings.....	Angular Contact - 7210A

Construction

Spindle Housing/Quill.....	Cast Iron
Table.....	Precision-Ground Cast Iron
Head.....	Cast Iron
Column/Base.....	Cast Iron
Base.....	Cast Iron
Stand.....	Cast Iron
Paint Type/Finish.....	Enamel

Other

Country of Origin	Taiwan
Warranty	2 Years
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	Machine ID Label
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features

- 3-Axis Servo Driven
- Fagor Control Panel with Hand-Held Controller
- Manual/Servo Mode
- Power Drawbar
- Powered Lubrication System
- Coolant Recycling System
- Auxiliary Worklight

Included Accessories

- Tool Box Including the Following Items:
 - Flat-Head, Philip Head Screwdrivers
 - Closed-End Wrench 19/21mm
 - Open-End Wrench 12/14mm
 - 10-Pc. Hex Wrench Set: 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8 & 10mm
 - Bottle for Oil