



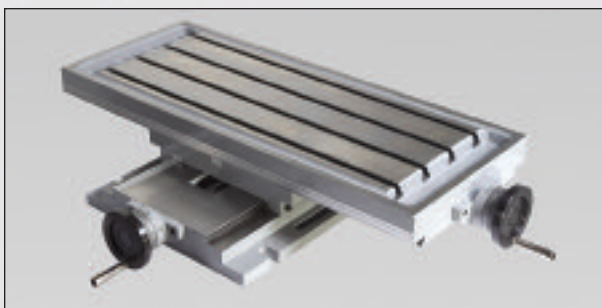
# Series B Geared-drive Round-column Drills

## *With Push-button Electromagnetic Clutch Automatic Feed Control*

The B series is a rugged built Industrial Drilling Machine designed to handle large workpieces and offers the widest range of large capacity drilling and tapping. The B series is equipped with an electromagnetic clutch for precise automatic feed control that can be activated from any of the 4 white push-buttons built into the end of the feed crank handles.

### Standard Features and Equipment:

- Drilling capacity in steel: 2.75" (70mm) maximum
- Drilling capacity in cast iron: 3.15" (80mm) maximum
- Tapping capacity in steel: 2" (50mm) maximum
- Tapping capacity in cast iron: 2.36" (60mm) maximum
- Automatic feed reversing system for tapping on "RS" models
- Automatic feed and cut-off by electromagnetic clutch
- Hardened and ground high quality steel gears
- Speed plate and selecting levers on front of head
- Gear box lubrication by automatic pump
- Machine base with 2 T-slots, coolant tank and pump
- Large rotating table with 3 T-slots
- Feed crank wheel for manual feed
- Front hand wheel for fine feed work
- Depth scale and adjustable depth stop
- Automatic tool ejector
- Work Light
- Built-in low voltage electrical equipment in machine head
- Emergency STOP
- Drill guard with microswitch



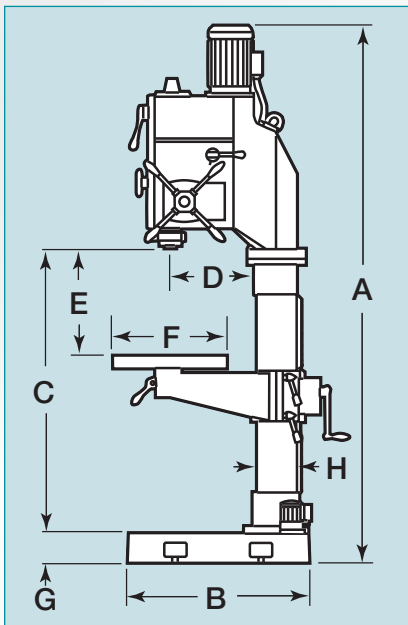
Optional **MB-5D** 18.5" x 11.5" cross slide table



*Built-in low voltage electrics, automatic tool ejection system lever and Speed Selector Levers are mounted on the front of the headstock for operator convenience for fast and easy speed selection*

# Capacities, Specifications and Dimensions

Standard Models Auto feed reversing "RS" Models	B35 B35RS	B40 B40RS	B45 B45RS	B50 B50RS	B60 B60RS	B70 B70RS
<b>Capacities:</b>						
Maximum drilling capacity in steel	1.38" (35mm)	1.57" (40mm)	1.77" (45mm)	1.97" (50mm)	2.36" (60mm)	2.75" (70mm)
Maximum drilling capacity in cast iron	1.77" (45mm)	2.17" (50mm)	2.17" (55mm)	2.36" (60mm)	2.75" (70mm)	3.15" (80mm)
Maximum tapping capacity in steel	1" (27mm)	1.3" (33mm)	1.3" (33mm)	1.42" (36mm)	1.65" (42mm)	2" (50mm)
Maximum tapping capacity in cast iron	1.3" (33mm)	1.57" (40mm)	1.57" (40mm)	1.65" (42mm)	2" (50mm)	2.36" (60mm)
<b>Specifications:</b>						
Spindle taper	4MT	4MT	4MT	4MT	5MT	5MT
Quill diameter	2.95" (75mm)	3.46" (88mm)	3.46" (88mm)	3.46" (88mm)	3.54" (90mm)	3.54" (90mm)
Spindle travel (drilling depth)	7.87" (200mm)	7.87" (200mm)	7.87" (200mm)	9.06" (230mm)	10.24" (260mm)	10.24" (260mm)
Main motor power	2 Hp (1.5Kw)	3 Hp (2.2Kw)	3 Hp (2.2Kw)	4 Hp (3Kw)	5.5 Hp (4Kw)	7.5 Hp (5.5Kw)
Coolant pump motor power	.1 Hp (.07Kw)	.1 Hp (.07Kw)	.1 Hp (.07Kw)	.1 Hp (.07Kw)	.12 Hp (.08Kw)	.12 Hp (.08Kw)
Number of speeds (see speed charts)	9	9	9	9	12	12
Number of automatic feeds	3	4	4	6	6	6
Auto feed range: in./rev. (mm/rev)	.0039/.0079/.0118 (0.1-0.2-0.3)	.0039/.0079/.0118/.0157 (0.1-0.2-0.3-0.4)	.0039/.0079/.0118/.0157 (0.1-0.2-0.3-0.4)	.0039/.0079/.0118/.0157/.0197/.0236 (0.1-0.2-0.3-0.4-0.5-0.6)	.0039/.0079/.0118/.0157/.0197/.0236 (0.1-0.2-0.3-0.4-0.5-0.6)	.0039/.0079/.0118/.0157/.0197/.0236 (0.1-0.2-0.3-0.4-0.5-0.6)
<b>Dimensions and Weights</b>						
Height (A)	81.2" (2285mm)	92.4" (2390mm)	92.4" (2390mm)	97.4" (2475mm)	103.9" (2640mm)	103.9" (2640mm)
Base: Length x Width (B)	31.5" x 18.5" (800x470mm)	31.9" x 21.3" (810x560mm)	31.9" x 21.3" (810x560mm)	33.9" x 21.7" (860x550mm)	35.8" x 23.2" (910x590mm)	35.8" x 23.2" (910x590mm)
Base to spindle (C)	47.24" (1200mm)	49.61" (1280mm)	49.61" (1280mm)	51.18" (1300mm)	49.21" (1250mm)	49.21" (1250mm)
Spindle center to column (D)	14.57" (370mm)	15.16" (385mm)	15.16" (385mm)	14.57" (370mm)	15.75" (400mm)	15.75" (400mm)
Spindle to Table (E)						
Minimum	4.72" (120mm)	5.51" (140mm)	5.12" (130mm)	5.91" (150mm)	3.15" (80mm)	3.15" (80mm)
Maximum	30.71" (780mm)	30.71" (780mm)	30.31" (770mm)	30.71" (770mm)	25.98" (660mm)	25.98"
Worktable: Length x Width (F)	18.9" x 22.1" (480x560mm)	18.9" x 22.1" (480x560mm)	20.5" x 24.4" (520x620mm)	20.5" x 24.4" (520x620mm)	23.6" x 27.6" (600x700mm)	23.6" x 27.6" (600x700mm)
Base height (G)	4.72" (120mm)	5.31" (135mm)	5.31" (135mm)	5.71" (145mm)	6.3" (160mm)	6.3" (160mm)
Column diameter (H)	6.3" (160mm)	7.09" (180mm)	7.09" (180mm)	7.87" (200mm)	8.66" (220mm)	8.66" (220mm)
Net weight	1,080 lbs (490Kg)	1,345 lbs (610Kg)	1,411 lbs (640Kg)	1,587 lbs (720Kg)	1,808 lbs (820Kg)	1,852 lbs (840Kg)
Shipping weight	1,257 lbs (570Kg)	1,532 lbs (695Kg)	1,598 lbs (725Kg)	1,725 lbs (805Kg)	2,025 lbs (920Kg)	2,072 lbs (940Kg)
Shipping dimension (Length x Width x Height)	28" x 40" x 95" (.7 x .1 x 2.4m)	28" x 40" x 103" (.7 x .1.2 x 2.6m)	28" x 40" x 103" (.7 x .1.2 x 2.6m)	28" x 40" x 103" (.7 x .1.2 x 2.6m)	32" x 52" x 111" (.8 x .1.3 x 2.8m)	32" x 52" x 111" (.8 x .1.3 x 2.8m)



### Standard motor: 1800 rpm

Model	Spindle speeds (rpm)
<b>B35</b>	95-135-190-267-380-534-750-1065-1500
<b>B40/45</b>	73-103-149-232-325-472-695-976-1415
<b>B50</b>	66-91-133-206-288-418-617-866-1255
<b>B60</b>	76-96-127-165-238-296-392-513-670-838-1107-1446
<b>B70</b>	62-81-104-133-191-250-321-410-532-683-878-1120

### Standard Fixed Table Models

Model	Description (Dimension see page 21)
<b>1B35</b>	29.1" (740mm) with Fixed Table
<b>1B35RS</b>	29.1" (740mm) with Fixed Table and Tapping
<b>1B40</b>	29.5" (750mm) with Fixed Table
<b>1B40RS</b>	29.5" (750mm) with Fixed Table and Tapping
<b>1B45</b>	29.5" (750mm) with Fixed Table
<b>1B45RS</b>	29.5" (750mm) with Fixed Table and Tapping
<b>1B50</b>	29.1" (740mm) with Fixed Table
<b>1B50RS</b>	29.1" (740mm) with Fixed Table and Tapping

"RS" models are equipped with automatic feed reversing system for tapping.

### Optional spindle motors

Model	Motor	Speed range
<b>B35</b>	1200 rpm	63-1000 rpm
<b>B35</b>	3600 rpm	190-3000 rpm
<b>B35</b>	900/1800 rpm	47-1500 rpm
<b>B35</b>	1800-3600 rpm	95-3000 rpm
<b>B40/45</b>	1200 rpm	50-948 rpm
<b>B40/45</b>	3600 rpm	146-2830 rpm
<b>B40/45</b>	900/1800 rpm	36-1415 rpm
<b>B40/45</b>	1800-3600 rpm	73-2830 rpm
<b>B50</b>	1200 rpm	46-878 rpm
<b>B50</b>	3600 rpm	132-2510 rpm
<b>B50</b>	900/1800 rpm	33-1255 rpm
<b>B50</b>	1800-3600 rpm	66-2510 rpm
<b>B60</b>	1200 rpm	54-1012 rpm
<b>B60</b>	3600 rpm	152-2892 rpm
<b>B60</b>	900/1800 rpm	38-1446 rpm
<b>B60</b>	1800-3600 rpm	76-2892 rpm
<b>B70</b>	1200 rpm	40-748 rpm
<b>B70</b>	3600 rpm	124-2440 rpm
<b>B70</b>	900/1800 rpm	31-1120 rpm
<b>B70</b>	1800/3600 rpm	62-2240 rpm