

Series A Geared-drive Round-column Drills

With Mechanical Clutch Automatic Feed Control

The A series of Industrial Drilling Machines are capable of handling heavier workpieces with a wide range of drilling and tapping capacities. Designed for easy operation with a mechanical clutch for precise automatic feed control that can be activated from the feed crank handle or by the lever on the front of machine head.

Standard Features and Equipment:

- Drilling capacity in steel: up to 1.97" (50mm) maximum
- Drilling capacity in cast iron: up to 2.36" (60mm) maximum
- Tapping capacity in steel: up to 1.42" (36mm) maximum
- Tapping capacity in cast iron: up to 1.65" (42mm) maximum
- Automatic feed reversing system for tapping on **"RS"** models
- Automatic feed and cut-off by mechanical 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 Equipment:

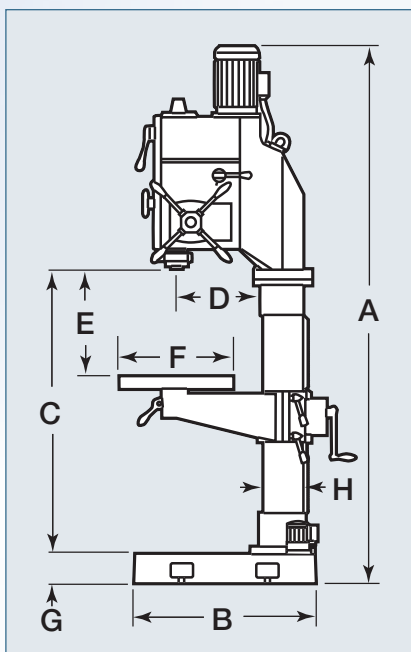
- Rotating table and tilting support
- Automatic pitch control tapping with single speed brake motor
- Automatic pitch control tapping with pneumatic rapid approach
- Master guide spindle and nut set for automatic pitch control tapping
- 50% lower feed range
- Mechanical spotface device
- Pneumatic counterbalance
- Multi-spindle head guide rod
- Union, dragging cone and assembly for multi-spindle head
- Multi-spindle head guide rod
- START-STOP and emergency STOP pendent control
- 8" column riser
- Cross slide table
- Cycle start foot pedal
- Foot pedal for reversing
- Worklight with magnetic base
- Coolant system with independent container



*Built-in low voltage electrics and
automatic tool ejection system lever*

Capacities, Specifications and Dimensions

Standard Models Auto feed reversing for tapping Models	A35 A35RS	A40 A40RS	A45 A45RS	A50 A50RS
Capacities:				
Maximum drilling capacity in steel	1.38" (35mm)	1.57" (40mm)	1.77" (45mm)	1.97" (50mm)
Maximum drilling capacity in cast iron	1.77" (45mm)	2.17" (50mm)	2.17" (55mm)	2.36" (60mm)
Maximum tapping capacity in steel	1" (27mm)	1.3" (33mm)	1.3" (33mm)	1.42" (36mm)
Maximum tapping capacity in cast iron	1.3" (33mm)	1.57" (40mm)	1.57" (40mm)	1.65" (42mm)
Specifications:				
Spindle taper	4MT	4MT	4MT	4MT
Quill diameter	2.95" (75mm)	3.46" (88mm)	3.46" (88mm)	3.46" (88mm)
Spindle travel (drilling depth)	7.87" (200mm)	7.87" (200mm)	7.87" (200mm)	9.06" (230mm)
Main motor power	2Hp (1.5Kw)	3Hp (2.2Kw)	3Hp (2.2Kw)	4Hp (3Kw)
Coolant pump motor power	.1Hp (.07Kw)	.1Hp (.07Kw)	.1Hp (.07Kw)	.1Hp (.07Kw)
Number of speeds	9	9	9	9
Number of automatic feeds	3	4	4	4
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)	
Dimensions and Weights				
Height (A)	81.2" (2265mm)	92.4" (2390mm)	92.4" (2390mm)	97.4" (2475mm)
Base: length x width (B)	31.5" x 18.5" (800x470mm)	31.9" x 21.3" (810x540mm)	31.9" x 21.3" (810x540mm)	33.9" x 21.7" (860x550mm)
Base to spindle (C)	47.24" (1200mm)	49.61" (1260mm)	49.61" (1260mm)	51.18" (1300mm)
Spindle center to column (D)	14.57" (370mm)	15.16" (385mm)	15.16" (385mm)	14.57" (370mm)
Spindle to Table (E)				
Minimum	4.72" (120mm)	5.51" (140mm)	5.12" (130mm)	5.91" (150mm)
Maximum	30.71" (780mm)	30.71" (780mm)	30.31" (770mm)	30.31" (770mm)
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)
Base height (G)	4.72" (120mm)	5.31" (135mm)	5.31" (135mm)	5.71" (145mm)
Column diameter (H)	6.3" (160mm)	7.09" (180mm)	7.09" (180mm)	7.87" (200mm)
Net weight	1,080 lbs (490mm)	1,345 lbs (610mm)	1,411 lbs (640mm)	1,565 lbs (710mm)
Shipping weight	1,257 lbs (570mm)	1,532 lbs (695mm)	1,598 lbs (725mm)	1,725 lbs (795mm)
Shipping dimension (length x width x height)	28" x 40" x 95" (.7x1x2.4m)	28" x 48" x 103" (.7x1.2x2.6m)	28" x 48" x 103" (.7x1.2x2.6m)	28" x 48" x 103" (.7x1.2x2.6m)



Standard motor: 1800 rpm

Model	Spindle speeds (rpm)
A35	95-135-190-267-380-534-750-1065-1500
A40/45	73-103-149-232-325-472-695-976-1415
A50	66-91-133-206-288-418-617-856-1255

Standard Fixed Table Models

Model	Description (Dimension see page 21)
1A35	29.1" (740mm) with Fixed Table
1A35RS	29.1" (740mm) with Fixed Table and Tapping
1A40	29.5" (750mm) with Fixed Table
1A40RS	29.5" (750mm) with Fixed Table and Tapping
1A45	29.1" (740mm) with Fixed Table
1A45RS	29.1" (740mm) with Fixed Table and Tapping
1A50	29.1" (740mm) with Fixed Table
1A50RS	29.1" (740mm) with Fixed Table and Tapping

Optional spindle motors

Model	Motor	Speed range
A35	1200 rpm	63-1000 rpm
A35	3600 rpm	190-3000 rpm
A35	900/1800 rpm	47-1500 rpm
A35	1800-3600 rpm	95-3000 rpm
A40/45	1200 rpm	50-948 rpm
A40/45	3600 rpm	146-2830 rpm
A40/45	900/1800 rpm	36-1415 rpm
A40/45	1800-3600 rpm	73-2830 rpm
A50	1200 rpm	46-878 rpm
A50	3600 rpm	132-2510 rpm
A50	900/1800 rpm	33-1255 rpm
A50	1800-3600 rpm	66-2510 rpm

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