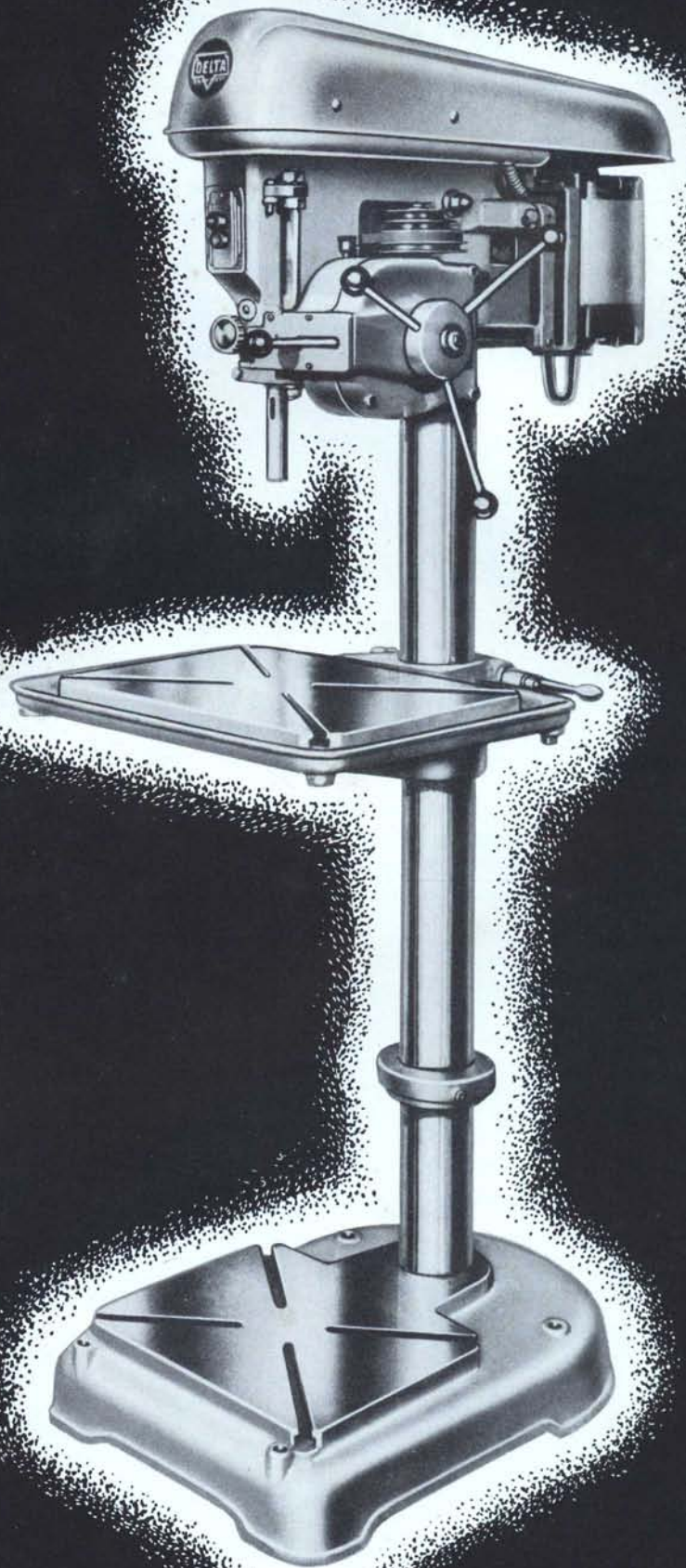


the
NEW

DELTA[®]
ROCKWELL

20"
Drill
Press
Line



NEW Delta 20" Drill Press

Engineered for Production Tooling

MASSIVE CONSTRUCTION—for continuous, precision operation

- The NEW Delta 20" Drill Press is a rugged, heavy duty tool that will maintain *close* tolerances in *continuous* service.
- Massive one-piece head and centrifugally cast, precision ground, cast iron column (with 1/2" thick wall) insure rigidity and accuracy during continuous operations under peak loads.
- Heavy, 10-spline, manganese steel spindle is 31/32" in diameter. "Floating Drive" means no belt pull on spindle . . . maintains spindle alignment.
- Four-bearing spindle construction with double-row, internally preloaded, heavy-duty ball bearing close to the work load eliminates spindle play and guarantees continued accuracy.
- Large, 2 3/8" diameter quill is supported by three precision bored lands in the head. Two adjusting screws at front of head may be easily taken up to compensate for wear after long use.

BIG CAPACITY—for general shop or factory use

- Drilling capacities—3/4" in steel—1" in cast iron.
- Long columns provide extra big capacity for large work—26" from spindle nose to table on bench model—35" on floor model. Spindle nose to base on floor model—44".
- Full 6" spindle travel with heavy-duty, adjustable spring return.
- Floor model has large 15" x 18" ground work surface on table and 13 1/2" x 14 3/4" on base. Both table and base are provided with true, blind T-slots for 1/2" bolts.

PLUS THESE "EXTRA" FEATURES

- Elevating mechanism furnished as standard equipment on all models.
- A stronger-than-steel fiber glass reinforced belt guard "swings back" for easy belt and speed changing—won't crack like cast iron, dent like steel, rattle, corrode or rust.
- Depth gage on stop rod plus a quick-set depth gage on the pinion with zero start feature and magnified scale for easy reading.
- A quick-release device that is mounted on the forward end of the motor plate permits easy belt changing with no possibility of damage to the belt.
- Pulley and spindle bearings as well as all moving parts of the quill and feed mechanism are lubricated from a single oil hole conveniently located above the spindle.

Production tooling with the NEW Delta 20" Drill Press combines the flexibility of power tools *with the stamina and capacity of special-purpose machine tools.*

It is more suitable than a machine tool in many instances because it offers the user these important advantages: low original investment . . . low maintenance cost . . . flexibility—can easily be converted into a special-purpose machine . . . versatility—can do almost every type of operation performed by a special-purpose machine . . . portability—light in weight for quick placement in the production line to speed up production or relieve the load on heavier, more costly machines . . . immediate delivery—no lengthy lead time required for tooling.

Available in 28 models—bench or floor model—No. 2 or 3 Morse Taper Spindle—single or multiple spindles—hand or power feed. In addition to a wide line of accessories, Delta offers you components such as heads, columns and production tables for making up your own special-purpose machines.

specifications

Overall Dimensions:

Bench Type	
Height	.55"
Width	.23"
Front to Rear	.40"
Floor Type	
Height	.74"
Width	.22"
Front to Rear	.37"
Table Working Surface	
Production (supplied with single spindle floor models)	.15 x 18"
Tilting Table	.16 x 18"

Base Working Surface

Bench Model	.18 x 24"
Floor Model	.13 1/2 x 14 3/4"

Quill

Stroke	.6"
Diameter	.2 3/8"

Capacities

Dia. Hole in Cast Iron	.1"
Dia. Hole in Steel	.3/4"

Spindle Speed

W/1725 rpm motor	.500, 800, 1200, 1800, 2600 rpm
W/1140 rpm motor	.330, 520, 800, 1200, 1700 rpm

Spindle Feeds

Power Feed Models	.004, .006, .009, .012 ipr
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DELTA 20" DRILL PRESS

catalog listing

SINGLE SPINDLE MODELS

Spindle and Feed	Bench Model (With Production Table)	Floor Model (With Production Table)	Over Head Model (With 33" Column and Ball Bearing Carriage)
No. 2 Morse Taper.....Hand Feed	CAT. NO. 20-428	CAT. NO. 20-421	CAT. NO. 20-429
No. 3 Morse Taper.....Hand Feed	CAT. NO. 20-438	CAT. NO. 20-431	CAT. NO. 20-439
No. 2 Morse Taper.....Power Feed	CAT. NO. 20-528	CAT. NO. 20-521	CAT. NO. 20-529
No. 3 Morse Taper.....Power Feed	CAT. NO. 20-538	CAT. NO. 20-531	CAT. NO. 20-539

MULTIPLE SPINDLE MODELS

No. of Spindles	No. 2 Morse Taper Hand Feed	No. 3 Morse Taper Hand Feed	No. 2 Morse Taper Power Feed	No. 3 Morse Taper Power Feed
2 Spindle.....One 1/2" Pipe Tap at Each Rear Corner	CAT. NO. 20-422	CAT. NO. 20-432	CAT. NO. 20-522	CAT. NO. 20-532
3 Spindle.....One 1/2" Pipe Tap at Each Rear Corner	CAT. NO. 20-423	CAT. NO. 20-433	CAT. NO. 20-523	CAT. NO. 20-533
4 Spindle.....One 1/2" Pipe Tap at each of 4 corners	CAT. NO. 20-424	CAT. NO. 20-434	CAT. NO. 20-524	CAT. NO. 20-534
6 Spindle.....One 1/2" Pipe Tap at each of 4 corners	CAT. NO. 20-426	CAT. NO. 20-436	CAT. NO. 20-526	CAT. NO. 20-536

The 2, 3 and 4 spindle drill presses have one-piece tables. The 6 spindle drill press has a two-piece table. Tables on multiple spindle units have 1 7/8" coolant trough. Table working surface is 32 1/8" from the floor. Six spindle units have three legs—all other multiple spindle units have two legs. Maximum distance spindle nose to table with No. 3 M.T.—26", with No. 2 M.T.—26 1/2"

STANDARD EQUIPMENT ON SINGLE AND MULTIPLE SPINDLE MODELS

Hand Feed Models: No. 521 V-belt, No. 49-235 motor pulley (3/4" bore), No. 20-661 raising mechanism and belt guard. Motor and motor controls not included with machine.

Power Feed Models: No. 521 V-belt, No. 49-101 V-belt, No. 49-102 V-belt, No. 49-235 motor pulley (3/4" bore), No. 20-661 raising mechanism and belt guard. Motors and motor controls not included with machine.

MOTORS AND MOTOR CONTROLS*

FOR SINGLE PHASE OPERATION

Motor, 1 HP, repulsion induction, 115/230V, 60 cy, AC, 1725 rpm. Includes on-and-off switch and 8' cord with plug. **CAT NO. 84-910**

*Push Button Switch. Includes 4-wire flexible conduit assembly, wiring diagram and everything needed for use with No. 84-910 motor. Also may be used with DC motors. **CAT NO. 20-611**

FOR THREE PHASE OPERATION

Motor, 1 HP, 208-220/440V, 50/60 cy, AC, 1425/1725 rpm. Without switch or power cord. **CAT NO. 86-920**

Motor, 1 HP, 208/220/440V, 60 cy, AC, 1140 rpm. Without switch or power cord. **CAT NO. 86-922**

Switch, Overload. Used with No. 20-613 switch. Easy to mount with No. 20-614 mounting bracket. Specify horsepower and voltage when ordering. **CAT NO. 49-365**

Starter, Magnetic. For 60 cy, 208-220V only. Provides low-voltage, no voltage and overload protection. Used with No. 20-612 switch. Easy to mount with No. 20-614 mounting bracket. Specify horsepower when ordering. **CAT NO. 49-396**

Starter, Magnetic. For 60 cy, 440V only. Provides low-voltage, no voltage and overload protection. Used with No. 20-612 switch. Easy to mount with No. 20-614 mounting bracket. Specify horsepower when ordering. **CAT NO. 49-397**

*Push Button Magnetic Control Switch. Includes 3-wire flexible conduit assembly, wiring diagram and everything needed for use with motor No. 86-920 or No. 86-922 and magnetic starters Nos. 49-396 or 49-397. **CAT NO. 20-612**

*Push Button Manual Control Switch. Includes 6-wire flexible conduit assembly, wiring diagram and everything needed for use with Motor No. 86-920 or No. 86-922 and No. 49-365 overload switch. **CAT NO. 20-613**

Mounting Bracket. Includes screws for mounting motor controls to motor mounting plate of drill press. Used with Nos. 49-365, 49-396 and 49-397. **CAT NO. 20-614**

WHAT CONTROLS TO ORDER

For 84-910 motor, single phase

1. (115 or 230V) No. *20-611 only

For 86-920 or 86-922 motor, three phase

A. Manual
1. (208-220/440V) Nos. 49-365, *20-613, 20-614

B. Magnetic
1. (208-220V) Nos. 49-396, *20-612, 20-614 or
2. (440V) Nos. 49-397, *20-812, 20-614

*For maximum safety, convenience, and good appearance we recommend the push button switch type of control—Nos. 20-611, 20-612, or 20-613. They give the drill press a deluxe machine tool appearance and bring the motor control to the most convenient position in the center of the head, accessible to either left or right hand. Protruding stop button and shrouded start button prevent accidental starts and provide safest control for quick emergency stops.

For Three Phase Motor No. 86-920 or No. 86-922, the Manual Starter No. 1320 or Magnetic Starters Nos. 1321 or 49-393 may be used.

NEW Components and Accessories for Delta 20" Drill Press

Head, No. 2 Morse Taper, Hand Feed, with belt guard, motor pulley ($\frac{3}{4}$ " bore) and V-belt; less raising mechanism, push button switch and motor. **CAT. NO. 20-427**

Head, No. 3 Morse Taper, Hand Feed, with belt guard, motor pulley ($\frac{3}{4}$ " bore) and V-belt; less raising mechanism, push button switch and motor. **CAT. NO. 20-437**

Head, No. 2 Morse Taper, Power Feed, with belt guard, motor pulley ($\frac{3}{4}$ " bore) and V-belt; less raising mechanism, push button switch and motor. **CAT. NO. 20-527**

Head, No. 3 Morse Taper, Power Feed, with belt guard, motor pulley ($\frac{3}{4}$ " bore) and V-belt; less raising mechanism, push button switch and motor. **CAT. NO. 20-537**

Column, $3\frac{3}{4}$ " x 33", cast iron. **CAT. NO. 20-625**

Column, $3\frac{3}{4}$ " x 42", cast iron. **CAT. NO. 20-626**

Column, $3\frac{3}{4}$ " x 66", cast iron. **CAT. NO. 20-627**

Column, $3\frac{3}{4}$ " x 78", steel. **CAT. NO. 20-628**

Column ($3\frac{3}{4}$ " x 42") and Flange Assembly. Flange is same as used on multiple spindle drill presses and is shrunk onto column. **CAT. NO. 20-629**

Flange, with screws, for mounting column on table (not for single spindle floor models). **CAT. NO. 20-624**

Raising Mechanism for head or table of 20" Drill Press. Includes ball bearing thrust collar, rack, gear assembly and crank. **CAT. NO. 20-661**

Tilting Table, ground work surface 16" front to back by 18" left to right, slotted, with column bracket and tilt angle scale. Without No. 20-661 Raising Mechanism. For single spindle floor model drill presses. **CAT. NO. 20-660**

Production Table, 15" x 18" ground work surface, with 4 diagonal and 2 parallel blind T slots for $\frac{1}{2}$ " bolts. Without No. 20-661 Raising Mechanism. For single spindle floor model drill presses. **CAT. NO. 20-650**

Production Table, ground work surface 24" front to back by 18" wide, for single spindle bench model. Does not fit No. 50-399 Legs. **CAT. NO. 20-651**

Production Table, one-piece, for two spindle setup. Drilled and tapped for column mounting flanges on $17\frac{1}{2}$ " centers. Ground work surface $24\frac{1}{2}$ " x $35\frac{1}{2}$ ". Fits No. 50-399 Legs. **CAT. NO. 20-652**

Production Table, one-piece, for three spindle setup. Drilled and tapped for column mounting flanges on $26\frac{1}{4}$ " centers. Machined work surface $24\frac{1}{2}$ " x $70\frac{1}{2}$ ". Fits No. 50-399 Legs. **CAT. NO. 20-653**

Production Table, one-piece, for four spindle setup. Drilled and tapped for column mounting flanges on $17\frac{1}{2}$ " centers. Machined work surface $24\frac{1}{2}$ " x $70\frac{1}{2}$ ". Fits No. 50-399 Legs. **CAT. NO. 20-654**

Production Table, two-piece, for six spindle setup. Drilled and tapped for column mounting flanges on $17\frac{1}{2}$ " centers. Machined work surface $24\frac{1}{2}$ " x $105\frac{1}{2}$ ". Fits No. 50-399 and No. 50-506 Legs. **CAT. NO. 20-656**

Production Table, right end section, drilled and tapped for two columns on $17\frac{1}{2}$ " centers, 25 " x $35\frac{1}{4}$ " ground work surface. **CAT. NO. 20-657**

Production Table, left end section, drilled and tapped for two columns on $17\frac{1}{2}$ " centers, 25 " x $35\frac{1}{4}$ " ground work surface. **CAT. NO. 20-658**

Production Table, center section, drilled and tapped for two columns on $17\frac{1}{2}$ " centers, 25 " x 35 " ground work surface. **CAT. NO. 20-659**

Legs, steel, one pair $27\frac{1}{2}$ " high. For mounting production tables Nos. 20-652, 20-653, 20-654 and 20-656. **CAT. NO. 50-399**

Leg, steel, $27\frac{1}{2}$ " high. For mounting production tables. Cannot be used with table No. 20-651. **CAT. NO. 50-506**

Riser Blocks, cast iron, one pair, 2" high with studs, nuts and lock washers for mounting under Legs 50-399 and 50-506. One pair required for each single leg to raise machine 2". Two blocks can be stacked to raise machine 4". **CAT. NO. 50-400**

Motor Pulley, 5 step, (specify $\frac{3}{4}$ ", $\frac{7}{8}$ " or 1" bore). **CAT. NO. 49-235**

V-belt, Standard, $62\frac{3}{4}$ " O. C. **CAT. NO. 521**

V-belt, for Power Feed, 29" O. C. **CAT. NO. 49-101**

V-belt, for Power Feed, 24" O. C. **CAT. NO. 49-102**

Mortising Attachment. Includes fence with mounting bolts, two hooked rods, adjustable hold down and chisel holder. **CAT. NO. 20-640**

Note: Minimum center to center distances for columns are: Hand Feed Models—13"; Power Feed Models—16".

The catalog numbers listed below are applicable to the new 20" Drill Press. They are already listed and described in the drill press section of the AB Catalog: Nos. 504, 505,

506, 508, 514, 515, 516, 518, 968, 1024, 1025, 1026, 1320, 17-802, 17-820, 24-902, 49-312, 49-313, 49-393, 49-394, 49-610, 49-611, 49-614, 49-618.



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