DELTA MILWAUKEE

®

PRODUCTION MACHINE TOOLS

CATALOG B-54

With Special Insert of
RADIAL SAWS
See Page 20

Distributed By

DELTA POWER TOOL DIVISION
ROCKWELL MANUFACTURING COMPANY

400 N. LEXINGTON AVE. PITTSBURGH 8, PENN.

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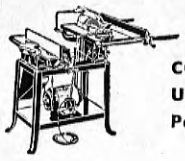
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Look For These Quality Features Found in DELTA Power Tools

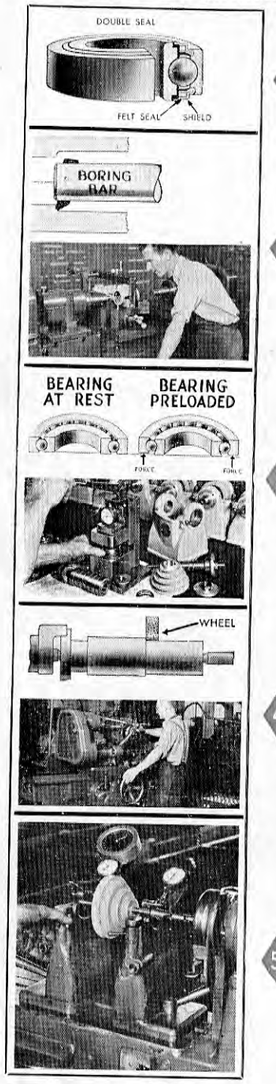
The outstanding performance of Delta Tools and their production records in thousands of shops is based on hard, cold facts; these machine tools deliver more accuracy, have longer life, are lower in cost, have greater flexibility and adaptability than any similar line.

There are five basic features you must have if you are to get the kind of operation you need in machines of this kind:

1. Lubricated-for-life, double-sealed ball bearings.
2. Precision bored seats in which the bearings are held.
3. Bearings that are "pre-loaded" to give accuracy and rigidity.
4. All spindles, shafts, etc., precision ground.
5. All high-speed pulleys and rotating parts dynamically balanced.

Most of these features are exclusive—can be found only in Delta-Milwaukee machines, and no line has all these features together with our exclusive patents.

REMEMBER—Other machines may look like Delta's on casual inspection, but the hidden value of Delta's design, as well as the more obvious advantages of the machine, make Delta machines, dollar for dollar, the best machine tools you can purchase.



1. Lubricated-for-life Ball Bearings Eliminate Lubrication Problems

The high speed bearings in Delta machines rotate on needle point contacts between the inner and outer races. It is obvious that any dust or abrasive particles would do serious harm. Delta uses a sealed bearing which keeps dust and grit out and prevents loss of lubricant. At the factory these bearings are packed for life with the proper lubricant. Thus these bearings need never be oiled for their entire life, reducing maintenance costs. No dirt can enter, no lubricant can leak out—the ideal bearing for the long life you need in your machine tools.

2. Precision Bored Bearing Seats Assure Accuracy and Smooth Operation

The advantages of using a good lubricated-for-life ball bearing is entirely lost unless the bearing is held firmly in a perfectly round, accurate and properly lined-up bearing seat in the machine casting. Usually the bearing seat is bored on a lathe with a tool that produces a rather large chip by taking a heavy cut at slow speed. The result is an uneven seat with the bearing riding on just the high points, often becoming loose after a few hours of operation. Precision or "Diamond" boring is used in Delta bearing seats. The seat is perfectly smooth. The bearing fits closely, is tightly held and cannot become loose. The seat is perfectly round, true to size, is in correct position and in PERFECT ALIGNMENT.

3. Preloaded Bearings Provide Maximum Rigidity and Accuracy Under Load

The preloading of the bearings is one of the most important quality features in Delta machines. Most bearings have inherent "end play" or movement of a few thousandths of an inch and will not run true. The act of preloading removes this play. The inner race is held rigid and the outer race forced up or down as shown by the line sketch to the left. This eliminates all play in the bearing, and by adding a slight additional preload the bearing runs true and accurate. Preloading the bearings improves the machines' original accuracy, maintains it longer, and increases the bearing life even when the nature of the work permits continued use until the bearings are completely worn out.

4. All Spindles, Arbors and Collars Are Precision Ground For Accuracy

All of the quality features found in Delta machine tools are important and necessary for precision work. If you eliminate any one you would nullify the value of the others. To continue the accuracy you need, all shafts, spindles and collars are precision ground. This is done by rotating the part against an accurately controlled revolving grinding wheel. Thus exact sizes of parts are maintained and extremely close tolerances are held between the shaft and the inner bearing race. This quality feature provides almost a solid member from the seat, through the bearing and shaft to the other seat with no opportunity for "play." The smoothly ground and almost polished shaft provides full even contact between shaft and bearing at all times.

5. Dynamic Balance of Rotating Parts Insures Smooth, True Performance

A pulley not in perfect balance causes vibration which places a tremendous strain on the bearings. This causes undue wear and an immediate loss of accuracy. To overcome this, all pulleys running at high speed in Delta machines are dynamically balanced. In dynamic or running balance each pulley is put upon a sensitive balancing machine as shown to the right and is actually run. Dial indicators show exactly where any unbalanced weight is located, and this is eliminated by removing a small amount of metal. You will appreciate this because you can continue to do accurate work and your Delta machines will continue to give long, satisfactory and accurate service.

Delta machines are manufactured and sold under the following patents either owned by Delta or under which Delta is licensed: Other U. S. and foreign patents are pending: 1,697,669; 1,790,288; 1,830,813; 1,877,705; 1,894,010; 1,896,924; 1,902,270; 1,906,190; 1,910,651; 1,930,022; 1,938,548; 1,938,549; 1,947,885; 1,959,199; 1,963,688; 1,964,651; 1,964,652; 1,967,791; 1,969,827; 1,975,562; 1,984,500; 1,992,726; 2,004,678; 2,007,887; 2,009,304; 2,016,843; 2,020,219; 2,020,222; 2,025,834; 2,032,233; 2,038,810; 2,040,718; 2,041,578; 2,045,422; 2,067,652; 2,069,395; 2,073,430; 2,085,131; 2,085,235; 2,085,236; 2,099,321; 2,108,086; 2,122,966; 2,168,282; 2,193,946; 2,202,878; 2,210,135; 2,232,149; 2,240,426; 2,265,335; 2,265,406; 2,265,407; 2,265,408; 2,325,082; 2,325,083; 2,346,198; 2,347,223; 2,429,250; 2,430,448; 2,432,058; 2,452,089; Des. 85,847; Des. 89,818; Des. 94,788; Des. 98,280; Des. 99,614; Des. 102,402; Des. 105,429; Des. 105,621; Des. 107,805; Des. 109,628; Des. 117,460; Des. 117,461; Des. 141,152; Des. 148,827; Des. 152,225; Des. 152,226; Des. 152,227; Des. 152,228; Des. 156,923. **Canadian patents:** 314,585 — 1931; 340,750 — 1934; 340,751 — 1934; 340,752 — 1934; 346,174 — 1934; 346,175 — 1934; 351,532 — 1935; 353,074 — 1935; 354,273 — 1935; 354,274 — 1936; 365,682 — 1937; 370,828 — 1937; 427,831; 435,705; 460,144 — 1949. **Union of South Africa:** 637/43. **Great Britain:** 574,335. **Australia:** 120,058; 123,057; 125,599; 125,600. **Brazil:** 34,178.

Foreign distribution, except territories of the U. S. A., Canada and the Philippine Islands, is through Tauco Export Corporation, 38 Pearl St., New York 4, New York.

Prices shown in the latest price sheet supersede all prices previously quoted. All prices subject to change without notice. The right is reserved to make changes in design or equipment at any time, without incurring any obligation to install these on machines previously sold, and to discontinue models of machines, motors or accessories at any time without notice. Any sales tax or other tax imposed will be added to the quoted prices.

Rockwell MANUFACTURING COMPANY
DELTA POWER TOOL DIVISION PITTSBURGH 8, PENNSYLVANIA

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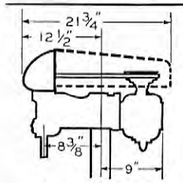
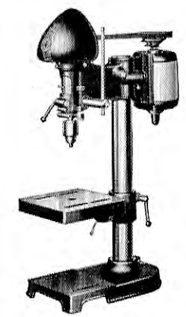
14-inch Bench and Floor Type Single-Spindle Drill Presses



SPECIFICATIONS

Height—
Floor Mod..66½"
Bench Mod..36½"
Col. Diam.....2¾"
Quill Stroke .....4"
Speeds—
High-Speed Model —680, 1250, 2400, 4600 r.p.m.
Slo-Speed Model —470, 780, 1300, 1950 r.p.m.
Cap...½" Cast Iron, ⅜" in Steel
Built-In Depth Gage
Depth Scale on Quill
Pulley Guard



Bench Model No. 14-007
Shown with Motor

Floor Model No. 14-207
Shown with Motor

Floor Model No. 14-212
Shown with Motor

Type	Standard Tilting Table		Standard Tilting Table		Production Table	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 1 MORSE TAPER SPINDLE						
Machine No.	14-005	14-006	14-205	14-206	14-210	14-211
Table Working Surface	10"x 10"	10"x 10"	10"x 10"	10"x 10"	11"x 16"	11"x 16"
Spin. to Table Max.	11⅞"	11⅞"	41¾"	41¾"	36½"	36½"
Spin. to Base Max.	17⅝"	17⅝"	46¾"	46¾"	46¾"	46¾"
Ship. Wt. Lbs.	110	110	176	170	237	211
WITH ½ INCH KEY CHUCK SPINDLE						
Machine No.	14-007	14-008	14-207	14-208	14-212	14-213
Table Working Surface	10"x 10"	10"x 10"	10"x 10"	10"x 10"	11"x 16"	11"x 16"
Spin. to Table Max.	11⅜"	11⅜"	41¼"	41¼"	36"	36"
Spin. to Base Max.	17⅛"	17⅛"	46¼"	46¼"	46¼"	46¼"
Ship. Wt. Lbs.	110	110	176	170	220	220

Before You Buy A Drill Press Make Sure It Has Both A Self-Aligning Drive and A Free-Floating Spindle

The design of a high-speed telescoping drill press spindle drive requires more than precision machining—it requires a design that will stay in alignment.

The misalignment encountered in service may be small—perhaps not more than .002"—but even this is sufficient to cause trouble in high-speed spindles, and it is this trouble that the Delta-Milwaukee patented type of drive is designed to prevent.

The Spindle Drive STAYS Aligned!

From the outside, the Delta spindle pulley looks like any other simple pulley. But, it is actually radically different. The pulley itself is balanced and is carried on a sealed-for-life ball bearing, of special design, with enormous reserve capacity above that required to take the belt pull. This bearing is mounted by means of a special extension of the inner race so that it cannot be sprung.

The actual drive of the pulley is transmitted to the spindle through a floating sleeve, with spur-gear teeth cut around its hub. These teeth mesh with an internal gear in the pulley so that the sleeve can "float" in all directions except the driving direction. This floating sleeve drives the spindle through splines fully 3⅛" long. The under-side of the pulley is covered with a heavy pressed-steel plate, which secures the bearing, covers the pulley ribs, prevents power-wasting "fan action" and keeps out dirt when the drill head is operated upside-down.

Study the action of the floating sleeve and you will see that you not only get a true "free-floating" drive, but that you also get complete freedom from misalignment troubles due to wear or any other service conditions. This drive stays aligned!

Low Cost — Low Maintenance — Portability

These Drill Presses have become extremely popular in shops where low cost, low maintenance and portability are of importance. Having a capacity of ½" in cast iron there are dozens of places where this drill press will quickly pay for itself. Not only does it combine all the best features of drill presses of this kind, but it has additional advantages which make it the favorite wherever used. Its self-aligning drive and free-floating spindle, its sturdy quill design and construction, its ease of operation, its lubricated-for-life ball bearings—these are but a few of the "plus" values you receive in these fine accurate drill presses.

High-speed models include No. 387 V-belt and No. 985 motor pulley.

Slo-speed models include No. 430 V-belt and No. 985 motor pulley.

Order Key Chuck spindle machines where straight shank drills only are to be used. This chuck will take drills from No. 60 to full ½".

Order No. 1 Morse taper spindle machines where taper shank drills only are to be used. Spindles in these machines are easily changed.

See complete listing on page 4. For special setups and for accessories, see page 5.

Motors and switches not included with machines. Must be ordered separately.

Motors Recommended: Heavy Duty: 62-610, 66-320; Medium Duty: 62-110, 66-320; Light Duty: 62-110.

For 3 Ph. motors use No. 1320 3-Phase Manual Starter or Magnetic Starters No. 1329 or No. 1321 with No. 1322 Mounting Parts.

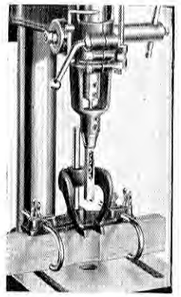
Use No. 1331 Switch Rod for all Single-Phase Motors.

See page 36 for Motors and Switch Parts.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION
ROCKWELL MANUFACTURING COMPANY

Drill Press Accessories and Attachments For Many Jobs



Attachment Converts 14" Drill Press Into An Efficient Mortiser

Woodworkers of all kinds—cabinet makers, contractors, repair men, instructors, pupils in school shops—everyone who makes mortise and tenon joints will find the No. 976 Mortising Attachment a time and labor saver.

Consists of heavy fence bolted to the drill press table. Two hooked rods hold the work against the fence and an adjustable hold-down keeps the work from being raised when the chisel is withdrawn. Capacity under hold-down 4¾"; capacity from ends of hooked rods to fence 2¾". Must be used with No. 974 spindle.

No. 976—Mortising Attachment complete. Without spindle. 7 lbs.

SHAPER ACCESSORIES FOR YOUR 14" DRILL PRESS

With these shaper cutters you can shape hundreds of different mouldings on your drill press. Must be used with No. 977 Spindle or with No. 974 Spindle and No. 978 Adapter. Also used on Shaper.

No.	Dia.	Width	Radius	Max. Depth of Cut
Concave				
D-1	61/64"	11/64"	1/8"	3/16"
D-2	61/64"	17/64"	3/16"	3/16"
D-3	61/64"	23/64"	1/4"	3/16"
D-4	61/64"	7/16"	5/16"	3/16"
Convex				
D-10	1-1/64"	11/64"	1/8"	15/64"
D-11	1-1/16"	17/64"	3/16"	1/4"
D-12	1-3/32"	23/64"	1/4"	17/64"
D-13	1-1/8"	7/16"	5/16"	17/64"
Corner Bead				
D-20	1"	7/32"	1/8"	7/32"
D-21	1-1/32"	7/16"	1/4"	15/64"
Spindle Bead				
D-30	1-3/16"	9/32"	1/8"	5/16"
D-31	1-15/64"	11/32"	5/32"	11/32"
Surface Bead				
D-40	1-3/32"	19/64"	3/32"	17/64"
D-41	1-5/32"	25/64"	1/8"	19/64"
Round Fluting				
D-50	1-1/8"	3/16"	3/32"	9/32"
D-51	1-1/8"	17/64"	1/8"	5/16"
Straight Face				
D-60	61/64"	1/8"	.....	3/16"
D-61	61/64"	5/32"	.....	3/16"
D-62	61/64"	3/16"	.....	3/16"
D-63	61/64"	1/4"	.....	3/16"
D-69	1-1/4"	1"	.....	11/32"
V-Fluting				
D-70	1-1/8"	11/64"	.....	9/32"
D-71	1-7/32"	9/32"	.....	21/64"
Combination Quarter Round				
D-80	1-1/4"	7/16"	1/8"–3/16"	11/32"

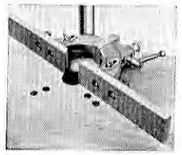
Note: We cannot supply custom shapes.

No. 978—Adapter for 5/16" hole cutter with nut. Fits No. 974 spindle.

No. 979—Set of six depth collars. 5/16" hole.

No. 981—Box only for cutters.

No. 43-817 — Safety Ring Guard with mounting bracket. 8 lbs.

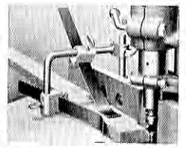


Fully adjustable Fence with both halves independent of each other. Adjustable endwise so opening may be made small as possible to fit the work—a good safety feature. Used with shaper table No. 11-806.

No. 982—Shaper Fence, 12 lbs.

Large Wood Shaper Table made of plywood and drilled for easy fastening to top of regular Drill Press table. Provides large working surface, and firm support for all shaping on Drill Press.

No. 11-806—Plywood Shaper Table 17-13/16"x 23-13/16", ¾" thick with bracket for mounting ring guard. 15 lbs.



Spring Hold-Downs hold work against fence and table. Can be used on either end of the fence, and are provided with universal brackets and long flexible springs that accommodate work up to 3½" thick.

No. 983—Set of Spring Hold-Downs with straight and bent posts, two springs, two spring brackets, and one post bracket. 2 lbs.

Three Lip Cutters provide hundreds of moulding shapes. Made of special steel and hardened in oil. Cutters can be resharpened again and again by merely honing across the face of the cutting lips. Also for use with shaper.

No. 980—Set of 24 Shaper Cutters D-1 to D-80, listed at left, including D-69 blank cutter. With No. 978 Adapter and 6 collars in box. 2 lbs.

Handy, Quick-Set Angle Vises for Drill Press, Grinder & Bench Work

Of tested quality and usefulness, these vises quickly raise to different angles and just as quickly lock in place. Side of vise is accurately graduated for angle work.

Accurately machined with base, body and sliding jaw of semi-steel, clamping jaws of hardened steel. Clamping screw has fine pitched thread and long bearing in vise body.

No.	Jaw	Opening	Overall Length	Ship. Wt. Lbs.
*1024	1½"x 1"	1⅝"	4⅝"	5
1025	1½"x 1"	1⅝"	4⅝"	6½
1026	2½"x 1 7/16"	2½"	6¼"	10

* No. 1024 same as No. 1025, but without angle raising feature.

HOLLOW CHISELS

Selected steel. Bit operates inside of chisel. Shank of chisel ⅝"x1½". Wt. per set 2⅛ lbs.

No.	504	505	506	508
Size, Inches	¼x¼	5/16x5/16	⅜x⅜	½x½
Depth of Mortise	1⅞"	1⅞"	2¾"	3¼"

Order Proper Bushings.

HOLLOW CHISEL BITS

Selected steel. Bit operates inside of chisel. Order proper bushing for each bit to fit No. 974 spindle for 14" drill press. Weight per set 2 lbs.

No.	514	515	516	518
Size	¼"	5/16"	⅜"	½"
Diameter Shank	7/16"	¼"	19/64"	19/64"

BUSHINGS

½" Outside Diameter

No.	524	525	526
Hole	5/16"	¼"	19/64"

No. 526 used with Nos. 516 and 518 Hollow Chisel Bits.

ROUTER BITS

For routing, round-end mortises and grooving work. ½ x 1½ inch shank. Use No. 974 spindle with router bits.

No.	474	475	476	477	478
Size	¼"	5/16"	⅜"	7/16"	½"

No. 480—Complete set of 5 Router Bits. 2 lbs.

PLUG CUTTERS

Used for making wood plugs and dowels. ½ x 2 inch shank, barrel 2¼" long.

No.	814	815	816	817	819
Size	3/8"	½"	5/8"	¾"	1"

No. 822—Complete set of 5 Plug Cutters. 2½ lbs.

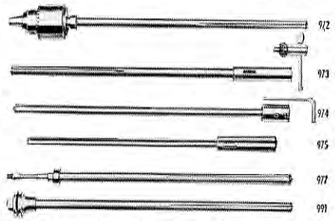
MACHINE SPUR BITS

Selected steel. Have brad point and two cutting lips. Approximately 6¼" long overall, with a ½" shank. Weight per set 3 lbs.

No.	804	805	806	807	808	809	810	812
Size	¼"	5/16"	⅜"	7/16"	½"	9/16"	⅝"	¾"

No. 818—Complete set of eight machine spur bits.

INTERCHANGEABLE SPINDLES



One of the many outstanding advantages of the 14" drill press is the fact that the spindles are readily interchangeable. This enables you to select the right spindle for the job, increasing the application of your machine many times. All chucks are balanced for high-speed work. Spindles have deep splines, and perfect balance for long wear.

No. 972—Spindle with Key Chuck and Key. No. 60—½" Cap., 3½ lbs.

No. 973—Spindle with No. 1 Morse Taper Hole. 2 lbs.

No. 974—Woodworking Spindle, has ½" hole for Router Bits, Machine Spur Bits, Shaper Cutter Adapter Spindle, etc. 2½ lbs.

No. 975—Spindle with No. 2 Morse Taper Hole. 2½ lbs.

No. 977—Spindle with pin and collar for Shaper Cutters with ⅜" Hole. 2 lbs.

No. 991—Spindle with flanges for Cup Grinding Wheels. 2 lbs.

(For Prices See Attached Price List)

Save On Special Set-Ups With Standard 14" Drill Press Accessories

14" Drill Press Parts

†**No. 14-220**—(Old No. 970-B)—14" High-Speed Drill Press Head with ½" Key Chuck, No. 387 Belt, and No. 985 Motor Pulley. 42 lbs.

†**No. 14-223**—(Old No. 1289-A)—14" Slo-Speed Drill Press Head with ½" Key Chuck, No. 430 Belt, and No. 985 Motor Pulley. 48 lbs.

†**No. 14-221**—(Old No. 970-C)—14" High-Speed Drill Press Head with No. 1 Morse Taper Spindle, No. 387 Belt, and No. 985 Motor Pulley. 42 lbs.

†**No. 14-222**—(Old No. 1286-A)—14" Slo-Speed Drill Press Head with No. 1 Morse Taper Spindle, No. 430 Belt, and No. 985 Motor Pulley. 48 lbs.

***No. 387**—V-Belt for High-Speed Drill Press, 1 lb.

***No. 430**—V-Belt for Slo-Speed Drill Press, 1 lb.

No. 969—Pilot Wheel. 4 lbs.

***No. 985**—4-Step Mtr. Pulley. Specify bore, 2 lbs.

No. 992—3½" x 1½" Cup Wheel, ½" hole. 2 lbs.

No. 1007—Foot Feed for Floor Type 14" Drill Press, with 60" col. only. Consists of Foot Pedal, Rods and Mounting Brackets. 38 lbs.

No. 1008—Table Raising Mechanism for No. 1009. 9 lbs.

No. 1009—Production Table only, for Single-Spindle Floor Type Drill Press, 52 lbs.

No. 1010—Collar to fit column for head or table support. 2 lbs.

No. 1019—Mounting Flange and Screws for 14" Drill Press Column. 10 lbs.

No. 1020—Column for 14" Drill Press, 36¾" long. 13 lbs.

Note: Drill Press Data Sheets with dimensions are available. Specify model when ordering.

***No. 1022**—Belt and Pulley Guard, 21 lbs.

No. 1030—Spring Counter Balance Assembly for 14" Drill Press, consisting of spring, chain, column-top casting with ball bearing roller and screws. 8 lbs.

***No. 1290**—Set of parts for changing High-Speed Drill Press to Slo-Speed, 13 lbs.

***No. 14-803**—Belt Guard only. Used where machine already has spindle pulley guard, 9 lbs.

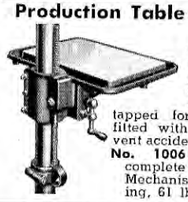
***No. 14-817**—Set of parts for changing Slo-Speed Drill Press to High-Speed, 13 lbs.

No. 14-841—Column for 14" Drill Press, 60" long, 2¾" dia. 25 lbs.

*Cannot be used with Super-Hi Drill Press.

†Motor Pulley has ½" bore unless otherwise specified.

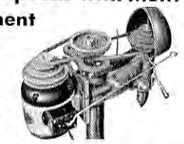
Production Table For Standard 14" Drill Press



This Production Table for Standard 14" Drill Presses, has a surface of 11x16" with a 1¼" drain trough, tapped for drain pipe. Rack fitted with safety hook to prevent accidental dropping of table.

No. 1006—Production Table complete with Rack, Raising Mechanism, Collar and Bearing, 61 lbs.

Wide Range of Speeds with Multi-Speed Attachment



This attachment provides a wide range of speeds on both the Slo and High-Speed models. It consists of a bearing housing, bearing and shaft, which mounts on the drill press column together with a cone pulley and two belts. Belt slack is taken up by turning casting so proper tension is always assured.

No. 1028—Multi-Speed Attachment for High Speed Drill Press, complete with column casting, pulley and belts. Twelve speeds 270 to 11,000 r.p.m. 7 lbs.*

No. 1029—Multi-Speed Attachment for Slo-Speed Drill Press, complete with column casting pulley and belts. Twelve speeds 185 to 4825 r.p.m. 7 lbs.

No. 271—Motor Pulley Belt for No. 1028 or No. 1029 Multi-Speed. ½ lb.

No. 272—Spindle Pulley Belt for No. 1028 Multi-Speed. ½ lb.

No. 273—Spindle Pulley Belt for No. 1029 Multi-Speed. ½ lb.

*11,000 r.p.m. for intermittent use only.

SURFACE PLATES THAT ARE 100% USEFUL AND CONVENIENT

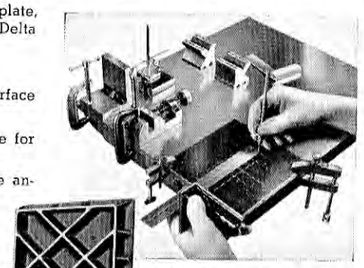
The four essentials of a 100% useful surface plate, for layout work, are the four essentials of the Delta Surface Plates.

1. A true surface to start with.
2. A properly ribbed casting to insure that surface stays true.
3. Adequate ledges at the edges of the plate for clamping purposes, and . . .
4. Edges that are machined square with one another and with the surface.

Formerly these advantages could be obtained only in high-priced, hand scraped, precision plates, and the user either purchased a plate of this type or else bought a plate that was more or less makeshift.

Now, Delta brings you a handy Surface Plate at low cost. A surface plate that is 100% useful and convenient. These plates can easily and economically be made into precision plates by simply scraping to a master plate, or to each other.

The photo at the right shows how angle plates, vises, etc., can be clamped to the surface plate,



Note the heavy ribbing of this massive plate and the clamping ledge all around the squared sides.

and how convenient the squared edges are for laying out work clamped to the table.

No. 640—15" x 18" x 3"—63 lbs.

No. 641—16" x 22" x 3"—71 lbs.

DELTA Tapping Attachment for 14" Drill Press

Faster Work — Better Quality Work — More Economical Work

The ability to produce quality threads . . . an increase in holes tapped per hour . . . ease of operation . . . and the saving of taps . . . all are performance features of the new Delta-Milwaukee tapping attachment.

Using an internal expanding drum type friction drive (see photo to the left, showing internal working parts and friction drum drive) the drum itself expands and firmly grips the entire circumference of the shell from the inside. There is no top or bottom pressure. This means greater accuracy, more uniformity in holes tapped, less chance of wear and no loss through slippage. The housing is made of heat-treated magnesium and will withstand high temperatures without warping. It operates without pressure on the tap itself and may be run at any speed suitable to the material to be tapped.

— FEATURES —

1. 100 percent contact—uses all friction area.
2. Uniform engagement—no uneven wear.
3. Extra speed—greater accuracy.
4. Friction runs dry—little chance of sticking.
5. Body will not warp—made of heat-treated Magnesium.
6. Compact in design.
7. Helical Gears.
8. All parts interchangeable.
9. Sealed-for-life ball bearings.
10. Economical—saves taps, time and labor.

CATALOG LISTING

No. 14-843—Tapping Attachment for 14" Drill Press, 0-3/16" Capacity. Complete with spindle. 6 lbs.

No. 14-844—Tapping Attachment for 14" Drill Press, 3/16"-5/16" Capacity. Complete with spindle. 8 lbs.

(For Prices See Attached Price List)

SANDING DRUMS AND ABRASIVE SLEEVES FOR INSIDE AND CURVED SANDING WORK ON YOUR DRILL PRESS

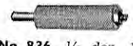
Perfect work is easy with these sanding drums. No fasteners to bump—no uneven expansion. In these drums, each rubber section is separated from its neighbor by bakelite washers, with non-corrosive metal bushings next to the arbor. The disks are expanded perfectly uniformly, run dead true and produce perfect work. No. 840 drum has ½" diameter stem to fit ½" hollow spindle or chuck. Others have ½" bore. Auxiliary shaft No. 11-834 needed to attach No. 830 and No. 835 Drums to No. 974 Spindle.

No. 830—3" dia. x 3" Drum, with one sleeve. Fits ½" dia. shaft. 2 lbs.

No. 831—½ doz. 3"x3" Sleeves, No. 1½ Grit coarse garnet. ½ lb.

No. 832—½ doz. 3"x3" Sleeves, No. ½-60 Grit medium garnet. ½ lb.

No. 833—½ doz. 3"x3" Sleeves, No. 1-50 Grit Al. Oxide (for metal). ½ lb.



No. 835—1¾" dia. x 2" Drum, with one sleeve. Fits ½" dia. shaft. 1¾ lbs.

No. 836—½ doz. 1¾"x2" Sleeves, No. 1½-40 Grit med. garnet. ¼ lb.

No. 837—½ doz. 1¾"x2" Sleeves, No. ½-60 Grit fine garnet. ¼ lb.

No. 838—½ doz. 1¾"x2" Sleeves, No. 1-50 Grit Al. Oxide (for metal). ¼ lb.

No. 840—11/16" dia. x 2½" Drum, with one sleeve. With ½" shank to fit hollow spindle or chuck. 8 oz.

No. 841—½ doz. 11/16"x2½" Sleeves, No. 1 Grit medium garnet. ½ lb.

No. 842—½ doz. 11/16"x2½" Sleeves, No. 1/0-80 Grit fine garnet. ½ lb.

No. 847—½ doz. 11/16"x2½" Sleeves, No. 50 Grit Al. Oxide (for metal). ½ lb.

No. 11-834—Auxiliary Shaft ½"x2½" with milled flat entire length. For use with No. 830 and No. 835 Sanding Drums when used with No. 974 Spindle.

NARROW SANDING DRUMS AND SLEEVES

No. 679—1½"x1" Drum, with one sleeve, 5/16" shank. ½ lb.

No. 682—½ doz. 1½"x1" No. 40-grit Al. Oxide sleeves. ¼ lb.

No. 683—½ doz. 1½"x1" No. 80-grit Al. Oxide sleeves. ¼ lb.

No. 680—2-3/16"x1" Drum, with one sleeve, 5/16" shank, ½ lb.

No. 684—½ doz. 2-3/16"x1" No. 40-grit Al. Oxide sleeves. ¼ lb.

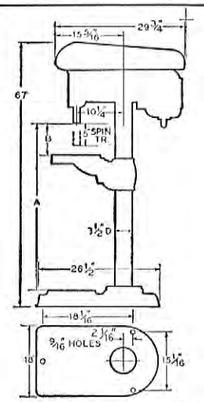
No. 685—½ doz. 2-3/16"x1" No. 80-grit Al. Oxide sleeves. ¼ lb.

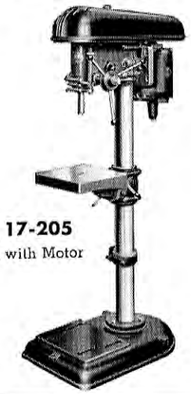
No. 681—3"x1" Drum with one sleeve, 5/16" shank. ¾ lb.

No. 686—½ doz. 3"x1" No. 40-grit Al. Oxide sleeves. ½ lb.

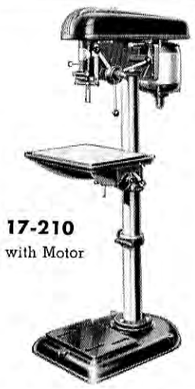
No. 687—½ doz. 3"x1" No. 80-grit Al. Oxide sleeves. ½ lb.

17-inch Floor Type, Single Spindle Drill Presses





No. 17-205
Shown with Motor



No. 17-210
Shown with Motor

Type	Standard Tilting Table		Production Table	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE				
Machine No.	17-205	17-206	17-210	17-211
Table Working Surface	11 1/16"x 12"	11 1/16"x 12"	12½"x 17"	12½"x 17"
Spindle to Table (B) Max.	33"	33"	31⅛"	31⅛"
Spindle to Base (A) Max.	43¾"	43¾"	43¾"	43¾"
Ship. Wt. Lbs.	310	310	370	370
WITH ½ INCH KEY CHUCK and SPINDLE				
Machine No.	17-207	17-208	17-212	17-213
Table Working Surface	11 1/16"x 12"	11 1/16"x 12"	12½"x 17"	12½"x 17"
Spindle Chuck to Table (B) Max.	33½"	33½"	31⅞"	31⅞"
Spindle Chuck to Base (A) Max.	44¼"	44¼"	44¼"	44¼"
Ship. Wt. Lbs.	310	310	370	370

MOTORS AND SWITCHES NOT INCLUDED WITH MACHINE, ORDER SEPARATELY

These 17-inch drill presses are supplied in twelve standard models as listed and illustrated above.

Capacity: ¾" in cast iron.

Machines include: Table raising mechanism—Streamlined belt guard—Built-in depth gage—Depth scale on spindle return spring housing—Quill has 5-inch stroke or travel.

Speeds: High-Speed Models—700, 1150, 1750, 2750, and 4250 RPM. Slo-Speed Models—385, 600, 935, 1450, and 2240 RPM.

High-speed models include No. 501 V-belt and No. 1312 motor pulley.

Slo-speed models include No. 520 V-belt and No. 1311 motor pulley.

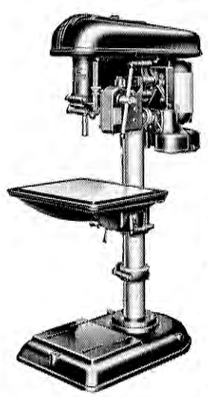
Order Key spindle models where straight shank drills 0"-½" are to be used. Order No. 2 Morse taper spindles where taper shank drills are to be used. Where both straight and taper shank drills are to be used, order models with No. 2 Morse taper spindle and use the No. 968 chuck listed on page 7.

For individual parts for special setups and for accessories, see page 7.

Motors Recommended: Heavy Duty—84-910, 86-920. Medium Duty—82-910, 86-720. Light Duty—82-710, 86-520.

For 3 Ph. motors use No. 1320 Manual Starter or Magnetic Starters No. 1329, or No. 1321 with No. 1322 mounting parts. Use No. 1332 switch rod for single phase motors. See page 36 for Motors and Switch Parts.

17-inch Single Spindle Floor Type Power Feed Drill Presses



No. 17-260
Shown with Motor

Type	Floor Type Single Spindle	
Model	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE		
Machine No.	17-260	17-261
Table Working Surface	12½"x 17"	12½"x 17"
Spin. to Base Max.	44"	44"
Spin. to Table Max.	32"	32"
Ship. Wt. Lbs.	418	418
WITH ½" KEY CHUCK and SPINDLE		
Machine No.	17-262	17-263
Table Working Surface	12½"x 17"	12½"x 17"
Spin. Chuck to Base Max.	44½"	44½"
Spin. Chuck to Table Max.	32"	32"
Ship. Wt. Lbs.	418	418

Motors and Switches not included with machines.

These power feed 17 inch drill presses are of advanced design, incorporating all good features of machines of this type. They can be either manual or power fed. The operator can bring the drill down to the work in one swift motion by hand, and with a flip of the lever engage the power feed. Upon completion of the operation the quill automatically returns. There are eight rates of feed for each of the 5-spindle speeds. Capacity ¾" in cast iron.

Machines include: Streamlined belt guard. Built-in depth gauge. Depth scale on spindle return spring housing. Table raising mechanism. Quill has 4½ inch stroke or travel.

Speeds: High Speed Models—700, 1150, 1750, 2750 and 4250 RPM. Slo-Speed Models—385, 600, 935, 1450 and 2240 RPM.

High speed models include No. 501 V-belt and No. 1312 motor pulley.

Slo-speed models include No. 520 V-belt and No. 1311 motor pulley.

Order Key Chuck spindle machines where straight shank drills only are to be used. Order No. 2 Morse taper spindle machines where taper shank drills only are to be used. Where both straight and taper shank drills are to be used, order machines with No. 2 Morse taper spindle and use No. 968 chuck listed on page 7.

Motors Recommended: Heavy Duty—84-910, 86-920. Medium Duty—82-910, 86-720. Light Duty—82-710, 86-520.

For 3 phase motors use No. 1320 Manual Starter or Magnetic Starters No. 1329, or No. 1321 with No. 1322 mounting parts.

Use No. 1332 switch rod for single phase motors.

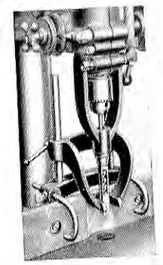
See page 36 for Motors and Switches.

17" Drill Press Accessories And Attachments

WOODWORKING ACCESSORIES

Mortising Attachment for 17" Drill Press. Complete with base, fence, hold-down, curved arm, chisel holder and bolts; without bit or chisel. Capacity under hold-down 6½" thick, capacity from ends of hooked rods to fence 2½" thick. Mortising bit is held in standard Key chuck.

No. 1381—Mortising Attachment. 15 lbs.



Hollow Chisels

No.	Size	Depth	Wt. lb.
504	¼	1⅞	½
505	5/16	1⅞	½
506	⅜	2¾	½
508	½	3¼	⅝

Mort. Bits

No.	Size	Wt. lb.
514	¼	⅜
515	5/16	½
516	⅜	½
518	½	½

Machine Spur Bits
6¼" long, ½" shanks

No.	Size	Wt. lb.
804	¼	⅝
805	5/16	⅝
806	⅜	⅝
807	7/16	⅝
808	½	⅝
809	9/16	⅝
810	⅝	⅝
812	¾	⅝
818	set of 8 bits	3

Plug Cutters
Shank, ½"

No.	Size	Depth	Wt. lb.
814	⅜	2 1/16"	⅜
815	½	2 1/16"	⅜
816	⅝	2 1/16"	⅜
817	¾	2 1/16"	½
819	1	2 1/16"	½
822	set of 5 cutters		2½

DELTA TAPPING ATTACHMENT
for 17" Drill Presses

FASTER WORK — BETTER QUALITY WORK — MORE ECONOMICAL WORK!

Quality threads . . . an increase in tapped holes per hour . . . ease of operation . . . and the saving of taps . . . all are performance features of the new Delta tapping attachment.

Has an expanding drum type friction drive. The drum itself expands and firmly grips the entire circumference of the shell from the inside. There is no top or bottom pressure. May be run at any speed suitable to the material to be tapped. This means greater accuracy, more uniformity of holes tapped, less chance for wear and no loss through slippage. The housing is made of heat treated magnesium and will withstand high temperatures without warping.

No. 17-875—Tapping Attachment for 17" Drill Press, 0-3/16" Capacity. Weight, 7 lbs.

No. 17-876—Tapping Attachment for 17" Drill Press, 3/16"-5/16" Capacity. Weight, 9 lbs.

No. 17-877—Tapping Attachment for 17" Drill Press, 5/16"-⅝" Capacity. Weight, 16 lbs.

Note: Tapping Attachment includes Special No. 2 Morse Taper Drive Spindle.

LOW COST STANDARD 17" DRILL PRESS ACCESSORIES

No. 501—V-Belt for 17" High Speed Drill Press. ½ lb.

No. 520—V-Belt for 17" Slo-Speed Drill Press. ½ lb.

No. 968—½" Key Chuck with a No. 2 Morse Taper Shank. To be used where straight shank drills are used in a drill press that has a No. 2 Morse Taper Spindle. 2½ lbs.

No. 1311—5-Step Motor Pulley for Slo-Speed. Specify bore. 3 lbs.

No. 1312—5-Step Motor Pulley for High Speed. Specify bore. 3 lbs.

No. 1371—Foot Feed for Floor Type 17" Drill Press. 34 lb

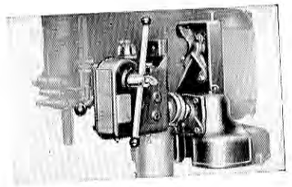
No. 1372—Production Table to fit Standard Bracket on Floor Type 17" Drill Press. 66 lbs.

No. 1380—Raising Mechanism for Head or Table of 17" Drill Press with Worm Shaft, Worm Gear and Pinion, Ball Handle, Rack, Ball Thrust Bearing and Collar for Column. 15 lbs.

No. 1391—Set of Change-over Parts consisting of High Speed Pulleys and No. 501 Belt for changing Slo-Speed Drill Press into High Speed. 7 lbs.

No. 17-862—Set of Change-over Parts consisting of Slo-Speed Pulleys and No. 520 Belt. For changing High Speed Drill Press into Slo-Speed. 10 lbs.

POWER FEED ATTACHMENT FOR 17" DRILL PRESSES



Any standard Delta-Milwaukee 17" drill press can be easily and readily changed into a Power Feed Drill Press by adding the Power Feed Unit listed here. No special machining, drilling or fitting need be done. The Unit is perfectly interchangeable. It can be operated in any position and may be attached to your present drill press with but little work. It is complete, consisting of gear box, motor pulley, belt guard, gear drive, handle assembly, motor plate, quill pinion shaft, stop rod, V-belt and oiler as illustrated.

Convert your present 17" Drill Presses into Power Feed Units today. The low cost of the unit will soon pay for itself many times over in increased production.

No. 17-857—Power Feed Attachment complete to fit all 17" drill presses. 84 lbs.

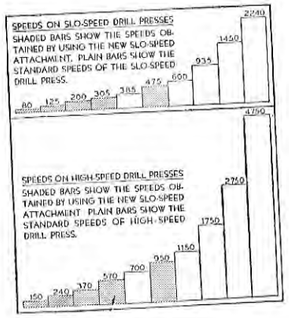
EFFICIENT OPERATING SLO-SPEED ATTACHMENT

To meet the requirement of extra slow operation of the 17" Drill Press; the No. 17-860 Slo-Speed Attachment has been designed. Fits any Delta 17" Drill Press with No. 2 Morse Taper Spindle.

A train of accurately machined double-reduction gears is used. This eliminates all chatter, and slippage, and means positive, smooth operation. Provides 10 different speeds. Gears are heat treated, Anti-friction bearings used throughout. Has No. 2 Morse Taper Spindle Socket. Spindle travel with slo-speed attachment is 4". Ratio of Input to Output is 4.7 to 1 R.P.M.

No. 17-860—Slo-Speed Attachment for 17" Drill Press with No. 2 Morse Taper Spindle. 11 lbs.

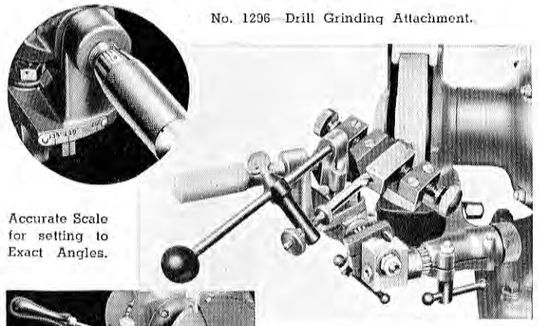
(For Prices See Attached Price List)



Attachments And Accessories That Increase The Use Of Your 7" Grinder

DRILL GRINDING ATTACHMENT

No. 1296—Drill Grinding Attachment.



Accurate Scale for setting to Exact Angles.

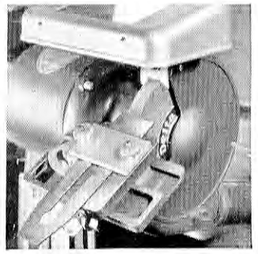
Left: No. 1664 Wheel Dresser Holder and No. 3121 Wheel Dresser.

This improved drill grinding attachment uses the face of the wheel—the natural way. It is a precision built unit so accurately made—so easy and simple to operate that anyone can now do a perfect drill sharpening job. Micrometer settings insure evenly ground lips so that drills run true. The amount of lip clearance on the drill is just right with enough of the heel cut away to provide clearance without weakening the cutting edge.

An additional feature of this attachment is that you can grind straight shank twist drills to fit your own job—with lip clearance and angles at any degree you need. Capacity ⅛" to ⅝" drills.

No. 1296—Drill Grinding Attachment as illustrated with No. 1664 holder for wheel dresser, 9 lbs. *Order diamond dresser No. 3121 separately.*

BLADE GRINDING ATTACHMENT



Here is a blade grinding attachment that has all of the best features of existing designs, yet has additional advantages that increase its usefulness in the shop. The carriage table clamps to the adjustable arm on the grinder and tilts so that the desired angle is obtained. This table is fully machined and on it rides the blade holder and clamp. The blade is clamped as shown—an adjustable quadrant is located on the left side which permits the accurate grinding of angle knives as well as assuring an accurate right angle position for straight knives. The knurled nut below gives hair-like adjustments for the amount of the "cut" when grinding. The entire carriage and clamp may be lifted off the table, thus providing a convenient and accurate table for other grinding without the necessity of replacing the regular tool rest.

Distance between clamp screws is 3-3/16", affording ample space for wide knives as well as scrapers. Diamond Pointed Wheel Dresser No. 3121 may be clamped into holder alongside the angle quadrant for wheel dressing.

No. 1294—Blade Grinding Attachment as illustrated, 6 lbs.

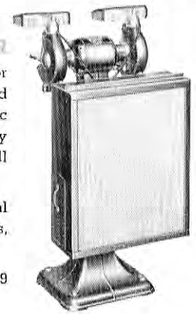
DIAMOND POINTED WHEEL DRESSER

An efficient and inexpensive tool for dressing all types of general grinding wheels. The diamond is securely held—the tool is sturdy, 9¼" long and has a comfortable handle.

No. 3121—Diamond Pointed Wheel Dresser, 1 lb.

No. 1664—Wheel Dressing Tool Holder, 1 lb. (Included with Cat. No. 1296.)

MOTORLESS, GRAVITY TYPE DUST COLLECTOR FOR GRINDER



This practical and inexpensive dust collector is self-contained and need not be connected to the shop blower system. No electric power is required. Grinder is completely portable. Efficient filters trap practically all of the fine dust.

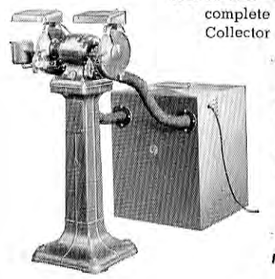
No. 1292—Dust Collector Unit for pedestal grinder with filter, brackets, screws, 28 lbs.

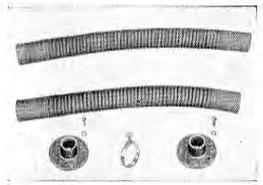
No. 1293—Replaceable Filter for above, 9 lbs.

Motor Driven Dust Collector for Tool Grinder

The Dust Collector shown below is ideally suited to the Tool Grinder because it traps all abrasive dust which otherwise would be harmful to the operator and to expensive machinery. Warm shop air is not forced out of the building with this Dust Collector during cold weather, but instead is re-circulated after being thoroughly cleaned. A special attachment package is available, as illustrated below, to hook up the Dust Collector to the Grinder. See page 10 for Dust Collector desired.

No. 23-802—Tool Grinder Attachment Package complete as illustrated to hook up Dust Collector to Grinder, 8 lbs.





No. 23-802—*Attachment Package for use with Tool Grinder.*

OTHER ACCESSORIES

Cat. No.	Description	Wt., Lbs.
1267	—⅝"x 7" Vit. Al. Oxide Wh., 46 Grit, Grade N, ⅝" Hole	2
1250	—Twin-Lite Shield (One Only). No Bulbs	3
1236	—Fine-Knotted Wire Brush, ⅝" Hole, 6" Dia.	1
1237	—Medium-knotted Wire Brush, ⅝" Hole, 6" Dia.	1
1238	—Coarse-knotted Wire Brush, ⅝" Hole, 6" Dia.	1
1280	—Bayonet Type Lamp Bulb	1
23-805	—Pedestal for Standard 7" Grinders	80
23-815	—1"x7" Al. Oxide Wheel, 60 Grit, Grade N, ⅝" Hole	4
23-816	—1"x7" Al. Oxide Wheel, 46 Grit, Grade M, ⅝" Hole	4

(For Prices See Attached Price List)

SAFETY PLUS! 7" Tool Grinders "That Cannot Forget Their Goggles"

Finest — Most Accurate — Safest Grinders made — Regardless of Price

WHEELS: Balanced to 1/10 inch ounce 60N and 46M Aluminum Oxide Wheels, 1" face by 7" diameter, ⅝" hole. Absolutely true and vibrationless to permit accurate tool grinding.

TOOL RESTS: Fully machined—not rough castings. Are adjustable vertically and horizontally—designed so that full advantage can be taken of both sides of wheels. Easily detached.

WHEEL GUARDS: Heavy cast iron with steel side plates. Designed to meet the strict regulations of the Wisconsin Industrial Commission. Only actual grinding section of wheel is exposed. Chute discharges dust to rear. Spark guard adjustable to diameter of wheel.

SAFETY SHIELDS: Patented Twin-Lite standard on all models. Double thickness shatter-proof glass. Included with each shield are two lamps which flood both sides and face of wheels independent of shop lighting. No glare in operator's eyes.

BEARINGS: Precision double-seal ball bearings. No oiling required for entire life of bearing. No trouble due to entrance of abrasive dust.

TWIN-LITE™ SAFETY SHIELDS

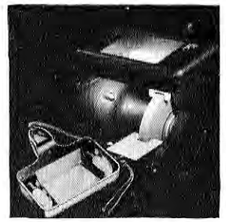
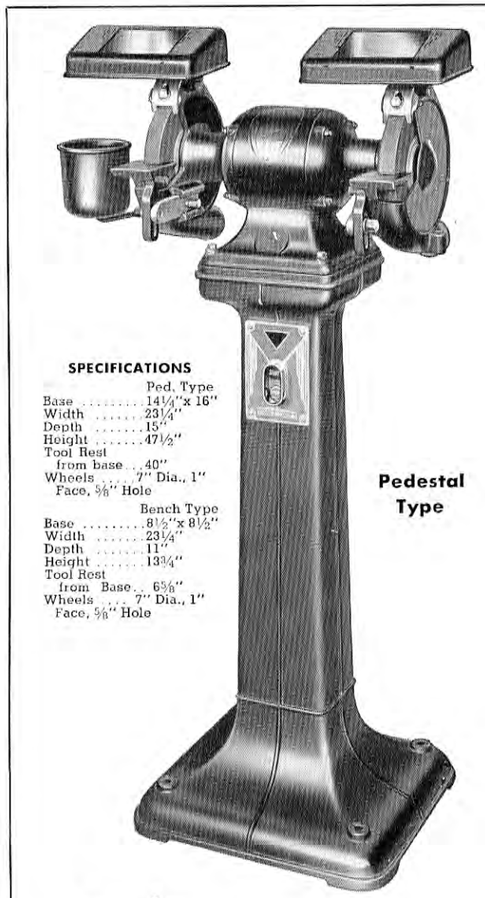


Photo at right shows clearly how the Twin-Lite Safety Shields "floods" the wheel and working surface with light from both sides for safer, more efficient work. This patented lighting system is standard on all models.

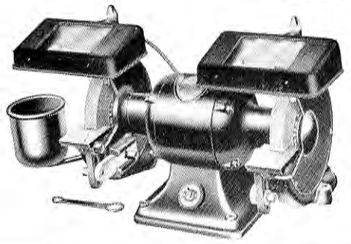


SPECIFICATIONS

Ped. Type
Base ..... 14¼"x 16"
Width ..... 23¼"
Depth ..... 15"
Height ..... 47½"
Tool Rest from base ... 40"
Wheels ... 7" Dia., 1" Face, ⅝" Hole

Bench Type
Base ..... 8½"x 8½"
Width ..... 23¼"
Depth ..... 11"
Height ..... 13¾"
Tool Rest from Base .. 6⅝"
Wheels ... 7" Dia., 1" Face, ⅝" Hole

Pedestal Type



Bench Type

BENCH TYPE MOTOR DRIVEN GRINDERS

Mach. No.	Motor Description	Speed R.P.M.	H.P.	Motor Switch	Ship. Wt. Lbs.
23-104	115/230 V. 60 Cy. Sgl. Ph.	1725	½	Toggle	95
23-105	115/230 V. 60 Cy. Sgl. Ph.	3450	½	Toggle	95
23-109	115/230 V. 50 Cy. Sgl. Ph.	2850	½	Toggle	95
23-115	220/440 V. 50/60 Cy. 3 Ph.	2850/3450	½	None*	95
23-124	550 V. 50/60 Cy. 3 Ph.	2850/3450	½	None*	95
23-120	115 V. DC	3450	½	Toggle	95
23-121	230 V. DC	3450	½	Toggle	95

PEDESTAL TYPE MOTOR DRIVEN GRINDERS

Mach. No.	Motor Description	Speed R.P.M.	H.P.	Motor Switch	Ship. Wt. Lbs.
23-404	115/230 V. 60 Cy. Sgl. Ph.	1725	½	Toggle	166
23-405	115/230 V. 60 Cy. Sgl. Ph.	3450	½	Toggle	166
23-409	115/230 V. 50 Cy. Sgl. Ph.	2850	½	Toggle	166
†23-415	220/440 V. 50/60 Cy. 3 Ph.	2850/3450	½	Relay*	181
‡23-418	220/440 V. 50/60 Cy. 3 Ph.	2850/3450	½	Relay*	181
23-424	550 V. 50/60 Cy. 3 Ph.	2850/3450	½	Relay*	181
23-420	115 V. DC	3450	½	Toggle	166
23-421	230 V. DC	3450	½	Toggle	166

*Separate Toggle Switch for 115 V. Twin lites is furnished.
†With thermal elements and wiring for 220 V. operation.
‡With thermal elements and wiring for 440 V. operation.

MOTOR DRIVEN BUFFING MACHINES

No. 23-255—Bench Type, 115/230 V., 60 Cy., Single Phase, 3450 R.P.M. with Toggle Switch, Without Safety Shields, Lamp Bulbs, Water Pot, Wheels, Wheel Guards or Tool Rests. 60 lbs.

No. 23-256—Bench Type, same as No. 23-255 except 1725 R.P.M.

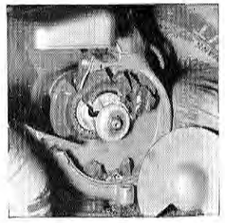
No. 23-475—Pedestal Type, 115/230 V., 60 Cy., Single Phase, 3450 R.P.M. with Toggle Switch, Without Safety Shields, Lamp Bulbs, Water Pot, Wheels, Wheel Guards or Tool Rests. 155 lbs.

No. 23-476—Pedestal Type, same as No. 23-475 except 1725 R.P.M.

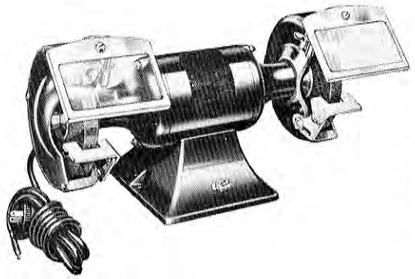
SURFACE FEET PER MINUTE WITH 7" WHEEL
6322 S.F.P.M. at 3450 R.P.M.
5223 S.F.P.M. at 2850 R.P.M.
3161 S.F.P.M. at 1725 R.P.M.

SAFETY PLUS!

To test the strength and guarding of these grinders a number of wheels were deliberately smashed with a rifle bullet while running at speeds from 3400 to 8000 r.p.m. with guard on. Photo shows wheel that was smashed at the highest speed—and it can plainly be seen what happened to the guard—nothing! That's safety plus! Why take a chance with inferior grinders?



DELTA 6" Ball Bearing Grinder — a Marvel of Convenience and Accuracy



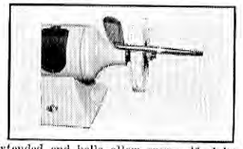
No. 23-625—6" grinder with wheel and spark guards, tool rests, motor switch, 8 ft. cord with two prong plug and ground wire, and two wheels—36 and 60 grit. Less eyeshields.

ACCESSORIES FOR 6" GRINDER

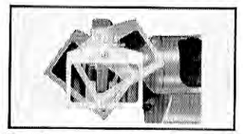
No. 3113 — 6" Fine wire wheel, 2 sections for use singly or together.
No. 3114 — Same as #3113 except coarse wire.
No. 3115 — Same as #3113 except fiber brush.
No. 3121 — Diamond tool for wheel dressing, 9¼" long with wood handle.
No. 4003 — Kit, consists of 1 each of Nos. 4005, 4007, 4008, 4009, 4010.
No. 4004 — Kit, consists of 1 each of Nos. 4007, 4008, 4009, 4010.
No. 4005 — ½ x 6" cloth buffing wheel, ½" hole, circular stitched.
No. 4007 — 1 lb. polishing bar for gold and silver.
No. 4008 — 1 lb. polishing bar for nickel, chrome, iron and brass.
No. 4009 — 1 lb. polishing bar for removing rust, scale and tarnish.
No. 4010 — 1 lb. polishing bar for aluminum, copper, pewter and wood.
No. 23-800 — 1 pr. eyeshields with brackets and screws.
No. 23-826 — Grinding wheel, ¾ x 6" with ½" hole, aluminum oxide, 36 grit, grade 0 (medium hardness and density).
No. 23-827 — Same as 23-826 except 60 grit.
No. 49-549 — 3-jaw drill chuck, 0 to ¼" capacity, tapped ½"-20 to fit right shaft.

An all-around unit for grinding, polishing, and buffing. Accuracy is insured by balanced grinding wheels, precision ground shaft and sealed-for-life ball bearings. Maximum safety is guaranteed by such features as fully adjustable shatterproof eyeshields, adjustable spark guards, heavy cast iron wheel guards with steel end plates and fully adjustable tool rests. Only the part of the grinding wheel being used is exposed. Make a wise, low dollar investment and place this Delta grinder at every bench in your operation.

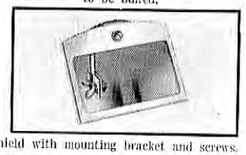
Tool rests adjustable to any angle.



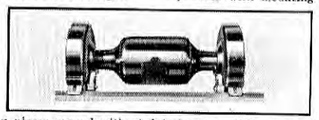
Extended end bells allow even golf clubs to be buffed.



Eyeshields move up, down, left and right.



Eyeshield with mounting bracket and screws.

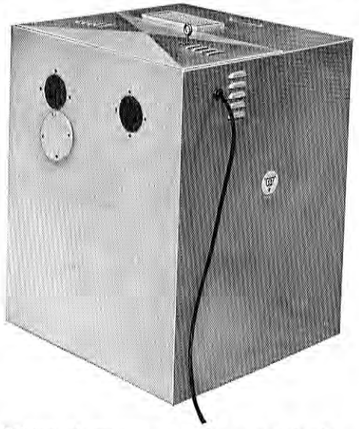


Long pieces ground without interference. Note small diameter motor leaves plenty of clearance even after wheel wear.

SPECIFICATIONS

Overall dimensions:	
Left to right	
With eyeshields	20"
Without eyeshields	18"
Height	9"
Front to rear	8"
Shipping weight	42 lbs.
Size of wheel	6" dia., ¾" wide, ½" hole
Wheel Flange diameter	2½"
Center to center distance between wheels	14⅝"
Arbor	⅞" dia. — ends threaded ½"-20 left and right
Speed	3450 rpm
Motor	⅓ hp, 115 V., 60 cy., AC, 1 ph.

Motor Driven Dust Collector Safeguards Health . . . Protects Machinery



Cabinet of pressed steel strong and husky . . . a large door at back provides quick access to filter, door at top for inspection of motor. Fan is high efficiency squirrel-cage type, moves 350 cubic feet of air per minute, develops static suction of 4 inches water lift. A ⅓ H.P. lubricated-for-life ball bearing motor is used. Motor is in separate dust-proof compartment away from harmful dust. Fireproof filter is readily removed for cleaning. Overall dimensions: Height 28"; depth 21", width 22".

Ideal for grinding, sanding, polishing, buffing, and other operations where dust must be efficiently collected to protect workers' health and keep harmful dust away from expensive machinery.

The Delta-Milwaukee Dust Collector is a self-contained, portable unit which has many applications in both large and small shops. Its cost is so low it will rapidly pay for itself. It protects workers' health and keeps harmful metal dust away from machinery. It collects both fine and coarse dust and particles. It is universal in application with openings so located that it can be attached to all types of abrasive units. In addition to its direct application to Delta machine tools it can also be used with many other units. Fittings are available for this.

A powerful fan sucks both fine and heavy dust and small particles through a perfected air filter. The larger particles fall into a pan at the bottom and are easily removed.

The standard filter, furnished with all models, is fireproof, has high filtering qualities for metal dust, is easily removed for cleaning.

Note: This Dust Collector not suitable for collecting shavings. Use No. 49-531 Holder and filters for very fine, flour-like material or sawdust.

Dust Collectors

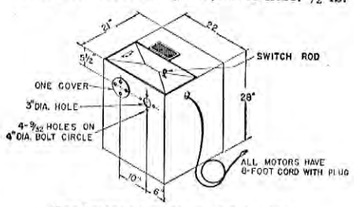
49-520—⅓ H.P. 115/230 V. 60 cy. 1-Ph. 3450 rpm. 120 lbs.
49-521—⅓ H.P. 220/440 V. 50/60 cy. 3-Ph. 2850/3450 rpm. 120 lbs.
49-522—⅓ H.P. 115 V., D.C. 3450 rpm. 120 lbs.
49-523—⅓ H.P. 230 V., D.C. 3450 rpm. 120 lbs.
49-524—⅓ H.P. 115/230 V., 50 cy. 2850 rpm. 120 lbs.
49-529—Extra Standard Filter. 8 lbs.
49-531—Filter Pad Holder with two expanded Fiber Pads. 7 lbs.
49-532—24 Expanded Fiber Filter Pads in carton. 15 lbs.

ATTACHMENT PACKAGES

No. 20-837—Cut-Off Machine Attachment. 13 lbs.
No. 23-802—Tool Grinder Attachment. 8 lbs.
No. 24-819—Toolmaker Grinder Attach. 19 lbs.
No. 31-803—Disk Abrasive Finishing Machine Attachment. 12 lbs.
No. 31-856—Belt Abrasive Finishing Machine Attachment. 7 lbs.
No. 31-869—Belt Grinding, Polishing and Deburring Machine Attachment. 8 lbs.

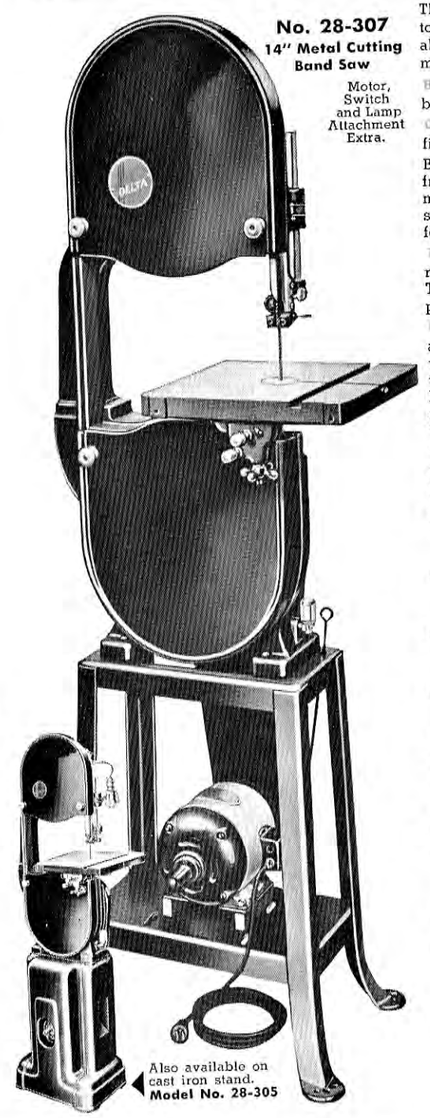
AVAILABLE CONNECTION FITTINGS

No. 49-533—Flexible Rubber Hose, 2 1/16" I.D.x20" long. 2 lbs.
No. 49-534—Flexible Rubber Hose, 3" I.D.x22" long. 2 lbs.
No. 49-535—Flexible Rubber Hose, 3" I.D.x48" long. 5 lbs.
No. 49-538—Cast Iron Flanges with Screw and Nozzle for 2 1/16" hose. 2½ lbs.
No. 49-539—Cast Iron Flanges with Screw and Nozzle for 3" hose. 2¾ lbs.
No. 49-541—Hose Clamps adjust. to hose. ½ lb.



(For Prices See Attached Price List)

14-inch Metal and Wood Cutting Band Saw Cuts Wide Range of Materials



No. 28-307
14" Metal Cutting Band Saw

Motor, Switch and Lamp Attachment Extra.

Also available on cast iron stand. **Model No. 28-305**

This Delta 14" Band Saw is used for cutting everything from carbon tool steel to asbestos and wood. Has five cutting speeds—4 metal, 1 wood. This machine also contains all the fine wood cutting features of the 14" Wood Cutting Band Saw. These features make it suitable for use in places such as maintenance departments, and pattern shops.

BEARINGS: 10 sealed, lubricated-for-life ball bearings for upper and lower wheels, blade supports, and all shafts of Back Gear Unit insure trouble-free performance.

GEAR UNIT: Gear unit self-contained. Spiral drive pinion and intermediate gear, final drive spur gear and pinion.

Back gear engaged or disengaged by half-turn of lever. A flip of a lever changes it from a slow-speed for metal sawing to high-speed for wood sawing. Separate belts must be used for metal and wood operation. Gear drive is simple, fool-proof and substantial, and with its helical drive gears and self-sealed ball bearings, is engineered for long, trouble-free service.

TABLE: Massive table, 14"x 14", swinging smoothly on double trunnions makes very rigid table mounting. Blade may be removed without disturbing rip-gage guide bars. Table tilts 45 degrees to right and 10 degrees to left with positive stop at horizontal position. ⅜" x ¾" groove for miter gage.

GUIDES: Finest type of guide ever offered. Each adjustment independent of others and each made with micrometer accuracy. Guide pins can be set to blade teeth without disturbing the setting of the blade support, and blade support can be set without altering adjustment of guide pins. High-grade reversible double-seal ball bearing blade supports. Lower guide of same construction as upper one, with added safety feature that all controls are brought out to front of table. Guide comes within ¾" of table top.

WHEELS: Aluminum wheels are carefully balanced and true-running. Are rimmed for proper mounting of tire.

Upper wheel completely enclosed, having rear guard as well as removable front guard complying with school and industrial safety requirements. Lower wheel completely guarded front and rear.

SPECIFICATIONS

CAPACITY: Blade to frame	13¾"
Under guide	6¼"
Under guide (with No. 894 Height Attachment)	12¼"
SPEEDS: With 1725 RPM motor	125, 175, 250, 340 FPM
With 1140 RPM motor	80, 114, 160, 220 FPM
For woodworking (1725 RPM motor)	2200 FPM
DIMENSIONS: Overall height (on stand)	65½"
Width	18½"
Front to back	24¾"
Table size	14"x 14"
Table height from floor	42¾"
Table tilt to right	45°
Table tilt to left	10°
Blade length	93½"

No. 28-307 Complete 14" Metal Cutting Band Saw with No. 50-891 Steel Stand, No. 883 Belt Guard, Wheel Guards, No. 5800 Arbor Pulley for wood, No. 720 4-step arbor pulley for metal, one No. 1062 metal cutting blade, No. 387 V-belt for metal drive, No. 49-141 V-belt for wood drive, No. 718 4-step motor pulley (specify bore). Without motor, switch or lamp attachment, 250 lbs.

No. 28-305 Same as 28-307 but has 886 Cast Iron Stand as illustrated. No. 132 Switch required when using single phase or DC motor.

No. 880—14" Metal Cutting Band Saw with wheel guards, No. 5800 Arbor Pulley for wood, No. 720 4-step arbor pulley for metal and one No. 1062 metal cutting blade. Without motor, switch or lamp attachment, 172 lbs.
No. 132—On-Off Switch and Motor Leads for all single phase and DC motors. 1½ lbs.
No. 387—V-Belt 39⅞" Out. Cir. (Metal Drive). ¾ lb.
No. 718—4-step Motor Pulley (specify bore). 1⅛ lbs.
No. 864—Auto-set Miter Gage. 4 lbs.
No. 882—Lamp Attachment with cord and plug. Less lamp bulb. Uses standard bulb. 1½ lbs.
No. 883—Belt Guard used with stand. 12 lbs.
No. 886—Cast Iron Stand for 14" Band Saw.
No. 894—Height Attachment. 14 lbs.
No. 1334—Switch Rod for use with No. 28-307. (If using single phase or DC motor.)
No. 28-810—Sanding Attachment consisting of flat and curved platens with guides and mounting bracket. 1 lb.
No. 28-836—Five Garnet Sanding Belts, No. 80 Grit, Fine, ½" wide, 91" long. 1 lb.
No. 28-837—Five Garnet Sanding Belts, No. 40 Grit, Medium, ½" wide, 91" long. 1 lb.
No. 28-843—Rip Gage with 18" Guide Bars. 8 lbs.
No. 28-845—Rip Gage with 32" Guide Bars. 14 lbs.
No. 49-141—V-belt. Out. Cir. 60". (Wood drive.) 1 lb.
No. 50-891—(Old No. 891) Steel stand, top 8" x 16", height 24". 30 lbs.

Motors Recommended: 86-520, 86-720, 82-710.

For complete listing of motors and switches see page 36.

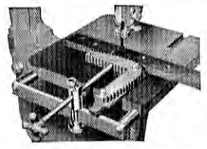
METAL CUTTING BAND SAW BLADES

93½ Inches Long

Made of high grade electric furnace steel, accurately set, spaced and jointed. These blades will stand up under hard work. These are hard-edge blades for cutting all metals. For standard and skip-tooth blades, see page 12.

Cat. No.	Width	Teeth Per Inch	Ship. Wt., Lbs.
1060	½"	14	1
1062	½"	18	1
1064	½"	24	1

SCREW FEED ATTACHMENT FOR BAND SAW

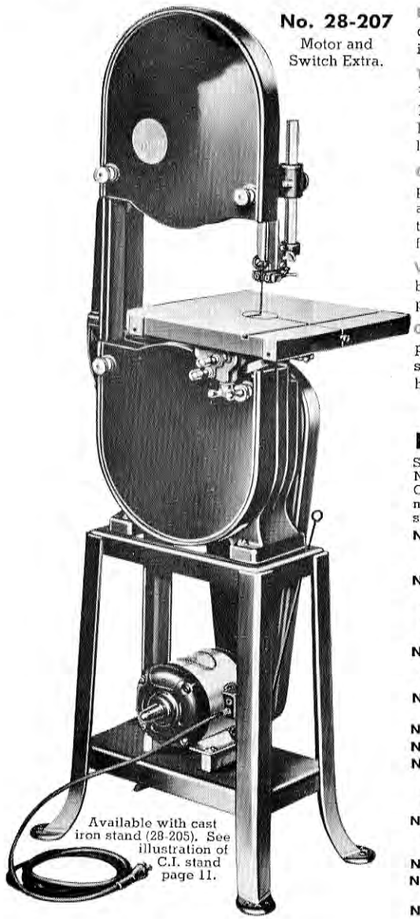


An added convenience for the tool room is the Screw Feed Attachment. The toothed segment clamps to the guide bar. May be inverted for cutting long bars or removed for cutting rounds and ovals. Adjustable so that proper feed pressure can be applied at all times.

No. 28-852—Complete Screw Feed Attachment. 7 lbs.

(For Prices See Attached Price List)

Greater Rigidity, More Convenience, With This 14-inch Wood Cutting Band Saw



No. 28-207
Motor and Switch Extra.

Available with cast iron stand (28-205). See illustration of C.I. stand page 11.

BEARINGS: Upper and Lower wheels are carried on sealed-for-life ball bearings which insure trouble-free performance.

TABLE: Massive 14"x 14" table with a 3/8"x 3/4" miter gage groove—tilts 45° right and 10° left with a positive stop at level position. Double trunnions give table extra rigidity for large, heavy work.

GUIDES: Guides and ball bearing blade supports adjust independently with micrometer accuracy. Lower guide comes within 3/4" of table top. All lower guide controls at front for added safety.

WHEELS: Aluminum wheels are carefully balanced and true running—are rimmed for proper mounting of tire.

GUARDS: Upper and lower wheels completely guarded. Heavy wood guard covers saw blade at rear—sliding guard covers all but working surface of saw blade in front.

CATALOG LISTING

No. 28-207 Complete 14" Wood Cutting Band Saw with No. 50-891 Steel Stand, No. 883 Belt Guard, Wheel Guards, No. 5800 Arbor Pulley, one No. 1034 Wood Cutting blade, No. 49-141 V-belt, and No. 5275 motor pulley (specify bore). Without motor or switch, 250 lbs.

No. 28-205—Same as No. 28-207 except with cast iron stand. 440 lbs. (No. 132 switch required when using single-phase or DC motor.)

No. 132—2 pole toggle switch for use with motors up to 1 hp, AC-DC, 125-250 V. with lock feature in special case without cover. Includes 2-wire, 3' power cord with plug. Use with No. 28-205.

No. 864—Auto-set Miter Gage with individually adjustable stops 3/8"x3/4" bar, 17" long, full 5/16" dia. stop rods, 2 clamps.....4 lbs.

No. 882—Lamp Attachment (Uses standard bulb) .....1½ lbs.

No. 883—Belt Guard.....12 lbs.

No. 886—Cast iron stand 24" high. 106 lbs.

No. 890—14" Wood Cutting Band Saw with Wheel Guards, No. 5800 Arbor Pulley, and one No. 1034 Wood Cutting blade. Without motor or switch, 147 lbs.

No. 894—Height Attachment with cast block, dowels and bolt. Extension Front Blade Guard and Wood Back Blade Guard.....14 lbs.

No. 1334—Switch Rod for use with No. 28-207.

No. 5275—2¾" Motor Pulley. Specify bore... .....½ lb.

No. 28-810—Sanding Attachment consisting of flat and curved platens with guides and mounting bracket. .....1 lb.

No. 28-836—Five Garnet Sanding Belts, No. 80 Grit, Fine, ½" wide, 91" long.....1 lb.

No. 28-837—Five Garnet Sanding Belts No. 40 Grit, Medium, ½" wide, 91" long.....1 lb.

No. 28-843—Rip Gage, 18" Guide Bars....8 lbs.

No. 28-845—Rip Gage, 32" Guide Bars..14 lbs.

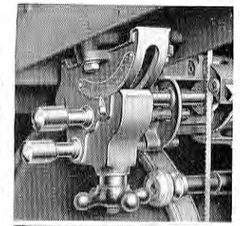
No. 49-141—V-Belt Out. Cir. 60".....1 lb.

No. 50-891—Steel Stand, top 8" x 16", height 24" .....30 lbs.

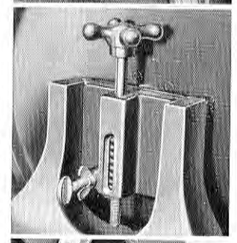
Motors Recommended: Heavy Duty 62-610, 66-320. Medium and Light Duty, 62-110, 66-320. For complete motor and switch listing see page 36.

SPECIFICATIONS

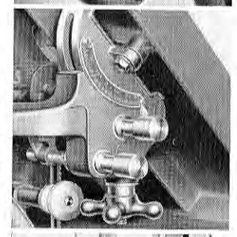
Capacity: Blade to Frame	13¾"
Capacity: Under Guide	6¼"
Capacity: Under Guide (with height attach.)	12¼"
Speed with 1725 r.p.m. motor	2200 FPM.
Overall height	65½"
Width	16¼"
Front to back	24¾"
Table size	14"x 14"
Table height from floor	42¾"
Table tilt to right	45°
Table tilt to left	10°
Blade length	93½"



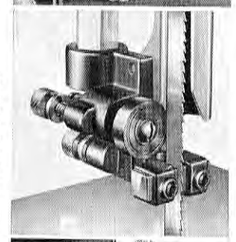
Notice the strong and accurate construction of the lower guide control and front table trunnion. All guide control adjustments at front of table for safety.



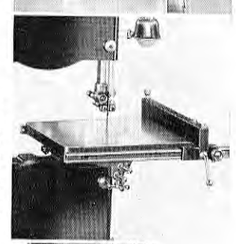
For added convenience and increased efficiency, upper wheel has blade tension adjustment. Quick index shows correct tension for various widths of blades.



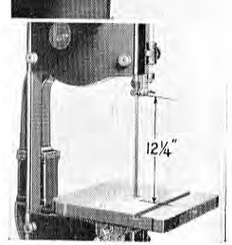
Two widely spaced trunnions 9 inches apart give maximum table rigidity, insures better clamping and greater accuracy. Table tilts 45° right and 10° left.



Micrometer adjustments of blade guides insure proper blade support for accurate work yet allow blade to run free. Guides and blade supports adjust independently.



Ripping on the 14" Band Saw is easily done with this Rip Gage. Fence has "Micro-Set" adjustment. Comes complete with screws for fastening.



This simple attachment increases the capacity of your 14" Wood Cutting Band Saw from 6¼" under the guide to 12¼". Can be added at any time—105" blades are used.

(For Prices See Attached Price List)

STANDARD BAND SAW BLADES

Width	Cut. Rad.	Teeth Per Inch	93½" long	105" long*
⅛"	¼"	7	No. 1032	No. 1045
3/16"	½"	7	No. 1033	No. 1046
¼"	¾"	7	No. 1034	No. 1047
⅜"	1"	6	No. 1036	No. 1048
½"	1¼"	6	No. 1038	No. 1050
¾"	1¾"	4	No. 1040	No. 1052

*Used with No. 894 Height Attachment.

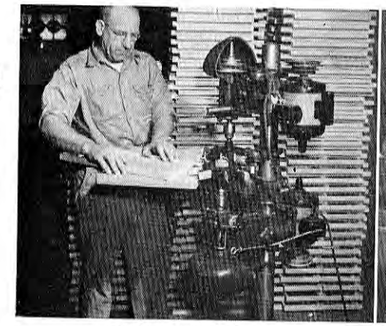
Note: These blades also can be used with the Metal Cutting Band Saw listed on page 11.

SKIP TOOTH BAND SAW BLADES

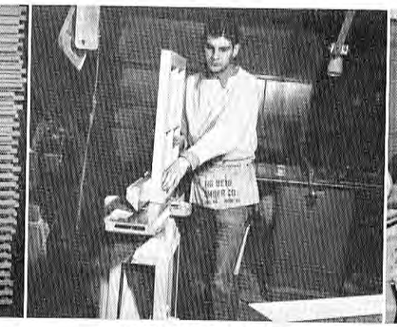
Ideal for Plastics, Wood, Aluminum, Magnesium, etc.

Width	Cut. Rad.	Teeth per Inch	93½" Long
¼"	¾"	6	No. 28-884
⅜"	1"	4	No. 28-885
½"	1¼"	4	No. 28-886
¾"	1¾"	3	No. 28-887

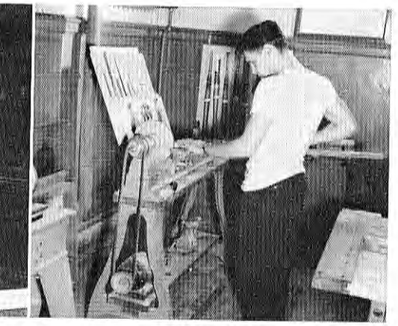
There's A Place In Every Shop For Delta Equipment



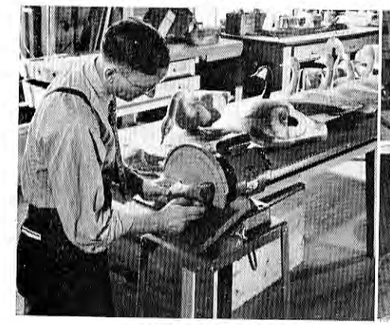
WOOD SPECIALTY CO.



MILLWORK COMPANY



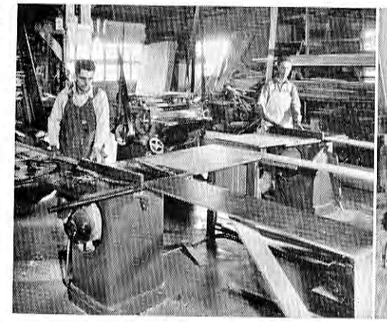
SCHOOL SHOP



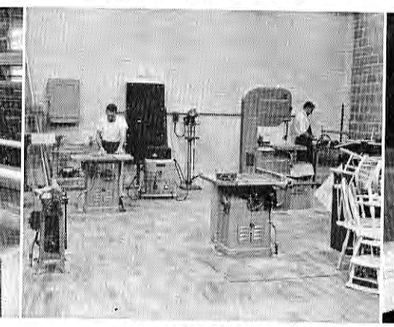
PUBLIC MUSEUM

WOODWORKING COMPANY

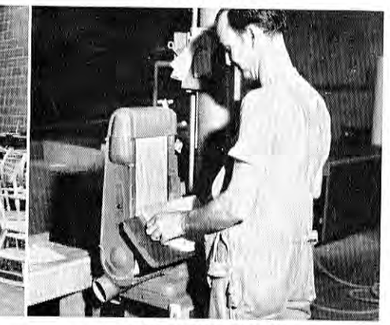
PATTERN WORKS



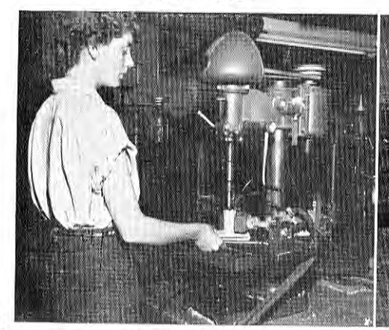
CABINET SHOP



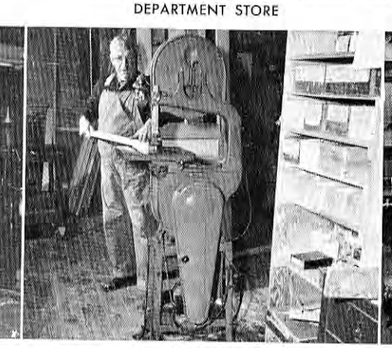
DEPARTMENT STORE



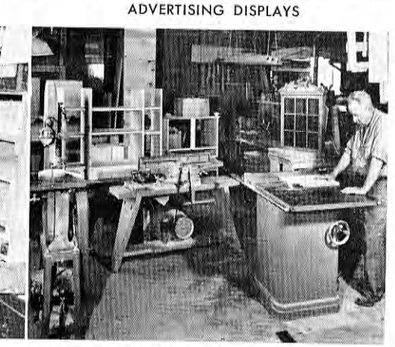
ADVERTISING DISPLAYS



PLASTIC COMPANY



LUMBER COMPANY



FURNITURE MANUFACTURER

The Abrasive Disk Finishing Machine For Wood or Metal

A HIGH GRADE UNIT FOR FINISHING, MITERING, SQUARING AND GRINDING

No. 31-105
Motor Extra

Designed to meet every requirement for accurate finishing, this abrasive disk finishing machine is ideal for the cabinet shop, sign shop, furniture manufacturer, pattern maker, or any place where an accurate, fast job must be done. Being portable, it can be moved to any place in the shop or on the production line.

Used with any standard Delta-Milwaukee ball bearing motor in 8½" frame, the disk fits directly to the end of the motor shaft. Disk is specially machined to insure proper adhesion of abrasive disks, and by using disk adhesive for applying disks, there is no need for messy gluing, no removal of disk from machine, no waiting overnight for new abrasive disks to dry. Abrasive disks can be renewed every few minutes if necessary.

CATALOG LISTING

No. 31-105 Complete Direct Motor Drive Abrasive Disk Finishing Machine with No. 50 432 Steel Stand, Tilting Table and one No. 1427 Garnet Disk. Without motor or switch 123 lbs.

No. 864 —Auto-set Miter Gage. 4 lbs.

No. 1426 —Direct Motor Drive Abrasive Disk Finishing Machine with tilt table. 53 lbs.

No. 1427 —12" Garnet Disk for wood No. 50 Grit Medium. (½ doz.) 1¼ lbs.

No. 1428 —12" Aluminum Oxide disk for metal. No. 60 Grit Medium. (½ doz.) 1¼ lbs.

No. 1430 —Disk Assembly with Flange and Set Screws. 10 lbs.

No. 49-503—Disk Adhesive. 1 lb.

No. 50-432—(Old No. 1432)—Steel Stand. 31½" high with 12½" x 16½" Top. 49 lbs.

Motors Recommended: Heavy duty—84-910, 86-920. Medium duty—82-910, 86-720. Light duty—82-710, 86-520.

For 3 phase motors use No. 1320 Manual starter, No. 1329—220 V. Magnetic starter or No. 1321—440 V. Magnetic starter and No. 1322 Mounting parts. See page 36 for Motors and Switches.

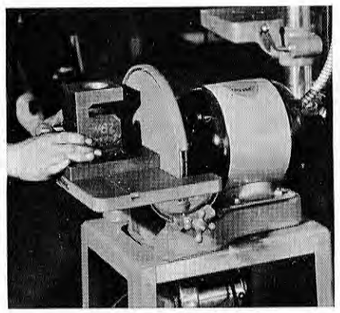
SPECIFICATIONS

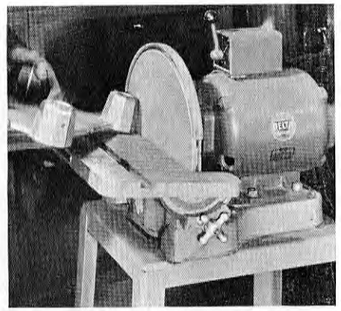
Dimensions (Floor model on steel stand):
- Width ..... 19"
- Height ..... 45"
- Front to rear ..... 23"

Table ..... 9¾" x 16¼"
Miter gage groove dimensions .... ⅜" x ¾"
Tilt of table to front ..... 45°
Tilt of table to back ..... 20°
Diameter of disk ..... 12"

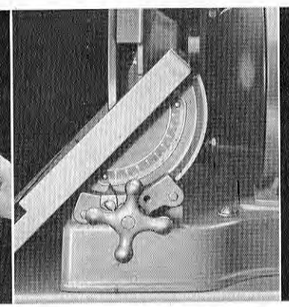
Tilt gage on right trunnion.

Table carried on rigid, well designed trunnions with large, convenient trunnion lock knobs.

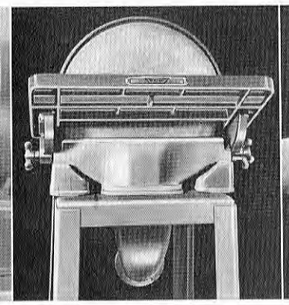




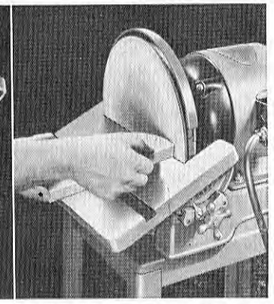
Plain and compound miters are easily handled with the aid of the No. 864 Miter Gage. Accuracy makes it ideal pattern shop tool.



Handy lock knob on either side of table locks it securely at any angle. Scale shows exact degree of tilt.

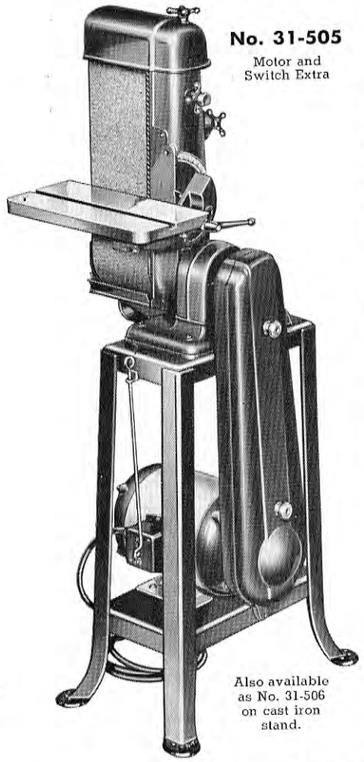


Scientifically ribbed table is mounted on two widely spaced trunnions. Dust chute carries off sawdust to the rear.



All kinds of sanding can be done quickly and easily — free hand curved sanding, sanding with jigs, angle sanding, miter sanding, etc.

Abrasive Belt Finishing Machine Has Many Industrial Uses



No. 31-505
Motor and Switch Extra

Also available as No. 31-506 on cast iron stand.

HERE is a 6" belt-type abrasive finishing machine that is heavy and husky enough to do any of the dozens of sanding, polishing and finishing operations to be found around the average shop—and yet is portable enough to be used just where it is wanted. With sealed, lubricated-for-life ball bearings. Completely enclosed and guarded in accordance with safety requirements. Exceptionally heavy main drive shaft, carrying large diameter drum (5½"). Large driving pulley to transmit power. No rubber covering required on drums. Adjustable deflector on drum hood catches practically all dust. Hood is provided with suction spout. Machine operates vertically as well as horizontally. Adjustable fence for edge sanding and adjustable back stop for flat sanding are available for use in horizontal position.

SPECIFICATIONS

Table size ..... 7⅜"x14¾"
Tilting Table (tilts 45° from belt, 20° toward belt)
Miter gage groove ..... ⅜"x¾"
Cloth-backed belt ..... 6" wide x 48" long
Belt capacity above table .. 6" wide x 9⅞" high

OVERALL DIMENSIONS: 28" long, 18" wide, 36" high in horizontal position, 54" high in vertical position.

Abrasive Belt Finisher with Metal Dust Collector

See page 10 for Dust Collector Desired

CATALOG LISTING

No. 31-505 Complete Abrasive Belt Finishing Machine with No. 1414 Aluminum Oxide Belt; No. 1401 Tilting Table; No. 50-406 Steel Stand; No. 1411 Belt Guard; No. 560 V-belt and No. 5500 Motor Pulley (specify bore). Without Fence, Backstop, Motor or Switch. 124 lbs.

No. 31-506—Same as No. 31-505 except takes 595 V-belt and is on cast iron stand. 205 lbs. No. 132 switch required when using single-phase or DC motor.

No. 1400—Abrasive Belt Finishing Machine only, with No. 1414 Aluminum Oxide Belt, without Fence, Backstop, Table, Stand, Motor, Belt or Motor Pulley, 86 lbs.

No. 132—2-Pole Toggle Switch, 1 HP, AC-DC, 125-250 V., with Lock Feature, in Special Case without cover. Includes 2-wire type 3' power cord, with plug. Use with No. 31-506.

No. 560—V-Belt for No. 31-505. Out. Cir. 58-5/16". 1 lb.

No. 595—V-Belt for No. 31-506. Out. Cir. 61-13/16". 1 lb.

No. 864—Auto-set Miter Gage. 4 lbs.

No. 1334—Switch Rod for use with No. 31-505. 1½ lbs.

No. 1401—Tilting Table. 15 lbs.

No. 1403—Backstop Complete with Bracket. 4 lbs.

No. 1410—Wood Fence (3¼"x17½") with brackets. 5 lbs.

No. 1411—Belt Guard with screws. 10 lbs.

No. 1412—6" Garnet Belt for Wood, 80 grit, Fine. 1 lb.

No. 1413—6" Garnet Belt for Wood, 40 grit, Coarse. 1 lb.

No. 1414—6" Al. Oxide Belt for Metal, 100 grit, Fine. 1 lb.

No. 1415—6" Al. Oxide Belt for Metal, 50 grit, Coarse. 1 lb.

No. 5500—5" Motor Pulley, specify bore. 1½ lbs.

No. 31-852—Cast Iron Stand with sub-base and belt guard. 140 lbs.

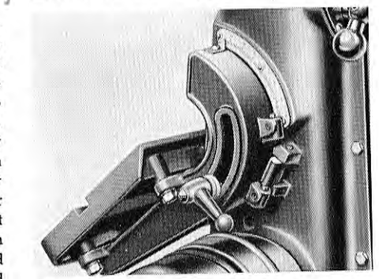
No. 31-856—Attachment Package for connecting Dust Collector to Abrasive Belt Finishing Machine. 7 lbs.

No. 50-406—Steel Stand. Top 8"x16". Height 29¼". 30 lbs.

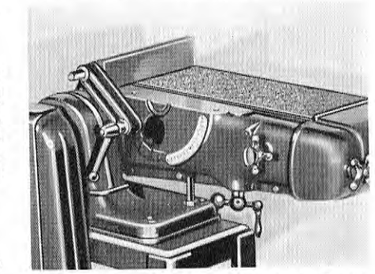
Motors Recommended. Heavy Duty—84-910, 86-920, 87-120; Medium Duty—82-910, 86-720; Light Duty—82-710, 86-520.

For complete listing of Motors and Switches see page 36.

(For Prices See Attached Price List)



Here's a close-up of the heavy trunnion that carries the tilting table, showing the swinging stop link and adjustable stop screws. A tilting scale and adjustable pointer are also provided.



View showing No. 1403 adjustable back stop and its bracket. This is available for use in sanding flat work, to prevent the work from being carried along with the belt.

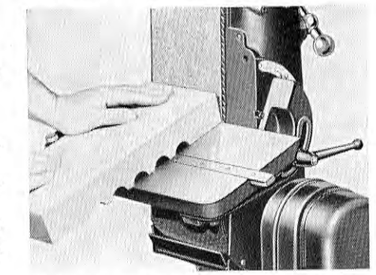
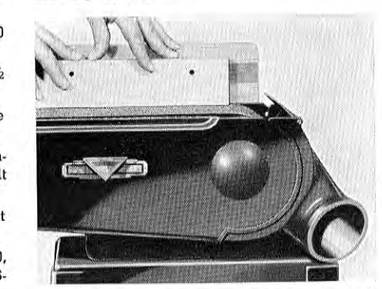


Table tilts easily and quickly 20° toward belt, 45° from belt. Standard No. 864 Miter Gage can be used. Handy locking handle locks table securely in position.



Convenient Wood Fence No. 1410 can be used to support large pieces. Adjustable deflector at end of hood catches dust and carries it off through dust spout. Can be attached to shop dust collecting system.

You Get Accuracy—Long Life—Convenience With A Delta 10" Unisaw®

Famous "3-Belt" Drive
Uses all motor power—eliminates vibration and produces smooth operation—three belts pull side by side.

No. 34-405
Motor and Switch Extra.

Cuts to Center of 50" Panel
Rips Stock 3⅛ Inch Thick

The Delta-Milwaukee 10" Tilting Arbor Circular Saw is completely self-contained, motor and driving mechanism being enclosed in a strong steel cabinet type base. The saw table is 20 x 27 inches (with wings 27 x 36 inches), it cuts to the center of a 50 inch panel and 3⅛ inches thick.

Saw blade tilts 45 degrees to right, operated by a large convenient hand wheel. Blade is raised and lowered by another hand wheel at front of machine. Dado heads, moulding cutters and many other attachments may be used. Carriage swings on trunnions that are large, heavy and strong with working surfaces completely machined.

Rip-fence bar extends over the rear edge of the table—many inches past the rear of the saw blade. Fence locks both front and rear, the rear lock being operated from the front of the gage. Fence can be used on both sides of the blade. Guide bars allow the fence to be moved 25 inches to the right of the saw blade and 15 inches to the left of the saw blade. Front Guide Bar graduated for quick setting of Fence.

The saw-arbor bracket is a very heavy casting, with accurately machined teeth to fit the raising and lowering worm, and with accurate adjustable stop to limit up and down travel. The casting is mounted on a very heavy keyed shaft where it can be adjusted and locked to bring the table in exact alignment with the saw arbor flange.

The arbor is carried in two sealed, Lubricated-for-life ball bearings, mounted in diamond bored bearing seats.

Features That Are Yours With The UNISAW®

These design and construction features make this 10 inch Tilting Arbor Circular Saw the best unit in its field today.

- Precision ground, stress proof arbor, flange faced after assembly.
- Sealed, Lubricated-for-life Ball Bearings.
- Highly efficient 3-belt "Texrope" drive.
- Massive swinging trunnions.
- Perfect alignment.
- Double-Face, Double-Lock Rip Fence.
- Perfected Raising, Lowering and Tilting Mechanism.
- Big Capacity—cuts to center of 50" panel—rips 3⅛" stock.
- Patented, precision Auto-Set Miter Gage.
- Big, Perfectly True Table Surface, 27"x36".
- "Point of use" Controls and Locks for Convenient, Safe operation.
- Sawdust Receptacle located in Base.
- Patented tubular ripping extension.
- Graduated Front Guide Bar.
- Accurate calibrations on all settings.
- Strong, Rigid cabinet type base.
- No useless weight—only 334 lbs.
- Perfect Safety—completely guarded—motor switch can be locked.
- Powerful, Fully Enclosed Motor.
- Beautiful streamlined appearance.

SPECIFICATIONS

Diameter of arbor	5/8"
Diameter of saw blade	10"
Maximum depth of cut	3⅛"
Cuts to center of panel (max. width)	50"
Table in front of blade on capacity cut	12"
Table size	20"x 27"
Table size with wings	36"x 27"
Fence moves:	
To right of blade	25"
To left of blade	15"
Tilt of Blade to right	45°
Miter Gage groove in table	3/8"x 3/4"
Table Height	34"
Overall dimensions with Wings and Guide Bars	30¼"x 45⅜"

Rip Fence locks at both front and back.

CATALOG LISTING

No. 34-405 Complete 10" Tilting Arbor Unisaw for 60 cycle service with No. 1455 pair of side Extension Wings, Micro-Set Rip Fence, No. 1015 Combination Blade, No. 864 Miter Gage, Front Graduated Guide Bar, No. 1449 Motor Pulley, three No. 291 V-belts and No. 1471 Super-Safe Guard, Without Motor or Switch. 334 lbs.

Note: When ordering machines for 25 and 50 cycle service, order No. 34-407.

No. 281—V-Belt for 25 and 50 cycle motors (3 req.). ¾ lb.

No. 291—V-Belt for 60 cycle motors (3 req.). ¾ lb.

No. 1450—10" Tilting Arbor Unisaw for 60 cycle service with Micro-Set Rip Fence, No. 1015 Combination Blade, No. 864 Miter Gage, Front Graduated Guide Bar, No. 1449 Motor Pulley and three No. 291 V-belts. Without Guard, Splitter, Extension Wings, Motor or Switch. 304 lbs.

Note: When ordering machines for 25 and 50 cycle service, order No. 1448.

No. 1451—Standard Table Insert. 1¾ lbs.

No. 1452—Dado head table insert, 1½ lbs.

No. 1453—Moulding Cutterhead table insert, 1½ lbs.

No. 1454—Motor Cover, with screws. 25 lbs.

No. 1455—Side Extension Wings to make table 36"x 27" per pair. 49 lbs.

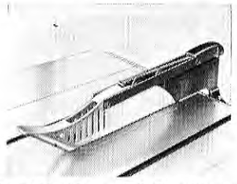
No. 1471—Super-Safe Splitter mounted Guard. 11 lbs.

Motors Recommended: 85-010, 87-010, 87-210.

For three-phase motors specify No. 1320 Manual Starter or Magnetic Starters 1321 or 1329. Specify 1459 Mounting Parts.

For complete motor and switches see page 36.

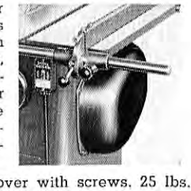
SUPER-SAFE GUARD PROVIDES PROTECTION



The No. 1471 "Super-Safe" splitter-mounted guard is anchored directly to the arbor bracket so that when the saw is tilted the guard follows the saw—thus complete protection is always assured no matter at what angle the saw is set. Provides maximum protection because it combines basket, splitter and anti-kickback fingers in one unit. Easily removed for Dadoing and Moulding cutter work.

No. 1471—"Super-Safe" splitter mounted guard. 11 lbs.

MOTOR COVER

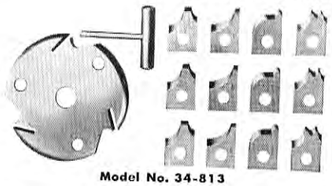


This cast iron cover completely encloses the opening in which the motor swings, and provides an additional safety factor for the machine. The cover is readily attached to the cabinet.

No. 1454—Motor cover with screws. 25 lbs.

You Can Make Many Different Mouldings With These 53 Sets of Knives

MOULDING CUTTER SETS AND PARTS



Model No. 34-813

No. 265—Heavy duty solid steel moulding cutterhead only, to fit 5/8" arbor. Without wrench or cutters, 3 lbs.

No. 34-813—Heavy duty moulding cutter set for all circular saws with a 5/8" arbor. With heavy duty steel cutterhead, 4 sets of high speed knives Nos. 35-102, 35-103, 35-331, and 35-222 and wrench. Order proper table insert below. 8 lbs.

No. 1162—Moulding cutter table insert for 34-305, 34-307 saws. 1½ lbs.

No. 1453—Moulding cutter table insert for 34-405, 34-407 saws. 1½ lbs.

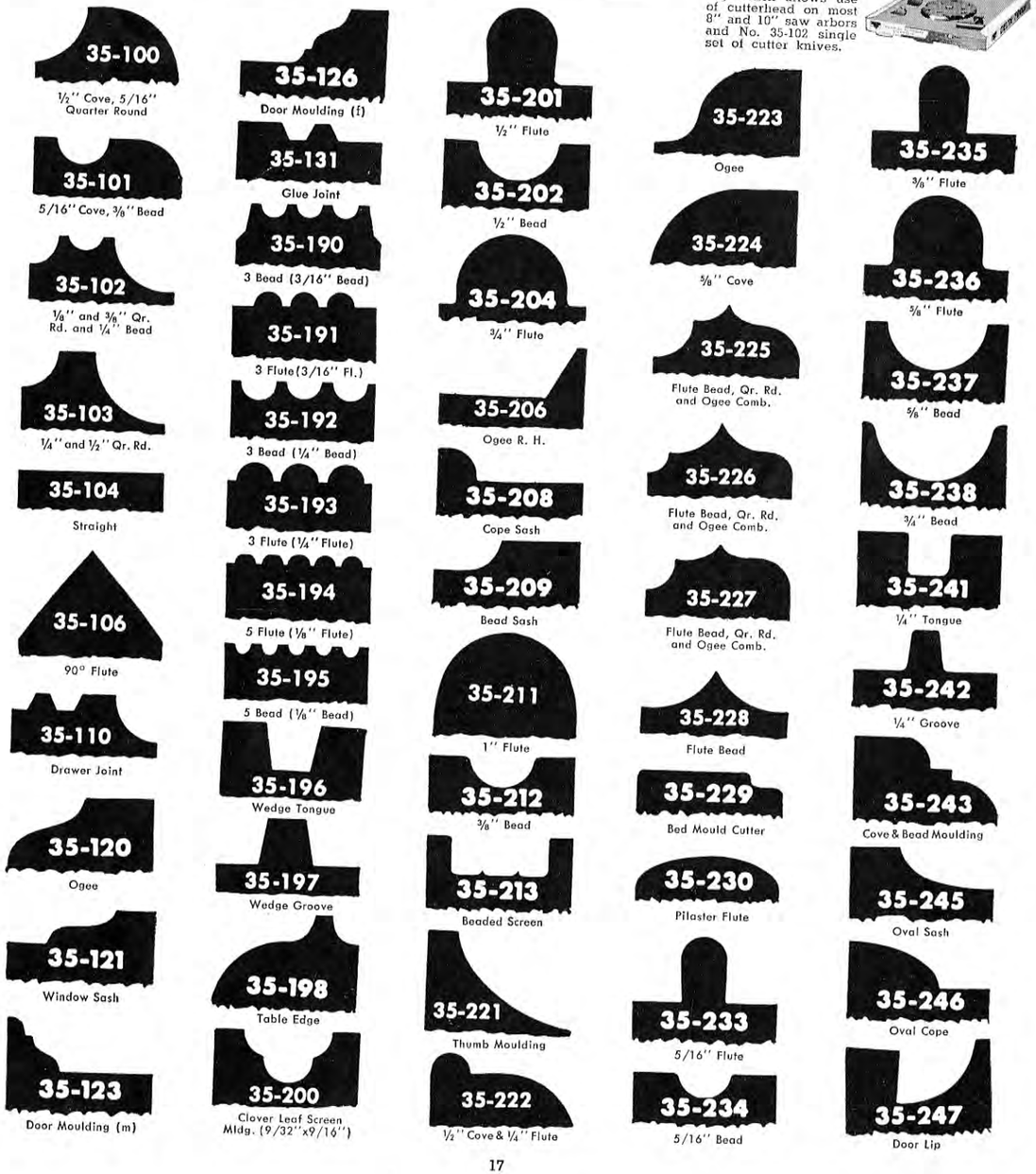
No. 1521—Wrench. ⅛ lb.

DOES MARVELOUS WORK!

The Moulding Cutter Set is the only practical tool of its kind. It consists of a strong well-designed steel head. A set of three interchangeable knives is locked into the head so that it is completely safe in operation. The head may be used on the 34-305, 34-307, 34-405, or 34-407 Circular Saws, and on most other saws provided with a ½" or 5/8" arbor.

GET ACQUAINTED OFFER

Cat. No. 34-821—BASIC MOULDING CUTTERHEAD AND KNIFE SET
Includes No. 265 cutter, No. 1521 wrench, bushing which allows use of cutterhead on most 8" and 10" saw arbors and No. 35-102 single set of cutter knives.



Accessories For Your Circular Saw

CIRCULAR SAW BLADES

No. 1017—10" Rip Blade with 5/8" Arbor Hole. 2 lbs.

No. 1018—10" Cross Cut Blade with 5/8" Arbor Hole, 2 lbs.

Combination Blade

The Combination Blade is a double-purpose blade, which rips and cross cuts equally well. This is the blade supplied with the Delta 10" Circular Saws. Teeth have proper set for free cutting.

No. 1015—10" Combination Rip and Cross Cut Blade with 5/8" Arbor Hole. 2 lbs.

Hollow Ground Blade

The teeth have no set, and the work comes from the saw ready to put together. Intended for fine work only: it is not suitable for rough cutting. It miters, cross cuts and rips.

No. 1016—10" Hollow Ground Blade with 5/8" Arbor Hole. 2 lbs.

PTI Blade

No. 34-802—10" diameter P.T.I. Saw Blade 5/8" diameter hole. Weight 2 lbs.

Novelty Tooth Blade

No. 34-804—10" diameter flat ground Novelty Tooth Saw Blade with 4 crosscutting teeth to each raker tooth, 5/8" diameter hole, 16 gauge. Weight 2 lbs.

Carbide-Tipped Saw Blades

No. 34-807— 8" dia., 5/8" bore, 16 teeth, 14 ga., .115" kerf, 1½ lbs.
No. 34-808— 9" dia., 5/8" bore, 16 teeth, 14 ga., .115" kerf, 2 lbs.
No. 34-809—10" dia., 5/8" bore, 18 teeth, 13 ga., .125" kerf, 2½ lbs.
No. 34-810—12" dia., 1" bore, 20 teeth, 13 ga., .125" kerf, 3½ lbs.
No. 34-811—12" dia., 1 1/8" bore, 20 teeth, 13 ga., .125" kerf, 3½ lbs.
No. 34-815— 8" dia., 5/8" bore, 8 teeth, 14 ga., .115 kerf, 1½ lbs.
No. 34-816— 9" dia., 5/8" bore, 8 teeth, 14 ga., .115 kerf, 2 lbs.
No. 34-817—10" dia., 5/8" bore, 8 teeth, 13 ga., .125 kerf, 2½ lbs.
No. 34-818—12" dia., 1" bore, 8 teeth, 13 ga., .125 kerf, 3½ lbs.
No. 34-819—12" dia., 1 1/8" bore, 8 teeth, 13 ga., .125 kerf, 3½ lbs.

For other Delta Carbide Tipped Saw Blades see Page 22.

DADO HEAD AND INSERTS

For cutting grooves varying in width from 1/8" to 13/16" and up to 1¼" deep, on tilting table saw (1 1/8" deep on tilting arbor saw) either with or across grain. Made of the finest steel, carefully hardened and tempered. Includes 1/16" inside cutter. Fits all circle saws with a 5/8" arbor.

No. 34-333—6" Dado Head, consisting of two outer blades, 1/8" thick, two inside cutters 1/8" thick, one inside cutter ¼" thick, and one inside cutter 1/16" thick. To cut grooves from 1/8" to 13/16". With 5/8" arbor hole. 3½ lbs.

No. 1161—Dado Head Table Insert for 10" Tilting Table Saw, 1½ lbs.

No. 1452—Dado Head Table Insert for 10" Tilting Arbor Saw, 1¾ lbs.

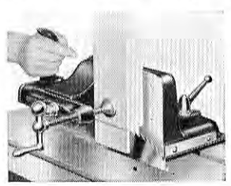
Clamp Attachment

No. 865—Clamp Attachment for Miter Gage with Clamp Bar, two Sliding Clamp Screws and Front and Rear Posts. 2¼ lbs.

No. 873—Extra Clamp Screw and Block for Clamp Attachment. 1 lb.

Tenoner Makes All Cuts Safe, Square, Parallel

Work is fed to the saw with one hand—far removed from the revolving blade. The tenoner will take stock up to 2¾" thick, any width within the capacity of the saw, and will cut tenons to full capacity of saw. With the use of No. 1171 spacing collars and two saw blades, ¼" or 3/8" tenons can be cut at one pass.



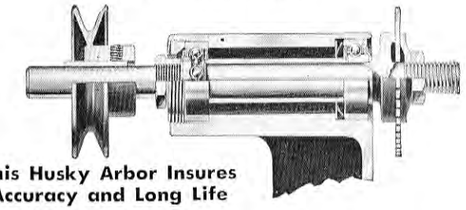
No. 1172—Tenoner complete with base plate. 31 lbs.

No. 1171—Spacing collar set (one ¼" and 3/8" collar). ½ lb.

No. 1170—Tenoner for use with No. 1186 Sliding Jig. Can also be used on shaper. 21 lbs.

(For Prices See Attached Price List)

10-inch Tilting Table Saw Assures Fast, Accurate Work

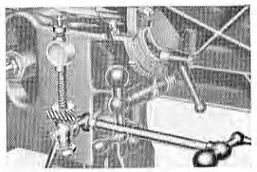


This Husky Arbor Insures Accuracy and Long Life

The arbor of the 10" Tilting Table Saw is accurately machined out of steel to extremely close tolerances. It is carried on widely spaced sealed-for-life ball bearings that require no lubrication. Bearing seats for arbor are "diamond-bored" to assure perfect accuracy. Arbor has 5/8" Acme threads. Flanges grip blade firmly.

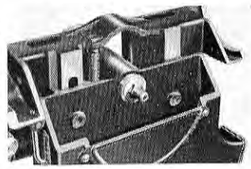
RAISING MECHANISM

Table raising and lowering is done by means of a helical gear on a shaft operated by a comfortable, free-handle ball crank. The gear meshes with another running on the ball-bearing raising screw, elevating or lowering the table with ease and speed. The pitch of the screw is chosen to provide a fast movement, while at the same time it is fine enough for close adjustment of depth.



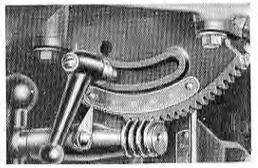
MACHINED WAYS

There are cheaper ways of fitting the table to the base than that employed on this saw, but none of these was thought satisfactory enough for a good machine . . . so the table is elevated and lowered on machined ways, the front one being gibbed for adjustment if this should ever be necessary.



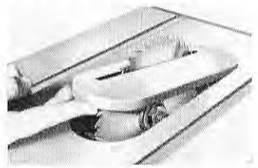
WORM-GEAR TILTING

The table is positively tilted by means of a worm and sector, the worm operated by means of another comfortable ball crank. Accurate and convenient etched scales are provided for height and tilting adjustments, each provided with an adjustable pointer for accuracy.



QUICK-ACTING INSERTS

Table inserts are fitted in machined openings in the table—not rough cast holes. They are instantly snapped in or out with a touch of the finger—no screws to loosen. And they are provided with adjusting screws so they may be made to lie exactly flush with the table.

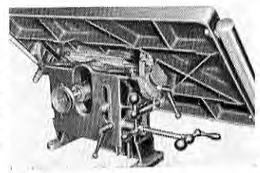


REAR RIP-FENCE LOCK

The patented construction not only provides a rigid rip fence, locked to the guide bars at front and rear, but in this saw all the fence controls are at the front—no reaching over the saw blade to loosen or tighten the rear lock. More convenience and safety!

MASSIVE CONSTRUCTION

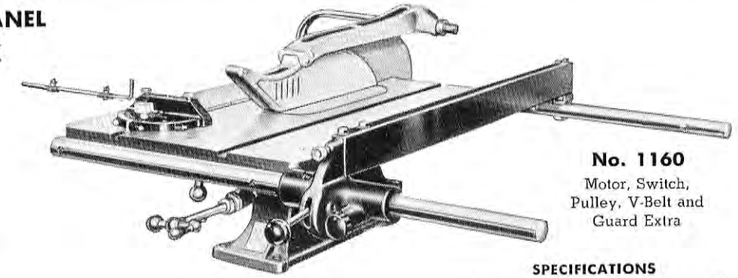
Notice the scientifically ribbed, heavy table, swinging on massive trunnions. This is a more expensive construction, but is the only one that permits the safety of a very narrow opening around the saw blade, since the table tilts at the point of opening in the table insert.



Large Capacity, Accuracy, Convenience in This 10" Tilting Table Circular Saw

RIPS TO CENTER OF 50" PANEL
CUTS STOCK 3¼" THICK

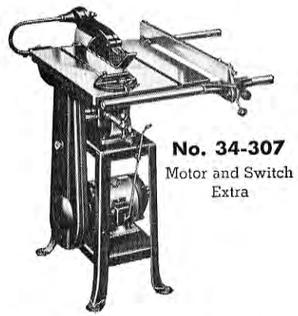
The Best Dollar Value in Circular Saws in America Today!



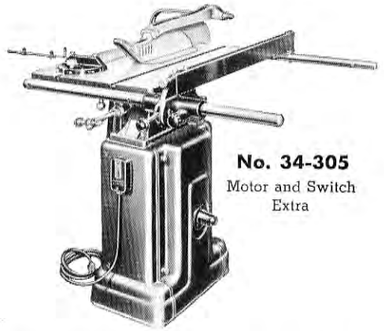
No. 1160
Motor, Switch, Pulley, V-Belt and Guard Extra

SPECIFICATIONS

Diameter of arbor ..... 5/8"
Diameter saw blade ..... 10"
Maximum thickness of stock ..... 3¼"
Rip to center of panel (max. width) .. 50"
Table in front of blade on capacity cut ..... 12"
Distance front of table to center of saw blade ..... 17"
Table dimensions ..... 20"x 27"
Tilt of table to right ..... 45°
Dimensions of table grooves for miter gage ..... 3/8"x ¾"
Diameter guide bars ..... 1 3/8"
Overall dimensions on stand:
Height ..... 38"
Width ..... 37¼"
Depth ..... 36 1/8"
Removable table insert.
Rip fence locks to front and back guide bars.
Steel arbor carried on sealed, "lubricated-for-life" ball bearings.



No. 34-307
Motor and Switch Extra



No. 34-305
Motor and Switch Extra

This 10" Tilting Table Circular Saw was built with just one thought in mind—to produce a saw that would offer more accuracy, more capacity, more convenience, more built-in value than any similar saw on the market. Its uses and applications are extremely wide, and the thousands of users in production plants, both big and small, are enthusiastic in their praise of its accuracy, rigidness, power and ease of operation.

Its rigid, husky arbor is of special design to give complete accuracy. Extra large capacity—will rip through a 3¼" plank and cross cuts to center of 50" panel. The table is 20"x 27" with a full 12" of saw table in front of the blade, at maximum cut 3¼" thick, giving extra support where it is wanted for large heavy pieces. And there is ample surface—5"—in back of the blade also.

The micro-set rip fence extends from the front clear over the rear edge of the table. The fence locks both front and back.

Observe the convenient cam and lever lock, with its comfortable Bakelite knob. A flip of the finger and the fence is unlocked. A light pressure of the hand and it is reclamped—and SELF-ALIGNED.

The rear lock too is operated from the front with a handy knurled knob. An added convenience and safety factor.

CATALOG LISTING

No. 1160—10" Tilting Table Circular Saw with No. 864 Miter Gage, No. 1015 Combination Blade, Micro-Set Rip Fence, and Front Graduated Guide Bar. Without Motor, Switch, Motor Pulley, V-Belt or Guard. 196 lbs.

No. 34-307—10" Tilting Table Circular Saw with No. 50-891 Steel Stand, No. 864 Miter Gage, No. 1015 Combination Blade, Micro-Set Rip Fence, Front Graduated Guide Bar, No. 1173 Belt Guard, No. 1165 Swing Guard, No. 1166 Splitter Attachment, No. 530 V-belt and No. 5500 Motor Pulley (specify bore). Without Motor or Switch. 290 lbs.

No. 34-305—Same as 34-307 except with Cast Iron Stand. 350 lbs.

No. 530—V-Belt. Out. Cir. 55". ½ lb.

No. 871—Holddown with Clamp, Brackets and Springs. 4 lbs.

No. 886—Cast Iron Stand 24" high. 106 lbs.

No. 1163—Standard Table Insert. 1½ lbs.

No. 1165—Swing Guard with Bracket Support Arm, Pivot Bracket, Basket, Collars and Screws. Without Splitter. 19 lbs.

No. 1166—Splitter Attachment consisting of splitter, Anti-Kickback fingers and collars for Support Arm. 5 lbs.

No. 1173—Belt Guard. 11 lbs.

No. 1330—Switch Rod for use with No. 34-307.

No. 1452—Dado Head Table Insert. 1¾ lbs.

No. 1453—Moulding Cutterhead Table Insert. 1¾ lbs.

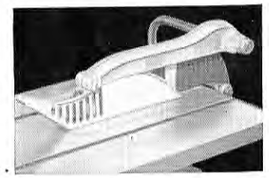
No. 5500—5" Motor Pulley. Specify ½", 5/8" or ¾" bore. 1¼ lbs.

No. 50-891—Steel Stand 24" high, top 8" x 16". 30 lbs.

Note: For heavy duty service 2 belts are recommended. Order extra: one No. 5300 arbor pulley 5/8" bore, one No. 5500 motor pulley (specify bore), and one No. 530 V-belt.

Motors Recommended: Heavy Duty 84-910, 86-920; Medium Duty 82-910, 86-720; Light Duty 82-710, 86-520. For complete motor and switch listing see page 36.

SWING GUARD . . .

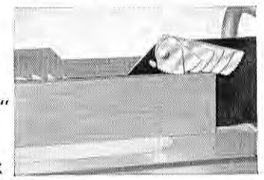


This guard No. 1165 really protects the user. Basket pivots with work so that blade remains covered while view is unimpaired.

SPLITTER SUITS SAW KERF . . .

The No. 1166 is the only practical type Splitter. Used with or without the basket. Floats to accommodate itself to the kerf.

"ANTI-KICKBACK" FINGERS ADJUST TO WORK

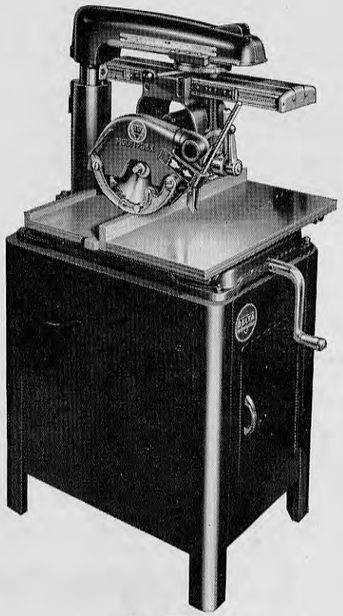


Prevents work from kicking back against operator. Invaluable when sawing poorly seasoned or warped wood. Kickback fingers take all work from thinnest strips to full capacity of blade.

(For Prices See Attached Price List)

8" Delta Radial Saw — An All-Purpose Saw For Home Workshops!

WILL ACCOMMODATE A 9" BLADE



CABINET TYPE

Where requirements are especially light, the 8" radial saw is your answer. It uses either an 8" or 9" blade which makes it ideal for exceptionally light duty operations such as home workshop use, light crating and boxing, and for interior trim work where extreme accuracy must be obtained on very light material. Also excellent for use by designers and decorators, model makers and small boat builders. This truly is a portable machine for it can be taken right on the job. Then, as the work progresses, the machine can be placed right at the job site to eliminate lost time and wasted motion. In other words, the saw is brought to the job instead of the work to the machine. This saves time and labor — gives you the utmost flexibility in woodworking of this kind. As illustrated, this unit is available with or without steel storage cabinet. 9" saw guard furnished.

SPECIFICATIONS

Motor rating	½ h.p.
Cross-Cut capacity—1" stock	10"
Maximum rip capacity	Center of a 40" panel
Maximum depth of cut—8" saw	2"
Maximum depth of cut—9" saw	2½"
Dado capacity (with 6" dado)	1½" deep x 13/16" wide
Diameter saw arbor	⅝"
Diameter of combination saw supplied (9" dia. can be used)	8"
Bevel locating latches	0°, 30°, 45°, 60°, 90°, R & L
Miter locating latches	0°, 30°, 45°, 60°, 90°, R & L
Type of track	Replaceable, hardened, nickel-alloy rods
Motor speed (full load) 60 cycles	3450 rpm
Overall height (cabinet type)	49"
Floor space required	22 x 25"
Wood table top	20 x 22"
Height table top	31½"
Net weight—portable model	125 lbs.
Net weight—cabinet model	169 lbs.
Shipping weight (approx.)—portable model	146 lbs.
Shipping weight (approx.)—cabinet model	195 lbs.

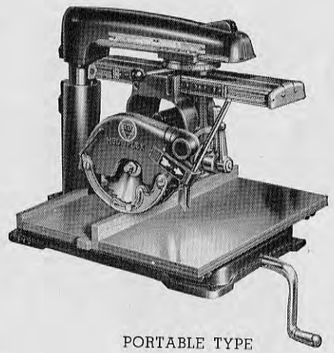
Cabinet Type

Cat. No.	H.P.	Volt	Phase	Cycle
33-122	½	115	1	60
33-123	½	230	1	50
33-127	½	230	1	60

Portable Type

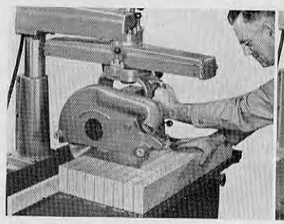
Cat. No.	H.P.	Volt	Phase	Cycle
33-120	½	115	1	60
33-121	½	230	1	50
33-126	½	230	1	60

No. 33-125—Cabinet Stand only .....

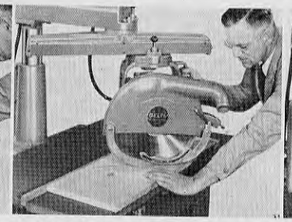


PORTABLE TYPE

DO ALL THESE JOBS ON A DELTA RADIAL SAW

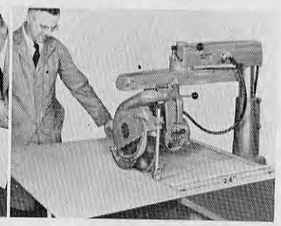


Mass cut-off of 2 x 4's stacked like this to speed up production.



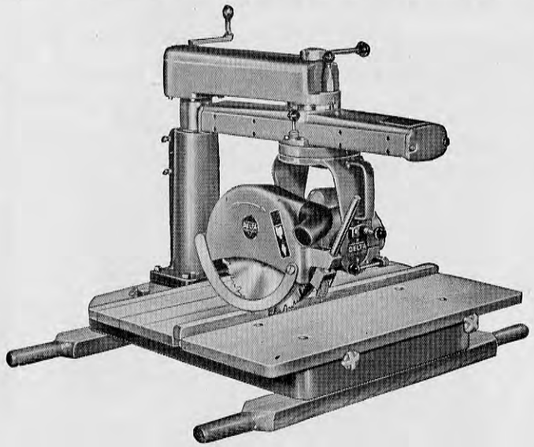
Right-hand miter from 0 to 90° makes low pitch rafter cuts.

Left-hand miter from 0 to 90° and saw stays on work table.



Left-hand rip 48" panels in half; wide table prevents saw overhang.

10" Delta Portable Radial Saw — For Light and Medium Duty Production Work



Here is a new portable radial saw that is designed, engineered, and built for the progressive builder. Easily moved from job to job and easily carried from place to place at the job, it gives the builder the precision accuracy and multi-purpose versatility of a true radial saw in a portable model. It's just the right size for production line cutting. With it the builder can take advantage of the economies or centralized cutting — can pre-cut an entire structure with only this one saw. In addition, this saw is especially suited for use in small school shops, pattern shops, and by jobbing contractors who do extensive light to medium duty cutting. Unit can be furnished with steel cabinet for permanent installation. 10" saw guard furnished.

SPECIFICATIONS

Motor rating	1, 1½ h.p.*
Cross-cut capacity—1" stock	16"
Maximum rip capacity	Center of a 48" panel
Dado capacity (with 8" dado)	2" deep x 13/16" wide
Maximum depth of cut—10" saw	3"
Diameter saw arbor	⅝"
Diameter of combination saw supplied	10"
Bevel locating latches	0°, 45°, 90°, R & L
Miter locating latches	0°, 45°, 90°, R & L
Type of track	Replaceable, hardened, nickel-alloy rods
Motor speed (full load) 60 cycles	3450 rpm
Overall height (cabinet type)	63¾"
Width of base	21"
Depth of base	25½"
Wood table top	22 x 30"
Height table top (cabinet type)	33"
Shipping weight (approx.)—portable type	243 lbs.

*1 H.P. Model is 115/230 volt, 60 cycle, single phase, cap-relay motor.

*1½ H.P. Model is 220/440 volt, 60 cycle, 3 phase induction motor.

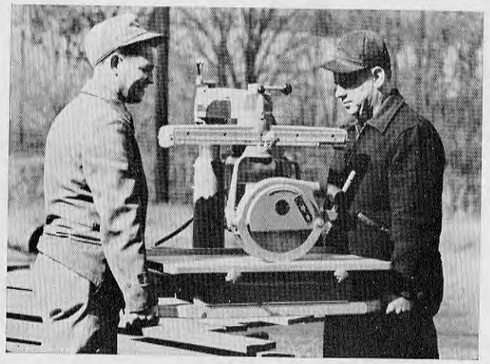
CATALOG LISTING

Cat. No.	H.P.	Volt	Phase	Cycle
33-571	1	115/230	1	60
33-572	1½	220	3	60
33-573	1½	440	3	60
33-574	1	115/230	1	50
33-575	1½	220/380	3	50
33-576	1½	220	3	50
33-577	1½	440	3	50
33-578	1½	550	3	50
33-580	1½	550	3	60

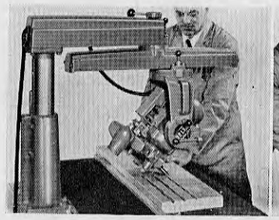
No. 33-579—Cabinet stand only.

ADVANTAGES OF 10" PORTABLE RADIAL SAW

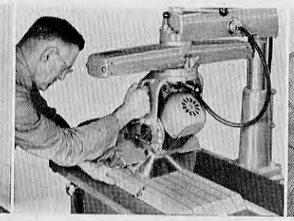
- Full three-inch depth of cut with 10" blade.
- New design provides 16" cut-off on one-inch stock.
- New one-piece leaf guard permits miter and bevel cuts to be made with guard in place.
- Light weight — only 243 lbs., can easily be carried by two men.
- Compact design enables it to be carried thru a standard door opening.
- Unlimited miter capacity — 0° to 90°, right or left.



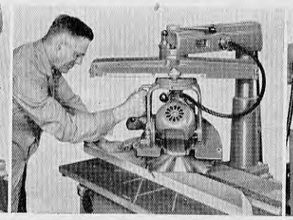
EXCLUSIVE 360° TRACK ROTATION OVER THE TABLE



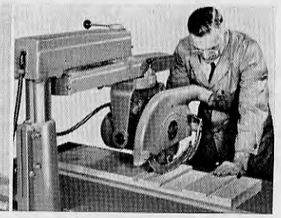
Bevel plough with dado head for "V" grooves to any depth.



Bevel cut-off bridging stock in multiple to save handling time.



Left-hand double miters for jack rafters are easy jobs.



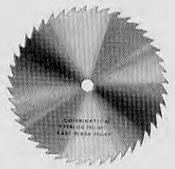
Straight dado — any width; cut in either direction.

Do More Jobs — And Do Them Better!

WITH SPECIALLY ENGINEERED DELTA RADIAL SAW ACCESSORIES

COMPLETE SELECTION OF SAW BLADES

Be sure to check arbor size before ordering.



COMBINATION SAW BLADES

(Flat Ground)

Catalog Number	Model	Diameter	Arbor Hole
325	8"	8"	5/8"
33-196	8"	9"	5/8"
1015	10"	10"	5/8"

RIP SAW BLADES

(Flat Ground)

Catalog Number	Model	Diameter	Arbor Hole
334	8"	8"	5/8"
33-198	8"	9"	5/8"
1017	10"	10"	5/8"

MITRE SAW BLADES

(Hollow Ground)

(4 cutting teeth — 1 raker tooth)

Catalog Number	Model	Diameter	Arbor Hole
326	8"	8"	5/8"
33-227	8"	9"	5/8"
1016	10"	10"	5/8"

SHAPER CUTTER ADAPTERS

33-287

No. 33-287—Spindle and Arbor Adapter for mounting ½" hole, 3-lip Shaper Cutters on 8" model and old 30A, 10" model.

No. 33-600—Same as above. For use on new 10" Portable Model.

33-288

No. 33-288—Spindle Adapter for Mounting 5/16" Hole, 3-Lip Shaper Cutters. Use with No. 33-289 Adapter.

No. 43-990—Spindle Adapter for Mounting ½" Hole, 3-Lip Left-Hand Shaper Cutters on Chuck No. 43-988 Mounted on Motor Arbor. Also with No. 33-304 adapter.

43-990

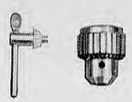
ROUTER BIT and SANDER ADAPTERS

No. 33-289—Adapter for mounting Router Bits, Sanding Drums or Spindle Adapters with ½" shank to be used on 8" model and old 30A, 10" model.

33-289

No. 33-601—Same as above. For use on new 10" Portable Model.

GEARED KEY CHUCKS



No. 43-988—3-Jaw Chuck, 0 to ½" capacity, with key. For use with 8" model and old 30A, 10" model.

No. 43-980—Same as above. For use on new 10" Portable Model.

NEW CARBIDE-TIPPED SAW BLADES

Radial saw performance never before realized! With Delta's new carbide-tipped blades . . . engineered exclusively for radial saws . . . and at prices never before possible!

They cut faster and smoother . . . make all cuts with greater accuracy in all woods and wood laminates plus plastics, metals and abrasive materials . . . eliminates frequent blade changes . . . blades last 25 to 100 times longer than conventional blades before resharpening . . . save power and prolong motor life. Custom engineered to deliver maximum performance in ALL radial saw operations.

CARBIDE-TIPPED BLADES FOR 10", 12"-14" DELTA RADIAL SAWS

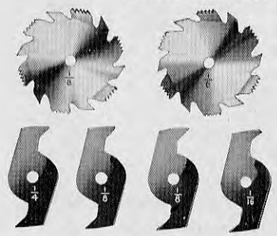
No. 34-835—10" Dia., 5/8" bore, 24 teeth, .095 gage, .131 kerf, 3 lbs.

No. 34-836—12" dia., 1" bore, 30 teeth, .095 gage, .131 kerf, 4½ lbs.

No. 34-837—14" dia., 1" bore, 36 teeth, .109 gage, .145 kerf, 6 lbs.

BE SURE TO CHECK ARBOR SIZE BEFORE ORDERING.

STANDARD DADO HEAD SETS

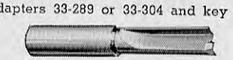


These No. 3 dado sets are made of the finest steel, carefully hardened and tempered. Sets consist of two outer blades, and four inside cutters, as illustrated. Will cut grooves from 1/8" to 13/16" wide with or across the wood grain. Sold in complete sets *only*.

Catalog Number	Model	Diameter	Arbor Hole
34-333	8"	6"	5/8"
33-212	10"	8"	5/8"

ROUTER BITS (Left Hand Rotation)

Use with adapters 33-289 or 33-304 and key chuck 43-988.



Catalog Number	Size	Shank	Flute Length
33-106	1/4"	1/2"	1 1/2"
33-108	3/8"	1/2"	1 1/2"
33-110	1/2"	1/2"	1 1/2"
33-112	5/8"	1/2"	1 1/2"
33-113	3/4"	1/2"	1 1/2"

SANDING DISK

Sanding Disk for Delta Radial Saw. 8½" diameter and threaded to fit motor spindle. Furnished with one garnet disk.

No. 46-835—Sanding Disk, 8½" dia., for use on 8" Model and old 30A, 10" Model.

No. 33-603—Same as above. For use on new 10" Portable Model.

NOTE: See page 17 for full-size drawings of Delta Moulding Cutter Knives. See page 5 for listing of Sanding Drums.

Saw Jointer Unit Ideal For Contractors and Cabinet Makers

Cuts 3¼" Stock—Rips to Center of 50" Panel—Joints ½" Deep x 6" Wide

No. 37-595
Combination Unit

Motor and Switch Rod Extra

Saw Jointer Combination Saves Space—Money and Time—Speeds up Production

THE ADVANTAGES of the Saw-Jointer Combination has made it a favorite of the contractor, furniture or novelty manufacturer and the cabinet maker where accurate work must be done at high speed and low cost. In fact, in practically every type of woodworking shop this versatile machine will almost immediately pay for itself and will constantly show a profit.

NO INTERFERENCE . . . There is absolutely no interference between the Circular Saw and Jointer in the Delta combination units. Either machine may be used singly, or both may be used together, by one man or by two, with ease and facility.

SPACE SAVING . . . Both machines are driven from below by the same motor. This not only increases portability, but also saves shop space.

LOW POWER COST . . . Since both machines are driven from the same motor, not only is the cost of an additional motor saved, but the running cost is generally lower than with two separate motors.

PORTABILITY . . . In spite of their large capacity, the Delta combination units are so compact that they are used as portable units for many outside jobs, as well as being used anywhere in the shop where they will best suit the job. Many contractors load them on a truck and take them right to the job.

MAXIMUM EFFICIENCY . . . The extreme handiness of being able to rip stock to width and then joint it without moving more that a step must be experienced to be appreciated. Users who own these combination units claim that they can perform 80% of all common woodworking operations on their machines, and at savings of from 25% to 50% in time. Use one of our combination units and you will understand why they are so popular! Hundreds of installations testify to their usability and value.

SPECIFICATIONS

Jointer:
Capacity . . . . . 6" width
Rabbet . . . . . ½" deep
Fence tilts 45° right and left.
Adjustable stops at 45, 90 and 135 degrees.
Cutter head has 3 knives.
Lubricated-for-life ball bearings.

Saw:
Blade . . . . . 10" diameter
Rips stock . . . . . 3¼" thick
Cuts to center of 50" panel.
Table . . . . . 20"x 27"
Table tilts 45° to right.
Arbor . . . . . 5/8" diameter
Lubricated-for-life ball bearings.

Overall Dimensions . . 37½" deep x 60" wide x 38" high

CATALOG LISTING

No. 37-595 10" Circular Saw—6" Jointer Combination Unit as shown, less motor and switch rod. Unit consists of following parts:

No. 1160—10" Tilting Table Circular Saw (See page 19) . . . . . 196 lbs.
No. 1161—Dado Head Table Insert . . . . . 1½ lbs.
No. 1162—Moulding Cutterhead Table Insert . . . . . 1½ lbs.
No. 1165—Swing Guard for Saw . . . . . 19 lbs.
No. 1166—Splitter Attachment for Saw . . . . . 5 lbs.
No. 1176—Belt guard for 10" Circular Saw . . . . . 12 lbs.
No. 1177—Belt guard for 6" Jointer . . . . . 11 lbs.
No. 5500—5" Motor Pulley for Saw, ¾" bore . . . . . 1¼ lbs.
No. 560 —V-belt for Saw. O.C. 58-5/16" . . . . . 1 lb.
No. 654—6" Ball Bearing Jointer (See page 24) . . . . . 124 lbs.
No. 5700—7" Motor Pulley for Jointer, ¾" bore . . . . . 2 lbs.
No. 510 —V-Belt for Jointer. O.C. 52⅞" . . . . . ½ lb.
No. 50-168—Steel Stand . . . . . 76 lbs.
No. 662 —Rear knife guard for jointer . . . . . 2 lbs.
No. 1334—Switch rod for single phase motors . . . . . 1½ lbs.

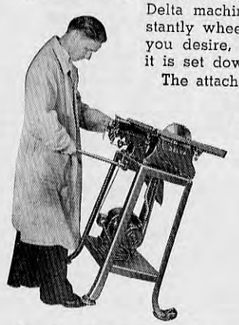
Note: For heavy duty service two belts recommended (for saw). Order extra: one No. 5300 Arbor Pulley, 5/8" bore, one No. 5500 Motor Pulley ¾" bore; one No. 560 V-belt.

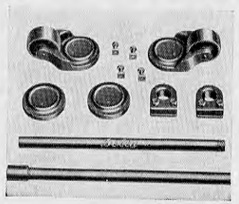
Motors Recommended: Heavy Duty 87-120; Medium Duty 84-910, 86-920; Light Duty 82-910, 86-720. (For complete listing of motor and switches see page 36.)

CASTERS FOR PORTABLE UNITS

Here is an attachment that greatly increases the portability of your Delta machines. With this caster outfit you can instantly wheel your machine to any part of the shop you desire, yet it is solid and steady the moment it is set down.

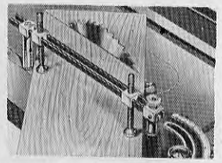
The attachment consists of two clamps, attached to the upper shelf of the Delta steel stand, two pads for the front legs, two casters for the rear legs and two lengths of cadmium-plated pipe with a coupling.





No. 50-351—Caster Attachment as shown right. 12 lbs.

CLAMP ATTACHMENT FOR MITER GAGE



An added convenience. Holds work in position. Invaluable for cutting accurate narrow miters as well as wide ones, and for all cutting off operations where accuracy is of first importance.

No. 864—Auto-Set Miter Gage. 4 lbs.

No. 865—Clamp Attachment for miter gage with clamp bar, two sliding clamp screws and front and rear posts. 2¼ lbs.

No. 873—Extra clamp screws and block for clamp attachment. 1 lb.

GUM AND PITCH REMOVER

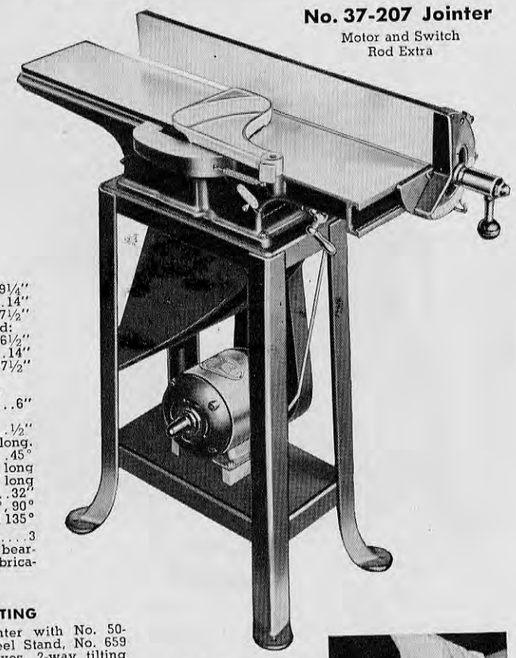
Delta gum and pitch remover keeps your tools clean, bright and new looking. It improves your cutting and makes your work cleaner and easier.

No. 4051—Gum and Pitch Remover. 2 lbs.

(For Prices See Attached Price List)

6-Inch Jointers That Give You A Smooth, Even, Accurate Finish

No. 37-205 Jointer
Motor and Switch Extra



No. 37-207 Jointer
Motor and Switch Rod Extra

SPECIFICATIONS

Dimensions on steel stand:
- Height ..... 39¼"
- Width ..... 14"
- Length ..... 37½"

Dimensions on cast iron stand:
- Height ..... 36½"
- Width ..... 14"
- Length ..... 37½"

Capacity:
- Maximum width of boards machine will surface .... 6"
- Maximum depth rabbett cut ..... ½"

Fence is 4" high x 27¾" long.
Fence Tilts right and left ... 45°
Front Table ..... 14" long
Rear Table ..... 16" long
Overall Table length ..... 32"
Adjustable stops at .... 45°, 90° and 135°
Number of knives in cutter head 3
Unit has sealed-for-life ball bearings which require no lubrication.

CATALOG LISTING

No. 37-207 6" Jointer with No. 50-656 Steel Stand, No. 659 set of 3 high-speed steel knives, 2-way tilting fence with "dual control," No. 5275 Arbor Pulley, front safety knife guard, No. 661 Belt Guard, No. 560 V-belt, and No. 5700 Motor Pulley (specify bore). Without motor or switch rod. 190 lbs.

No. 37-205 6" Jointer with No. 667 Cast Iron Stand, No. 659 set of 3 high-speed steel knives, 2-way tilting fence with "dual control," No. 5275 Arbor Pulley, front safety knife guard, No. 560 V-belt, and No. 5700 Motor Pulley (specify bore). Without motor or switch, 238 lbs. *(Requires 132 Switch for single phase or DC motor.)*

No. 560 —V-belt, 58-5/16" out. cir. ½ lb.
No. 654 —6" Jointer with No. 659 set of 3 high-speed steel knives, 2-way tilting fence with "dual control," No. 5275 arbor pulley and front safety knife guard. Without motor or switch. 124 lbs.
No. 659 —Set of 3 high-speed knives. ⅜ lb.
No. 37-808—Cutterhead Assembly complete with bearings, housing and No. 659 set of 3 high-speed steel knives. 10 lbs.
No. 661 —Belt guard for use with steel stand. 9 lbs.
No. 662 —Rear knife guard. 2 lbs.
No. 667—Cast iron stand, 26" high, with motor plate and belt guard. 123 lbs.
No. 1333—Switch Rod for use with No. 37-207. 1½ lbs.
No. 1522—Double end 5/16" open wrench for cutterhead knife lock bar screws. ¼ lb.
No. 5700—7" motor pulley, specify ½", ⅝" or ¾" bore. 2 lbs.
No. 50-656—Steel stand, top 8" x 15⅞"; 29⅛" high. 33 lbs.

Motors Recommended: Heavy Duty 62-610, 66-320; Medium and Light Duty 62-110. For complete listing of motors and switches see page 36.

Many Convenient Features Found In These 6-Inch Jointers

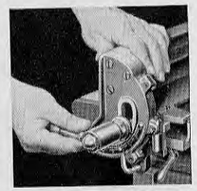
An exceptionally heavy, rigid unit, cast of close grained iron and accurately machined to close tolerances. Tables are finish ground after assembly on base. This not only assures a true flat surface but eliminates any chance of misalignment. Front and rear tables are individually controlled by readily accessible control handles and gibs are provided on the dovetailed ways to take up wear.

The fence, also ground, is rigid and a single dual-control handle, regulates tilting of the fence and movement across the table. Convenient scales on the table and fence permit accurate settings. Front knife guard provides protection. Stands have built-in dust chute.

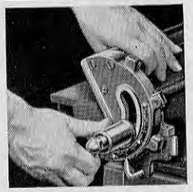
Compare this 6" Jointer with others on the market and you will see why this machine has become the standard for shops of all kinds from novelty factories to the experimental departments of large furniture manufacturers.

(For Prices See Attached Price List)

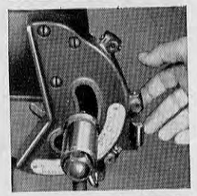
(See Page 23 for Delta Saw-Jointer Combination.)



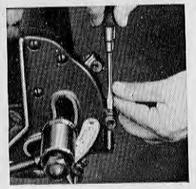
Dual control handle slid out engages bracket lock nut allowing fence to be moved across table to any position. Does not disturb previous angle settings. When tightened it clamps fence firmly and accurately in place.



Slid in, the dual control handle loosens tilting lock nut. Fence can be tilted to any angle desired. Tightening the nut locks fence securely. When not engaged handle swings free out of way.

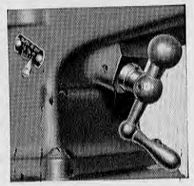


Touch of finger moves stop links in or out of position. Individually adjustable set screws permit fence to be accurately set at 45°, 90° or 135°. Large scale provides for accurate settings.



Stop screws are individually adjustable for absolute accuracy. Once the stops are set, the fence may always be returned to its original setting.

Rabbett cuts a full ½" deep can be made. Guard is instantly removed for rabbetting and is quickly replaced. Front and rear guards may be locked to prevent unauthorized removal.



Convenient ball-crank handles provide quick, easy raising and lowering of tables. Plenty of room means no skinned knuckles. Scale at the side shows depth of cut up to ½".

The Smoothest Running Scroll Saw You Can Buy

No. 40-305
Motor and Switch Extra

Specifications

Capacity, arm to saw ..... 24"
Thickness of cut ..... 1¾"
Table size ..... 14"x 14"
Table tilts ..... 45° right, 15° left, 45° front
Table from floor ..... 42¼"
Overall Height ..... 55"
- Width ..... 15"
- Length ..... 36"

Speeds (Variable Speed Model) ..... 650 to 1700 C.S.M.*
(4-Speed Model) ..... 610, 910, 1255, 1725 C.S.M.*

Overarm can be removed for unlimited cutting capacity with saber blade.

*Cutting strokes per minute

Catalog Listing

No. 40-205—Four Speed 24" Scroll Saw with No. 50-716 Steel Stand, No. 720 4-step Cone Pulley on Arbor, No. 718 4-step Motor Pulley (specify bore), No. 340 V-belt, No. 1203 Belt and Pulley Guard, 1 Saber Blade and 3 Scroll Saw Blades. Without motor or switch. 194 lbs.
No. 40-305—Variable Speed 24" Scroll Saw with No. 50-716 Steel Stand, No. 1443 Arbor Pulley, No. 1446 Variable Speed Motor Pulley ½" bore, No. 1447 Motor Base and Bracket, No. 331 V-belt, No. 1442 Belt and Pulley Guard, 1 Saber Blade and 3 Scroll Saw Blades. Without motor or switch. 197 lbs.
No. 331—V-belt for Variable Speed scroll saw. ½ lb.
No. 340—V-belt for 4-Speed scroll saw. ½ lb.
No. 718—4-step cone pulley for motor, specify ½, ⅝ or ¾ bore. 1⅛ lbs.
No. 1203—Belt and pulley guard for 4-speed scroll saw. 15 lbs.
No. 1207—4-speed accessory group consisting of No. 718 motor pulley (specify bore), No. 720 spindle pulley and No. 340 V-belt. 1¾ lbs.
No. 1440—24" Scroll Saw with 1 Saber Blade, 3 Scroll Saw Blades, without motor or switch. 106 lbs.
No. 1442—Belt and pulley guard for Variable-Speed Scroll Saw. 6 lbs.
No. 1443—Special arbor pulley for Variable-Speed Scroll Saws ½" bore. 2⅝ lbs.
No. 1446—Variable-Speed motor pulley only ½" bore. 2 lbs.
No. 1447—Motor Base for Variable-Speed scroll saw with bracket, screw and handle. 6 lbs.
No. 50-716—Steel Stand 31½" high; top 7"x33". 55 lbs.

Motors Recommended: 62-110 or 66-320. (For complete listing of motors and switches see page 36.)

(For Prices See Attached Price List)

Why These Modern High-Speed Scroll Saws Give You Better Performance . . . Longer Life . . . Faster Output!

Experienced scroll saw users know that there are several features essential in a good scroll saw. It must be capable of using all types of blades—it must operate with minimum blade breakage—a minimum of vibration at all speeds and must have a selection of speeds for various types of work.

The patented chucks in Delta scroll saws are completely universal, taking jeweler's blades, saber blades, sanding drums and round shank files up to ¼" dia. shank—without any adapters. Operation is smooth and free—the blade is properly guided reducing blade breakage.

The heavy cast table not only tilts to the right and left but, by rotating the table bracket 90 degrees and the chucks so that the blade cuts sideways, the table tilts to front so stock of any length can be cut.

Timken-bearing crankshaft . . . shaft-driven blower pump which makes air available even for saber blades . . . universal tilting table, tilting for sidewise cutting as well as for straight cuts . . . the finest completely universal blade guide made . . . high-speed blade support . . . adjustable blade tension . . . splash-lubricated drive . . . tilting spring hold-down . . . these are only a few of the things that make the Delta-Milwaukee 24" scroll saws the finest tools of their type ever offered.

Available In Two Models

Made in the Variable-Speed model which gives you any speed, and in a Standard Four-Speed model.

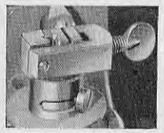
Any Speed From 650 to 1700 Cutting Strokes per Minute With the Variable Speed Model.

A Thousand Speeds at the Touch of Your Finger—that's what you get with this perfected control of speed. Two or four speed saws have limited choice of speeds—too slow for some materials—too fast for others. With the Variable-Speed Scroll Saw you can select ANY speed from 650 to 1700 C.S.M.* controlling the speed within 1 or 2 C.S.M.* if necessary. High speed for fast, fine work—slow speed for heavy work—and ANY speed in between. Speed controlled by conveniently located ball crank.

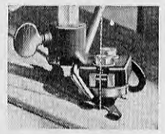
A Four-Speed Model with 610, 910, 1255, and 1725 Cutting Strokes Per Minute

Operating at four well-selected speeds, this scroll saw has the same features as the Variable-Speed unit described above. The heavy, rigid over-arm—the heavy 14"x 14" finely finished cast iron table, the design of the chucks, blade support, guide and other features make this an excellent saw for all purposes. Speeds 610, 910, 1255, and 1725 C.S.M.*

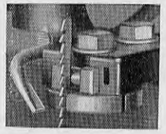
*Cutting strokes per minute



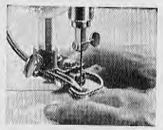
Universal Chuck made of steel—light but strong. Capable of holding blades, files and sanding attachment.



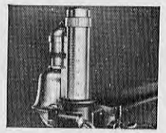
Spring hold-down functions even when table is tilted—giving added accuracy and ease of operation.



Efficient blade guide and roller support holds blades in true alignment — even when saber blades are used.



Big capacity for all jobs. Cuts up to 1¾" thick and the distance to the overarm is 24".



Tension spring over saw blade can be adjusted to suit the type of cut or the type of blade used.

How To Select And Use The Right Scroll-Saw Blade

When compared casually with one another, many blades look so much alike that the average person mistakingly thinks them to be the same. Actually, there *is* a great difference in how they cut — in the number of teeth per inch, the set of the teeth, the thickness of the blade and its width.

On this page is a complete guide you can follow in selecting the proper scroll-saw blades.

The table below recommends — by blade number — the blade you should use to cut various materials. And it gives the speed at which you should run the scroll saw to do the best job.

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MATERIAL TO BE CUT	SPEED	THICKNESS OF MATERIAL TO BE CUT							
		Up to 1/16	1/16 to 1/8	1/16 to 1/4	1/16 to 1/2	1/8 to 1/4	1/8 to 1/2	1/8 to Cap. of Saw	1/4 to Cap. of Saw
ALUMINUM, BRASS	SLOW	58 95 96	64 59	98	65	60	91		
COPPER	SLOW	58	59 64	65	65	91	91		
JEWELRY METALS	MEDIUM	95	96	98					
LEAD, PEWTER	SLOW	58	59 64	65	65	60	91		
SHEET IRON, MILD STEEL	SLOW	58	59 64	65		60			
ASBESTOS	MEDIUM	58	59 64	65	65	60	65		
BAKELITE CELLULOID PLASTICS	SLOW	84	83	82	85	86 81	86 81		88
LAM'D PLASTICS FIBERTEX MICARTA	SLOW					91	91	91 to 1"	92 to 1" 94 to 2"
IVORY	SLOW	84	83	82	85	86 81	86 81		88
BONE	SLOW					91	91	91 to 2"	91 to 2"
PEARL	MEDIUM	95 96	96	98					
BRAKE LINING	SLOW		65	65	65	65	65		
MICA	MEDIUM	95	96	98	65	65	65		
FELT	SLOW	58	59			91	91	91	91
HARD LEATHER	MEDIUM	95	96	98		98			
HARD RUBBER	SLOW	84	82	85	85	81 86	81 86		88
INLAYS	SLOW	84	83						
VENEER	FAST	84							
PRESSED WOOD PLYWOOD WALL BOARD	FAST	96	77 98	77 98		91	91	703 92, 704	92, 703 94, 704
HARDWOOD	MEDIUM	84	82	82		91	91	91 to 1" 92	92 94
SOFTWOOD	FAST	84	83			91, 703 704	91,703 704	91, 703 92, 704	94
PAPER	FAST	58	59			91	91	91	91

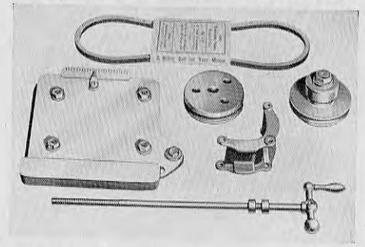
SPEEDS: SLOW, 650 to 900 R.P.M.—MEDIUM, 900 TO 1300 R.P.M.—FAST, 1300 TO 1750 R.P.M.

Below are full-sized profiles of Delta Scroll-Saw Blades. Blade number, dimensions, and number of teeth per inch are given for each. 6 to a package.

Pkg. No.	Thickness	Width	No. of teeth per inch
58	.020	.070	32
59	.020	0.70	20
60	.020	0.70	15
61	.020	.085	15
64	.020	.110	20
65	.028	.250	20
77	.010	.048	18
81	.010	.070	14
82	.010	.055	16
83	.010	.045	18
84	.008	.035	20
85	.019	.050	15
86	.019	.055	12
87	.020	.070	7
88	.020	.110	7
91	.020	.110	15
92	.020	.110	10
93	.028	.187	10
94	.028	.250	7
95	.016	.054	30
96	.016	.054	20
97	.020	.070	15
98	.020	.085	12

Accessories That Increase The Usefulness of Your Scroll Saw

VARIABLE SPEED ATTACHMENT



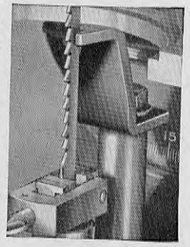
Any Delta-Milwaukee four-speed 24" Scroll Saw may be easily converted into a Variable-Speed Model with the use of the No. 1444 Variable Speed Accessory Group shown in the photo above and the No. 1442 Belt and Pulley Guard.

It consists of the variable-speed motor pulley, motor base with bracket screws and handles, special V-belt, and special arbor pulley. With this accessory group any speed from 650 to 1700 cutting strokes per minute may be obtained using a 1725 r.p.m. motor.

No. 1444—Variable-Speed Accessory Group consisting of No. 1446, No. 1447, No. 331 and No. 1443. 11 lbs.

No. 1442—Belt and Pulley Guard for No. 1444. 6 lbs.

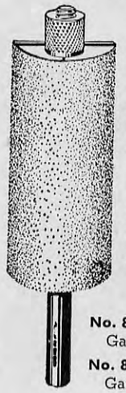
LOWER SABER BLADE GUIDE



Supports saber blade directly below table. Also enables you to do perfect straight-line work, when used in conjunction with the upper guide, as blade is supported above and below the table.

No. 1204—2 Lower Guides for Scroll Saw, with post, nut and thumb screw. Blade slots .030" and .040". 5/8 lb.

SANDING ATTACHMENT



Built to sand concave, convex or flat surfaces, this convenient sanding attachment saves hours of hand labor. It does away with the annoyance of makeshift devices. Knurled knob expands the body of sanding attachment and tightens garnet sleeve securely. 15/16" wide, 1/2" thick and 2 1/2" long. 1/4" diameter shank fits lower jaw of Scroll Saw.

No. 711—Sanding Attachment with one sleeve. 1/2 lb.

No. 841—Six No. 1 Grit Medium Garnet Sleeves. 3/8 lb.

No. 842—Six No. 1/0 Grit Fine Garnet Sleeves. 1/2 lb.

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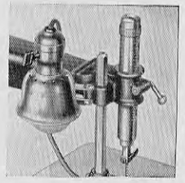
SELF-CENTERING CHUCK

Fits lower plunger of Scroll Saw. A boon to craftsmen who specialize in puzzle and marquetry work. Fine blades are automatically guided to center of chuck and locked securely with thumb screw, saving much time especially on interior cuts.

No. 715—Self-centering lower jaw chuck, including special jaw for use with upper chuck. 3/8 lb.

LAMP ATTACHMENT



Brings light to work where needed in volume enough for accuracy in following layouts, yet it does not glare. Is independent of shop lighting system — can be swung out of way by a touch of the finger—uses 15 or 25 watt bulbs.

No. 882—Lamp attachment with shade, socket, cord, four flat links, bolts, spacer and attachment bracket. Uses standard bulb. 1 1/2 lbs.

MACHINE FILES

Machine Files with 1/4" shank
Overall Length 3 1/4"

No. 726—Square .....
No. 727—Crochet .....
No. 728—Half Round .....
No. 729—Round .....
No. 730—Triangle .....
No. 731—Oblong .....
No. 740—Set of above six. 1/2 lb.....

Machine Files with 1/8" shank
Overall Length 3 1/4"

No. 751—Square .....
No. 752—Crochet .....
No. 753—Half Round .....
No. 754—Round .....
No. 755—Triangle .....
No. 756—Oblong .....
No. 757—Lozenge .....
No. 758—Knife .....
No. 760—Set of above eight. 1/2 lb. ...

GRAY MACHINE ENAMEL

Hundreds of users have purchased the attractive medium gray enamel, with which we paint our machines, in order to paint benches, other tools and accessories in their shops to match. Excellent quality finish. Has a hard smooth surface; dries quickly. May be brushed on or sprayed.

Cat. No.	Size	Shade	Ship. Wt.
49-333	1 qt.	Med.	5 lbs.
49-334	1 gal.	Med.	14 lbs.

NEW, BETTER, RUST REMOVER

A non-inflammable liquid that removes rust and cuts grease and oil from iron and steel. Deltacraft Rust Remover also cleans copper, brass, aluminum, zinc die castings, galvanized iron, iron and steel.

Ready to use — apply with spray, brush, steel wool or cloth. Does not leave chalky surface, requires no extra wiping.

No. 49-319—1 qt. bottle. 5 lbs.

No. 49-320—1/2 pt. bottle. 1 1/2 lbs.

No. 49-321—1/2 gal. bottle. 7 lbs.

No. 49-322—1 gal. bottle. 15 lbs.

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SABER BLADES FOR WOOD

Made of best steel, accurately hardened and set. 5" long overall. 6 to a package. 3/8 lb.

703—1/2 doz. .025" Thick, .187" Wide, 9 teeth per inch.

704—1/2 doz. .035" Thick, .250" Wide, 7 teeth per inch.

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BONE	SLOW					91	91	91 to 2"	91 to 2"
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BRAKE LINING	SLOW		65	65	65	65	65		
MICA	MEDIUM	95	96	98	65	65	65		
FELT	SLOW	58	59			91	91	91	91
HARD LEATHER	MEDIUM	95	96	98		98			
HARD RUBBER	SLOW	84	82	85	85	81 86	81 86		88
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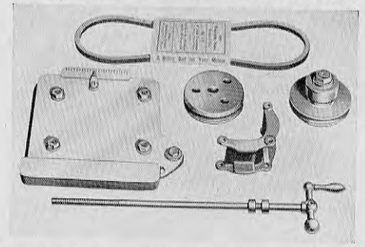

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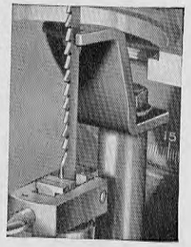

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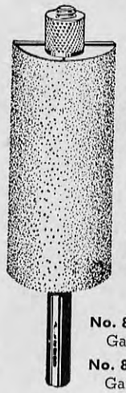

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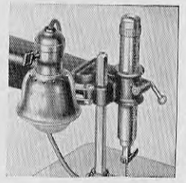

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No. 757—Lozenge .....
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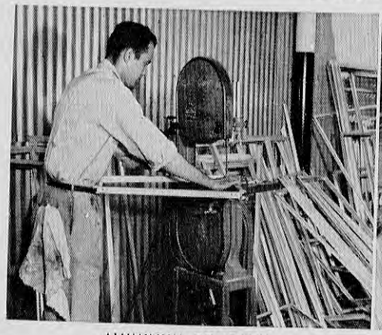
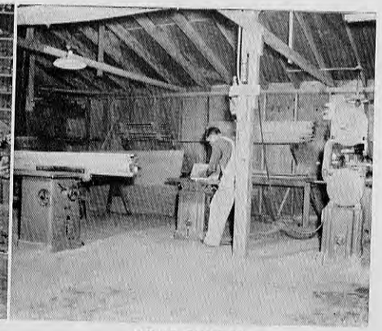
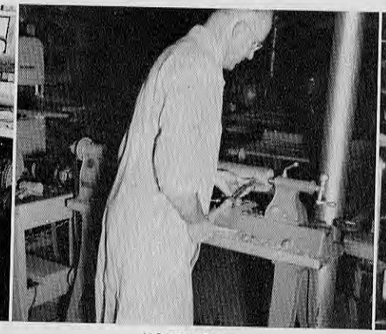
Delta Equipment Is Used Everywhere

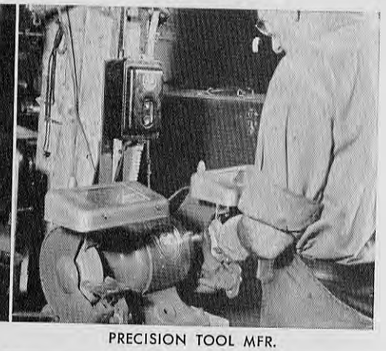

ALUMINUM COMPANY

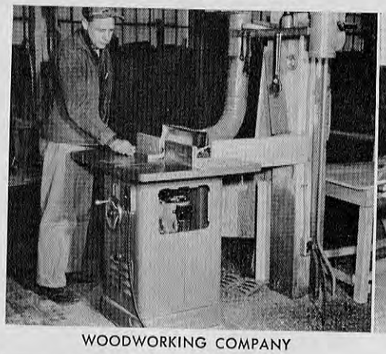
LUMBER COMPANY

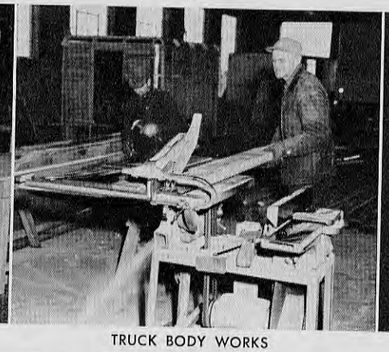

HOME BUILDER

GLASS PRODUCTS COMPANY

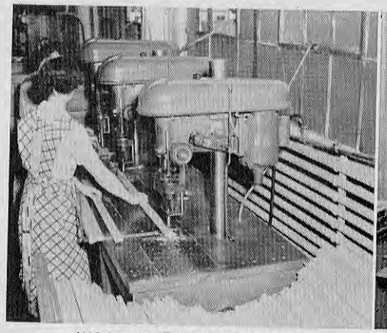

HOBBY CLUB


PRECISION TOOL MFR.

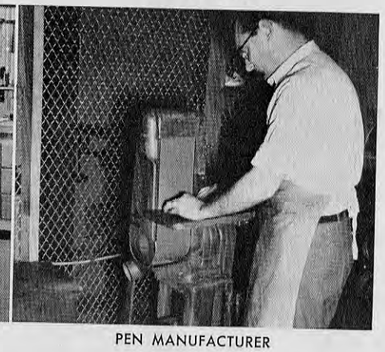

WOODWORKING COMPANY


TRUCK BODY WORKS

SCHOOL SHOP


WOOD SPECIALTY COMPANY

HOME WORKSHOP


PEN MANUFACTURER

Large Capacity—Smooth Operation—Long Life in This Husky Shaper

Shaper Unit Complete

INCREASED VERSATILITY

Now available as an accessory—Long, Solid Type ¾" Spindle to accommodate wide cutters and make fluting and reeding of wide material possible. See Catalog Nos. 43-826 and 43-827.

SPECIFICATIONS

Table Height	34"
Table Size	27"x 28"
Table Size with extensions	27"x 36"
Table Opening Diameters	6¾", 3½", 3" and 1⅜"
Spindle Diameter Furnished	¾"
Other Spindles Available	½" and 5/16"
Capacity, ¾" Spindle (under nut)	3¼"
½" Spindle (under nut)	2½"
5/16" Spindle (under nut)	1½"
Spindle Travel	3"
Spindle Speed (r.p.m.)	10,000
Largest table opening	6½"
Fence Size (each side)	3¾"x 12⅜"x 15/16"

Spindles are interchangeable.

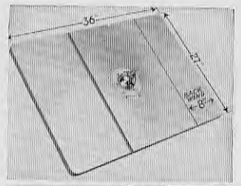
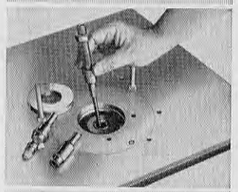
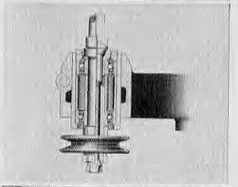
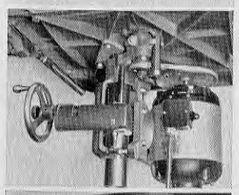


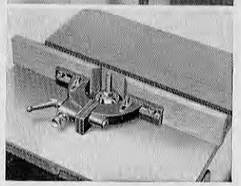
Table is big 27"x 28" with a ⅜" x ¾" groove for miter gage or jigs. May be increased to 27"x 36" by adding extension table.


Exceptionally long ¾" diameter spindle. Spindles readily interchangeable for use of wide variety of cutters. Note removable table inserts in 3 opening sizes.


Spindle assembly showing rugged design, short, stiff drive spindle, well spaced bearings . . . produces chatterless work.


Entire mechanism is one unit assembled and bolted to bottom of table, nothing to get out of alignment, insures true running.

All controls in one group. Hand wheel for spindle adjustment . . . lock knob . . . scale showing spindle height . . . and starting switch.


Fully adjustable fence — both halves adjust independently — adjustable endwise so opening may be made small as required.

Designed and Built to Handle Heavy, Fast Cuts . .

Ideal for the cabinet shop, furniture factory, specialty shop, sash and door company—as a matter of fact, any shop where accurate production shaping must be done at low cost.

The table is big 27"x 28" and can be increased to 27"x 36" by adding the extension table.

Big and husky spindle is ¾"x 3¼" under the nut with a full 3" travel. Carried on sealed, Lubricated-for-life ball bearings. Spindle is accurately ground—bearing seats diamond bored for absolute accuracy. Standard ¾" spindle easily and quickly interchanged with ½" or 5/16" spindle for 3 lip formed cutters or with ½" stub spindle for cope cutters.

Main bearing housing is massive and is supported by a 3 point suspension which keeps spindle square with table.

Removable table inserts in three sizes provide capacity for solid cutting tools up to 6" in diameter and sectional and inserted cutters up to 4" in diameter. Safety and convenience are retained.

Controls are conveniently grouped at front. Spindle height indicator covers full 3" travel. Knob in center of hand wheel locks position. Each half of fence is fully adjustable independent of other half, a good safety feature. Steel cabinet fully encloses motor and working mechanism. Doors provide easy access for repairs or replacement. Easily cleaned. Heavy enough to stay put yet light enough to be moved to facilitate production.

CATALOG LISTING

No. 43-205—Shaper with No. 1354 Fence, ¾" Spindle and No. 1347 ½" Spindle, Table Inserts, Starting Pin, Wrenches, Spindle Pulley, two 1349 Table Extensions, 287 V-belt and 5710 Motor Pulley (specify bore). Without Motor, Reversing Switch or Cutters. 340 lbs.

No. 1340—Shaper with No. 1354 Fence, ¾" Spindle, No. 1347 ½" Spindle, Table Inserts, Starting Pin, Wrenches, Spindle Pulley, one No. 1349 Table Extension. No. 287 V-belt and No. 5710 Motor Pulley (specify bore). Without Motor, Reversing Switch or Cutters. 297 lbs.

No. 287—V-Belt, Out. Cir. 30". ½ lb.

No. 864—Auto-set miter gage. 4 lbs.

No. 865—Clamp attachment for miter gage, with clamp bar, two sliding clamp screws, and front and rear posts. 2¼ lbs.

No. 873—Extra clamp screw and block for Clamp Attachment. 1 lb.

No. 1345—½" stub spindle for cope cutters with ½" hole. 1 lb.

No. 1346—5/16" spindle for 3 lip cutters with 5/16" hole. 1 lb.

No. 1347—½" spindle for 3 lip cutters with ½" hole. 1 lb.

No. 1349—Extension table, 8"x 27". 23 lbs.

No. 5710—7½" motor pulley for 3450 r.p.m. motors. Specify Bore. 2 lbs.

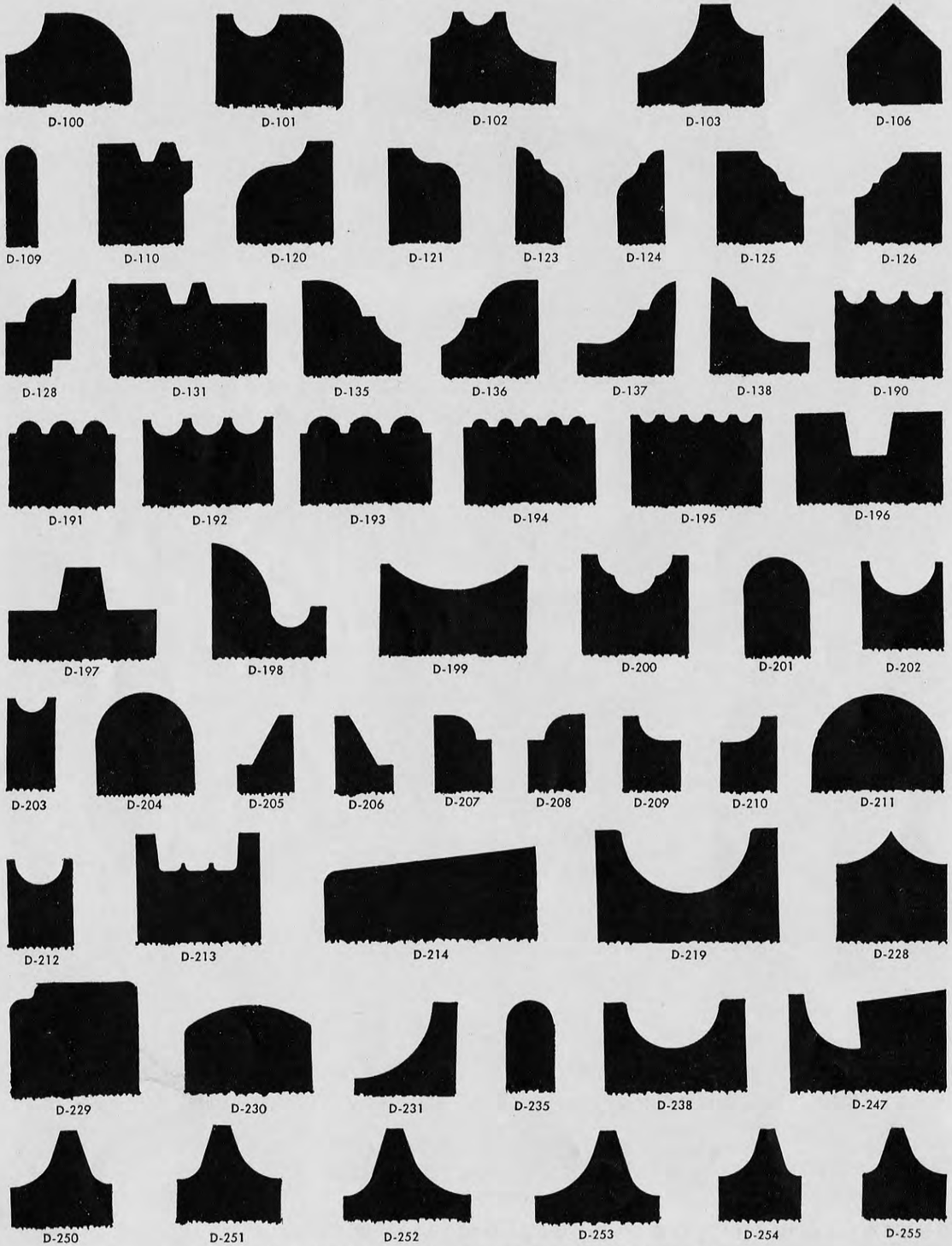
No. 43-826—Long Shaper Spindle Cartridge Assembly with ¾ x 10 R.H. thread for use on No. 1340 or No. 43-205 Shaper when only counter-clockwise rotation of spindle is desired. Designed for wide cutters to make fluting and beading possible. Capacity under nut is 4⅜".

No. 43-827—Long Shaper Spindle Cartridge Assembly with ¾ x 10 L.H. thread for use on No. 1340 or No. 43-205 Shaper where only clockwise rotation of spindle is desired. Designed to accommodate wide cutters and make fluting and beading possible. Capacity under nut 4⅜".

Motors Recommended: 85-080, 86-921, 87-121. Important: Order proper "On-and-Off" switch and mounting parts. For single phase and D.C. motors No. 132 switch, for 3 phase motors No. 1320 switch and No. 1327 mounting parts. Reversing mechanism built into single phase motors, for 3 phase and D.C. motors order No. 1325 reversing switch. For complete listing of motors and switches see page 36.

(For Prices See Attached Price List)

A Complete Assortment — 73 Shaper Cutters!



Note: 15 Straight Cutters not shown above. See page 31 for catalog listing.

Accessories That Add To The Usefulness Of Your Shaper

3 — LIP CUTTERS AND COLLARS

These three lip cutters offer unlimited possibilities in making hundreds of moulding shapes. They have involute relief and honing the face does not change the shape. Collars for use with the cutters are ground to size.

SHAPED CUTTERS — ½" HOLE

D-100	½" Cove, 5/16" Quarter Round
D-101	5/16" Cove, ⅜" Bead
D-102	⅛" and ⅜" Quarter Round, ¼" Bead
D-103	¼" and ½" Quarter Round
D-106	90° Flute
D-109	¼" Flute
D-110	Drawer Joint
D-120	Ogee
D-121	Female Sash
D-123	Cab. R.H. Male
D-124	Cab. L.H. Male
D-125	Cab. R.H. Female
D-126	Cab. L.H. Female
D-128	Male Sash
D-131	Glue Joint
D-135	Cove and Bead Moulding L.H.
D-136	Cove and Bead Moulding R.H.
D-137	Cove and Bead Cope R.H.
D-138	Cove and Bead Cope L.H.
D-190	3-Bead (3-16")
D-191	3-Flute (3/16" Flute)
D-192	3-Bead (¼" Bead)
D-193	3-Flute (¼" Flute)
D-194	5-Flute (⅛" Flute)
D-195	5-Bead (⅛" Bead)
D-196	Wedge Tongue
D-197	Wedge Groove
D-198	Ogee and Bead Table Edge
D-199	1" Convex Edge
D-200	Clover Leaf Screen Mldg. (9/32" x 9/16")
D-201	½" Flute
D-202	½" Bead
D-203	¼" Bead
D-204	¾" Flute
D-205	Pgee R.H.
D-206	Pgee L.H.
D-207	Cove Sash L.H.
D-208	Cove Sash R.H.
D-209	Bead Sash L.H.
D-210	Bead Sash R.H.
D-211	1" Flute
D-212	⅜" Bead
D-213	Beaded Screer Moulding
D-214	Panel Raising
D-219	1" Bead
D-228	Flute-Bead
D-229	Step Moulding
D-230	Pilaster Flute
D-231	9/16" Quarter Round
D-235	⅜" Flute
D-238	¾" Bead
D-247	Door Lip
D-250	⅜" & 3/16" Radii R.H.
D-251	3/16" & ⅜" Radii L.H.
D-252	¼" & ½" Radii L.H.
D-253	½" & ¼" Radii R.H.
D-254	5/16" & ⅛" Radii Cutter R.H.
D-255	⅛" & 5/16" Radii Cutter L.H.

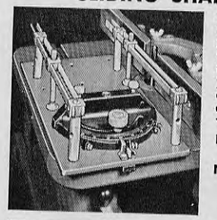
STRAIGHT CUTTERS

D-104	1" x 1⅞" Diameter
D-105	1½" x 1⅞" Diameter
D-107	½" x 1⅞" Diameter
D-108	¼" x 1-15/16" Diameter
D-127	⅜" x 1-15/16" Diameter
D-129	⅜" x 2-7/32" Diameter
D-130	¾" x 1⅞" Diameter
D-139	¼" x 2-7/32" Diameter
D-218	⅜" x 2" Diameter
D-248	5/16" x 1-15/16" Diameter
D-249	5/16" x 2-7/32" Diameter
D-256	¼" x 1¼" Diameter
D-257	⅜" x 1¼" Diameter
D-258	½" x 1¼" Diameter
D-259	5/16" x 1¼" Diameter

Spacing Collars for Shaper Cutters

No.	Th.	O. Dia.	Hole
D-132	⅜"	1 3/32"	½"
D-133	⅛"	1 1/16"	½"
D-134	¼"	1 3/32"	½"
D-140	¼"	1 1/16"	½"
D-141	⅜"	1 1/16"	½"
D-142	⅜"	¾"	½"
D-143	⅜"	⅞"	½"
D-144	⅜"	1"	½"
D-145	⅜"	1⅛"	½"
D-146	⅜"	1¼"	½"
D-147	⅜"	1⅜"	½"
D-148	⅜"	1½"	½"
D-149	⅜"	1¾"	½"
D-150	1/16"	1⅜"	½"
D-151	¼"	1⅞"	½"
D-155	¼"	¾"	½"
D-171	⅜"	11/16"	½"
D-172	⅜"	13/16"	½"
D-173	⅜"	15/16"	½"
D-174	⅜"	1 1/16"	½"
D-175	⅜"	1 3/16"	½"
D-176	⅜"	1 5/16"	½"
D-177	⅜"	1⅝"	½"
D-178	⅜"	1 11/16"	½"
D-179	⅜"	1 13/16"	½"
D-180	⅜"	1⅞"	½"
D-215	¼"	1 15/32"	½"
D-217	¼"	1 3/32"	½"

SLIDING SHAPER JIG

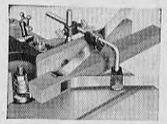


Shaping of short and narrow pieces is now a safe, accurate operation with the sliding shaper jig. The hands never come close to the cutters, and the work cannot slip.

No. 1186 — Sliding Shaper Jig. 19 lbs.

No. 1170—Tenoner for use with No. 1186 Sliding Jig. 21 lbs.

SPRING HOLD DOWNS



Holds work firmly against fence and table . . . used on either end of fence. Accommodate work up to 3½" thick.

No. 983—Set of Spring Hold Downs. 2 lbs.

SAFETY RING GUARD

Fully adjustable and easily removed ring guard . . . protects operator . . . acts as efficient hold down.

No. 1348 — Safety Ring Guard. 8 lbs.

STANDARD CUTTER SETS

No. 1182—Standard Cutter Set includes D-100 to D-109 inclusive and collars D-142 to D-149 inclusive. Packed in wood box. 3½ lbs.

No. 1213—Cove and Bead Cutter Set includes D-129, D-135 to D-139 Cutters inclusive; D-132 and D-134 Collars. Packed with No. 1345 Stub Spindle Assembly and SP-10 Wrench. 2 lbs.

No. 1214—Sash and Cabinet Cutter Set includes D-108, D-120, D-121, D-123 to D-128 inclusive and D-130 Cutters. D-140, D-141, D-150 and D-151 Collars. Packed with No. 1345 Stub Spindle Assembly and SP-10 Wrench. 3 lbs.

D-205-S—Pgee Door Assembly Set with D-205, D-206, female cutters, and D-217 Collar.

D-206-S—Pgee Door Assembly Set includes D-205, D-206 female cutters, D-108 straight cutter and D-133 collar.

D-208-S—Cove Cutter Assembly, includes D-207, D-208 cutters, D-133 and D-215 collars.

D-210-S—Bead Sash Cutter Assembly, includes D-209, D-210 and D-108 cutters.

SHAPER COLLAR SETS

No. 1210—Set of 7 collars from ¾" to 1⅛" diameter, D-142, D-143, D-144, D-145, D-171, D-172 and D-173. ¾ lb.

No. 1211—Set of 6 collars from 1-3/16" to 1½" diameter, D-141, D-146, D-147, D-148, D-174 and D-175. 1 lb.

No. 1212—Set of 6 collars from 1-9/16" to 1⅞" diameter, D-149, D-176, D-177, D-178, D-179 and D-180. 1½ lbs.

No. 1191—Set of 4 collars for sash cutters, D-140, D-141, D-150 and D-151. ½ lb.

No. 1198—Set of Table Inserts with Guide Shoulders SR-253 2⅜" dia. and SR-254 1⅝" dia. ⅓ lb.

3 — Lip Cutters with 5/16" Hole

No. 979 — Complete set of 6 depth collars. 5/16" hole.

No. 980—Set of 24 Edge Cutters D-1 to D-80 with No. 978 Adapter and 6 Collars in wood box. 2 lbs. For use on the No. 1346 spindle. (For complete Listing of these cutters see page 7.) ⅜ lb.

3 — KNIFE SAFETY CUTTER HEAD

Made of alloy steel. Bushing furnished so that cutterhead fits either ½" or ¾" spindles. Uses moulding cutter knives listed below. Furnished without knives.

No. 1343—3 Knife Cutter Head. 1½ lbs.

EXTRA SETS OF CUTTER BLADES

Come in sets of three matched blades.

Cat. No.	Description
35-100	½" Cove, 5/16" Quarter Round
35-101	5/16" Cove, ⅜" Bead
35-102	⅛" and ⅜" Quarter Round and ¼" Bead
35-103	¼" and ½" Quarter Round
35-104	Straight
35-106	90° Flute
35-110	Drawer Joint
35-120	Ogee
35-121	Window Sash
35-123	Door Moulding (m)
35-126	Door Moulding (f)
35-131	Glue Joint
35-190	3 Bead (3/16" Bead)
35-191	3 Flute (3/16" Flute)
35-192	3 Bead (¼" Bead)
35-193	3 Flute (¼" Flute)
35-194	5 Flute (⅛" Flute)
35-195	5 Bead (⅛" Bead)
35-196	Wedge Tongue
35-197	Wedge Groove
35-198	Table Edge
35-200	Clover Leaf Screen Moulding (9/32"x9/16")
35-201	½" Flute
35-202	½" Bead
35-204	¾" Flute
35-206	Ogee R. H.
35-208	Cope Sash
35-209	Bead Sash
35-211	1" Flute
35-212	⅜" Bead
35-213	Beaded Screen
35-221	Thumb Moulding
35-222	½" Cove and ¼" Flute
35-223	Ogee
35-224	⅝" Cove
35-225	Flute Bead, Quarter Round and Ogee Comb.
35-226	Flute Bead, Quarter Round and Ogee Comb.
35-227	Flute Bead, Quarter Round and Ogee Comb.
35-228	Flute Bead
35-229	Bed Mould Cutter
35-230	Pilaster Flute
35-233	5/16" Flute
35-234	5/16" Bead
35-235	⅜" Flute
35-236	⅝" Flute
35-237	⅝" Bead
35-238	¾" Bead
35-241	¼" Tongue
35-242	¼" Groove
35-243	Cove and Bead Moulding
35-245	Oval Sash
35-246	Oval Cope
35-247	Door Lip

See page 17 for actual size and shape of cutters.

SAFETY CUTTER HEAD with BLANK KNIVES

For special mouldings that cannot be made with standard shaper cutters, special cope cuts, etc. Knives are self-hardening and sand-blasted so that cutter design may be drawn directly on them and ground to shape. All knives are ⅛" thick with a 30° clamp angle. Cutter head furnished without knives.

No. 1342—Cutter head, 2 37/64" high, for ¾" spindle, with tightening block. 1½ lbs.

No. 1192—Cutter head, 2 37/64" high, for ½" spindle, with tightening block. 1½ lbs.

No. 1193—Two ½" wide x 2½" long knives. ⅜ lb.

No. 1194—Two ¾" wide x 2½" long knives. ⅜ lb.

No. 1195—Two 1" wide x 2½" long knives. ⅜ lb.

No. 1196—Two 1½" wide x 2½" long knives.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

12" Ball Bearing Lathe That is Rigid, Accurate, Safe, Dependable

No. 46-305

4 Speed Lathe for Wood Turning — Motor and Switch Rod Extra

TWO MODELS—4-speed for Wood Turning and 16-speed for Wood and Light Metal Work.

THIS is the perfect lathe for general wood working applications. With the use of Tungsten Alloy tipped turning chisels, light metals can be turned at wood turning speeds. By adding the counter shaft unit the 4-speed lathe can be converted into an efficient and accurate 16-speed lathe for light metal working. With the addition of the compound slide rest practically everything except screw cutting can be done. The slower speeds are ideal for large face plate wood turning.

CATALOG LISTING

No. 46-305 4-speed 12" Lathe with No. 1461 Tool Support Base, No. 690 4" Tool Support, No. 692 12" Tool Support, No. 933 Drive Center, No. 934 Cup Center, No. 936 3" Face Plate, No. 644 V-belt, No. 932 Motor Pulley (specify bore), No. 1463 Lathe Bench, and wrenches. Without motor or switch rod. 254 lbs.

No. 46-310 16-speed 12" Lathe with No. 1461 Tool Support Base, No. 690 4" Tool Support, No. 692 12" Tool Support, No. 933 Drive Center, No. 934 Cup Center, No. 936 3" Face Plate, No. 644 V-belt, No. 932 Motor Pulley (specify bore), No. 1464 Countershaft Assembly, No. 1463 Lathe Bench, and wrenches. Without motor or switch rod. 272 lbs.

No. 192 —Allen Extension Wrench. ½ lb.

No. 284 —V-belt, for Countershaft arrangement. Out. Cir. 30-7/16". ½ lb.

No. 644 —V-belt, for Lathe. Out. Cir. 66¼". ¾ lb.

No. 932 —4-Step Motor Pulley (specify bore). 2 lbs.

No. 949 —1¼" Open End Wrench. ½ lb.

No. 1334—Switch Rod for use with No. 46-305.

No. 1460—12" Lathe with No. 1461 Tool Support Base, No. 690 4" Tool Support, No. 692 12" Tool Support, No. 933 Drive Center, No. 934 Cup Center, No. 936 3" Face Plate, No. 644 V-belt and wrenches. Without motor pulley, motor, switch rod or bench. 160 lbs.

No. 1463—Lathe Bench complete with top, shelf, cast iron legs and bolts. 97 lbs.

No. 1464—Countershaft Unit, consisting of (2) No. 49-370 hangers, No. 378 shaft, No. 718 pulley (specify bore for motor), No. 720 pulley (¾" bore for shaft), No. 932 pulley (¾" bore), No. 284 V-belt, (2) No. 49-374 collars, bolts and nuts. 20 lbs.

Motors Recommended: Heavy Duty 82-910, 86-720; Medium Duty 82-710, 86-520; Light Duty 62-610; 66-320. For complete listing of motors and switches see page 36.

(For Prices See Attached Price List)

SPECIFICATIONS

Speeds: 4-Speed Lathe	915, 1380, 2150, 3260 r.p.m.
16-Speed Lathe	340 to 3400 r.p.m.
Swings Over Bed	12"
Between Centers	37"
Overall Length	57"
Width	10½"
Height	14⅜"
Height on Stand	46"
Tool Rest From Floor	42"
Accurately Ground Ways both front and back	2" wide
Spindle Diameter	1¼"
Spindle Hole	⅝"
Spindle Thread	1"—8

These Features of Design and Construction Provide Greater Accuracy and Longer Life

The features of this remarkable lathe have made it a favorite in thousands of shops throughout the country—Furniture Factories, Cabinet Shops, Specialty Shops, Millwork Shops, Sporting Goods Manufacturers, Pattern Shops, Schools, etc.

BED: Heavy, substantial, fine-grained cast iron, properly ribbed to provide the utmost in rigidity and accuracy. 53½" long, 8½" wide, 4⅞" high. Finely ground and machined ways 2" wide front and back.

HEADSTOCK: Rigid substantial cast iron body, designed to take V-belt drive from either bottom or rear. Fitted with belt guard completely covering top and front of headstock pulley and belt; guard instantly removable to facilitate changing belt on pulley cones. With built-in indexing mechanism having two rows of holes —8 holes and 60 holes—in cone pulley, to provide maximum number of index divisions. Index pin mounted to engage either row of holes.

SPINDLE: 1¼" diameter spindle, with ⅝" hole through center to facilitate the handling of long rod stock or of repetition work. Nose machined for No. 2 Morse Taper centers. Nose threaded 1" diameter 8 threads per inch for chucks and faceplates. Rear end of spindle has 1"—8 left-hand thread for outboard work. Spindle carried on two heavy-duty double-seal New Departure lubricated-for-life ball bearings, pre-loaded to insure maximum rigidity and accuracy. Spindle quickly removable to facilitate belt removal or installation. 4-speed model has speeds of 915, 1380, 2150, and 3260 r.p.m. 16-speed model has speeds from 340 to 3400 r.p.m.

TAILSTOCK: Substantial, fine-grained cast iron body, with sub-base and provision for set-over of tailstock for center alignment and taper turning. Tailstock locked to bed with wrench conveniently located at front. Tailstock sleeve operated with large ball-end crank handle, and locked with ball-end lever actuating lock cams. Sleeve machined for No. 2 Morse Taper centers. Centers self-ejecting.

TOOL REST: Lathe equipped with quick-acting universal tool-rest base, locked to bed by convenient handle at front of base. Tool rests, adjustable in tool-rest base by means of lock screw with ball-end T-handle.

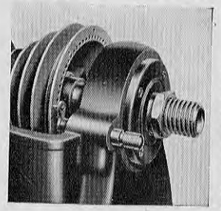
EFFICIENT DRIVE: A simple, dependable, V-belt drive—over 90 percent efficient transmits plenty of power for all your work.

No. 46-310

16 Speed Lathe for Wood and Light Metal Work — Motor and Switch Rod Extra.

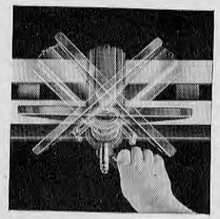
Handy Lathe Accessories Add to Use of 12-inch Lathe

MANY FEATURES . . .

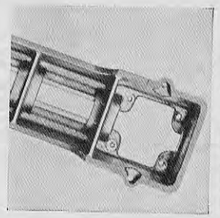


Famous Indexing Mechanism — two rows of holes in headstock pulley, 8 holes and 60 holes, can be engaged at will by the unique indexing pin. You can now obtain the maximum number of index divisions.

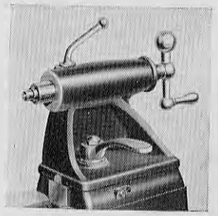
Substantial, fine-grained cast iron tailstock, with sub-base and provision for set-over of tailstock for center alignment and taper turning. Tailstock locks to bed with wrench conveniently located at front.



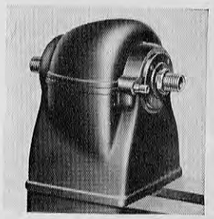
Universal Tool Support is exceptionally handy and fast in action. Heavy and substantial, it locks to bed at any position or angle with convenient lever at the front where it does not interfere with work.



Massive Lathe Bed made of fine grained cast iron, heavily ribbed to provide the greatest rigidity and accuracy. 53½" long, 8½" wide, 4⅞" high. Finely machined ways 2" wide front and back.

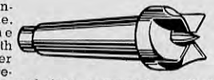


Graduated Tailstock Sleeve operated with large ball crank handle and locked in place with convenient ball end lever. Sleeve machined for No. 2 Morse Taper centers. Centers self-ejecting.



Safety Headstock completely encloses pulley and belt from front and top of lathe. Belt drive can be taken from either the bottom or the rear — an added convenience.

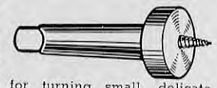
No. 933—Drive Center for 12" Lathe. Fits any lathe headstock with No. 2 Morse Taper Hole. Has replaceable center pin and four accurately milled teeth. ⅜ lb.



No. 934—Cup Center for 12" Lathe. Fits any tailstock with No. 2 Morse Taper hole. Has replaceable center pin. Hardened and polished. ⅜ lb.

No. 939—60-degree plain center for metal turning on 12" lathe. Fits any lathe headstock with No. 2 Morse Taper hole. Hardened and ground. ⅜ lb.

No. 940 — Screw Center for 12" Lathe. Fits any lathe headstock with No. 2 Morse Taper hole. Excellent for turning small, delicate work. With 1⅛" long replaceable screw, 1½" dia. face. ½ lb.

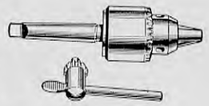


Screw-on arbor with ½" shaft for grinding wheels, buffing wheels, wire brushes, etc. Flanges trued for accuracy. For 1" dia. -8 thread shaft. 1 lb.

No. 144—Screw-on Arbor Right Hand.

No. 145—Screw-on Arbor Left Hand.

No. 968—Geared chuck with key. Fits any lathe headstock with No. 2 Morse Taper hole. Invaluable for drilling on the lathe. Capacity No. 60 —½". 2½ lbs.



No. 1461—Tool support Base for 12" Lathe. Has V-shaped hole for ½" to 1" diameter shanks, with universal locking mechanism. 5 lbs.

No. 697—Heavy, rigid Floor Stand for face plate work on the left of the spindle. Tripod legs, pipe support. V-hole for ½" to 1" shank. Knocked down. 43 lbs.

No. 692—Standard Tool Support. Is 12" wide with 1" diameter shank. Heavy and strong. Designed for minimum interference with tools and hands. 3 lbs.

No. 695—Right angle Tool Support for 12" Lathe. Has 1" diameter shank. Strong and heavy. Extremely useful for face plate work. 3 lbs.

No. 690—4" Tool Support. Has a 1" diameter shank. Very strong and well made. Made for use where doing small, fine work. 1¾ lbs.

No. 694—24" Tool Support for extra long turnings. Has two 1" diameter shanks. This rest requires an extra tool support base No. 1461 for lathe on which it is used. 7 lbs.

No. 1468—Steady Rest for 12" Lathes. Prevents spring and vibration of long thin stock. Heavy cast iron base with sliding arms of steel. Capacity 2¼" diameter. 7½ lbs.

No. 938—5" Hand Wheel for 12" Lathe. Fits left-hand end of lathe spindle with 1"-8 thread. Useful for quick stopping of lathe, for positioning of work, etc. 3 lbs.

No. 936—3" Face Plate for small and medium face plate work on the 12" lathe. Faced true and provided with three holes for screws. R.H. thread only. For shaft with 1"-8 thread. 1½ lbs.

No. 937—6" Face Plate for large face plate work on the 12" Lathe. Has special thread to fit both right and left-hand threaded spindles. Used either end of spindle. For spindle with 1"-8 thread. 3 lbs.

No. 935 — Adapter for 12" Lathes. Has No. 2 Morse Taper Shank on one end, other end ½" diameter, 1⅛" long. Enables use of all attachments with ½" bore to be used. ⅜ lb.

No. 4005—Buffing wheel, for polishing plated parts and cleaning and buffing metal parts of all kinds. 6" diameter, ½" wide with ½" hole to fit arbor. 1 lb.

Wire wheels for scrubbing rust from metals, removing burrs, etc. Two sections. 6" diameter ½" hole. 1 lb.

No. 3113—Wire, coarse.

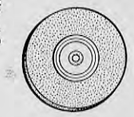
No. 3114—Wire, fine.

No. 3115—Tampico Fibers.

6" diameter, high-quality, fast cutting grinding wheel. ½" wide with ½" hole to fit No. 144 and 145 arbor. Handy to have in any shop. 1¾ lbs.

No. 3101—Grinding wheel, 46 grit.

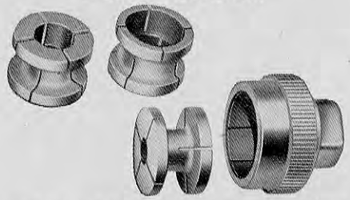
No. 3102—Grinding wheel, 60 grit.



(For Prices See Attached Price List)

Lathe Accessories and Attachments Increase Usefulness of Lathe

COLLET CHUCK FOR LATHE
— Safe — Accurate!



Ideal for the School and Pattern shop where safety and accuracy are of prime importance. You can do close, fine work right up against the chuck and from any angle.

Capacity ½" to 2" in seven convenient sizes . . . quick and easy to use . . . extra safe, there are no projections.

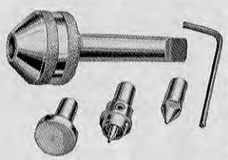
Will not mar work . . . fully balanced for high speed work. No longitudinal play . . . small overhang insures smooth accurate work. The most economical and safest chuck you can buy.

No. 46-956—Collet Chuck for Lathe, made of chrome plated, rust-proof alloy, 2" capacity, 1"-8 thread, with three double end collets ½" and ⅝", ¾", and 1", 1¼" and 1½". 4 lbs.

No. 46-957—Steel Collet Chuck 2" capacity, 1"-8 thread, with three double-end collets ½" and ⅝", ¾" and 1", 1¼" and 1½" and Jacobs Chuck key. 4 lbs.

No. 46-958—Steel Collet Chuck 2" capacity, 1½"-8 thread, with three double-end collets ½" and ⅝", ¾" and 1", 1¼" and 1½", and Jacobs Chuck key. 4 lbs.

No. 1490 BALL BEARING CENTER



A center free of chatter, accurate, husky and true running. With double row sealed, Lubricated-for-life ball bearings. Takes exceptionally heavy radial and thrust load. Shank has No. 2 Morse Taper.

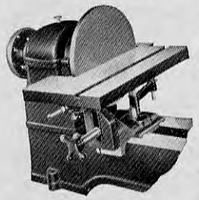
No. 1490—Ball Bearing Center with three replaceable centers and wrench. 1½ lbs.

CAST IRON BENCH LEGS FOR LATHE

No bench twist — strong, solid. Heavy cast iron with all holes ⅜". Bracket for shelf at bottom. Can also be used for other benches and tables.

No. 945—One pair Cast Iron Bench Legs. 65 lbs.

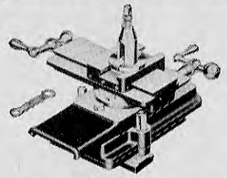
SANDING TABLE FOR LATHE



This sanding table is used for finishing, sanding plain or compound miters, boring and routing work. The table is supported both front and back and offers perfect support for the work. Raises and lowers to suit the work—is graduated to show the angle of tilt — and has a 3/16"x ½" slot for the No. 34-903 Miter Gage.

No. 46-948—Sanding Table, complete with adjustable Bracket and Clamps, for 10" 11" and 12" Lathe. 15 lbs.

COMPOUND SLIDE REST



This Compound Slide Rest is accurately built with dovetail slides and graduated compound base rotating 360 degrees. Feed screws are covered to protect them from dirt and chips, and are fitted with micrometer sleeves, accurately graduated.

No. 46-961—Compound Slide Rest for 12" Lathe with tool post rocker, washer and wrench. 33 lbs.

HOLDER, BORING BARS AND TOOL BITS
for use with the Slide Rest

The holder for boring bars and tool bits is an extremely handy tool and many uses can be found for it. Holds both boring bars and square ¼" bits. Two holes in holder facilitate holding of the tool. Made of tool steel, case hardened.

No. 46-963—Holder for Boring Bar and Tool Bits. 1½ lbs.

No. 46-966—Set of three Boring Bars, ⅛", 3/16", and ¼". ½ lb.

No. 46-954—Set of four high-speed steel tool bits ¼" x¼"x1⅞", roughing, finishing, right corner and left corner. 1 lb.

BUFFING COMPOUND KIT

This efficient kit allows you to polish all types of material on your 23-603 basic head unit. Consists of four different buffing compounds and full ½" buffing wheel made for home use.

No. 4003—Buffing Kit of Compounds and Wheel.
No. 4004—Box containing four Buffing Compounds only without Wheel.

MITER GAGE for SANDING TABLE

Miter Gage provides accurate angles... pivots 60 degrees both right and left. Used for sanding plain and compound miters. Runs in accurately milled slot in sanding table.

No. 34-903—Miter Gage.....3 lbs.

SANDING DISK

Sanding Disk for lathe, 8½" diameter and threaded to fit headstock spindle with 1"-8 thread. With one garnet disk. R.H. thread only.

No. 46-934—8½" Sanding Disk for 11 and 12 inch lathes. 5 lbs.

Abrasive Paper Disks

Garnet paper disks for use with No. 46-934 metal sanding disk. Comes in two grades, fine and coarse.

No. 46-815—Coarse No. 40 Grit Garnet paper disk, 8½" dia. (1 doz.) 2 lbs.
No. 46-817—Fine No. 80 Grit Garnet paper disk, 8½" dia. (1 doz.) 2 lbs.

Disk Adhesive

With disk adhesive you have no messy glueing, no removal of metal disks from machine, no waiting over night for the new abrasive disk to dry. You can change from one abrasive disk to another every few minutes.

No. 49-503—Disk Adhesive. 2 lbs.

No. 163—3"x 3" Sanding Drum with No. 2 Morse Taper Shank. 2½ lbs.
No. 164—1¾"x 2" Sanding Drum with No. 2 Morse Taper Shank. 1¾ lbs.

See page 5 for sanding sleeves No. 831, 832, 833, 836, 837, and 838.

WOOD TURNING TOOLS

Made of special, high-grade alloy steel. Fitted with extra long hard wood handles, 1¼"x 10½". Overall length 15". 1¼ lbs.

No. 121.....1" Skew Chisel
No. 122.....¾" Gouge
No. 123.....¼" Gouge
No. 124.....½" Skew Chisel
No. 125.....⅛" Parting Tool
No. 126.....½" Gouge
No. 127.....½" Spear Point
No. 128.....½" Round Nose
No. 130.....Set of above 8 tools. 6 lbs.

ALL-PURPOSE TUNGSTEN ALLOY TIPPED TURNING CHISELS
Cuts Metal Free-Hand as Easily as Wood and Plastic

Diamond lapped ready for use. Two of these tools will do the work of a regular set of turning tools. Come in two styles, square nose and round nose, two sizes—⅛" for fine work and ¼" for larger, heavy work.

With these new tools you can cut free-hand on all materials such as plexiglas, lucite, bakelite, fiber, wood, brass, bronze, aluminum, magnesium, copper, silver, steel, etc. —all on your woodturning lathe at wood turning speeds.

You can turn metals and plastics free-hand as easily as wood. You need no heavy compound tool rests or bulky, expensive equipment. Then, too, these New Turning Chisels have an extremely long cutting life... require little or no sharpening.

No. 46-801.....⅛" Square Nose. 1½ lbs.
No. 46-802.....⅛" Round Nose. 1½ lbs.
No. 46-803.....¼" Square Nose. 1½ lbs.
No. 46-804.....¼" Round Nose. 1½ lbs.

(For Prices See Attached Price List)

Accessories and Attachments For All Shops

V-BELTS

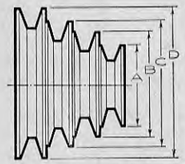
Designed to make perfect contact with the side of the V-groove, these A section V-belts will transmit maximum horsepower with minimum slip. Cords are saturated with pure liquid rubber, imbedded in special rubber stock which resists fatigue and carries off heat.

Note: When ordering belts for which number is not known, measure around outside diameters of pulleys, then select belt of nearest outside circumference in the table.

Cat. No.	Out. Cir.	Top Width	Thick
271	25"	9/16"	9/32"
272	28"	9/16"	9/32"
*281	28"	9/16"	9/32"
49-103	28"	9/16"	9/32"
×49-150	28¼"	9/16"	9/32"
*291	29"	9/16"	9/32"
30-102	29"	9/16"	9/32"
49-105	30"	9/16"	9/32"
284	30 1/16"	9/16"	9/32"
287	30 15/16"	9/16"	9/32"
273	31 15/16"	9/16"	9/32"
49-106	32"	9/16"	9/32"
49-153	34"	9/16"	9/32"
331	35⅛"	9/16"	9/32"
49-152	36"	9/16"	9/32"
340	36½"	9/16"	9/32"
355	38½"	9/16"	9/32"
49-115	39½"	9/16"	9/32"
387	39⅞"	9/16"	9/32"
49-154	40"	9/16"	9/32"
410	42"	9/16"	9/32"
430	44"	9/16"	9/32"
*289	46"	9/16"	9/32"
453	47 3/16"	9/16"	9/32"
*294	51"	9/16"	9/32"
49-142	51 5/16"	9/16"	9/32"
501	51⅝"	9/16"	9/32"
510	52⅞"	9/16"	9/32"
520	54⅛"	9/16"	9/32"
530	55"	9/16"	9/32"
49-144	56¾"	9/16"	9/32"
49-173	57"	9/16"	9/32"
30-136	57⅝"	9/16"	9/32"
560	58 3/16"	9/16"	9/32"
‡49-140	59⅜"	9/16"	9/32"
49-172	59⅜"	9/16"	9/32"
49-141	60"	9/16"	9/32"
49-174	60"	11/16"	11/32"
583	60 13/16"	9/16"	9/32"
588	61 1/16"	9/16"	9/32"
595	61 13/16"	9/16"	9/32"
521	62¾"	9/16"	9/32"
618	64 13/16"	9/16"	9/32"
644	66¼"	9/16"	9/32"
670	69½"	9/16"	9/32"
673	74¾"	13/16"	9/32"
750	77½"	13/16"	9/32"

‡Available in matched pairs.
*Available in matched sets of three.
×Available in matched sets of four only.

FOUR STEP CONE PULLEYS



Made for the same size V-belt as plain pulleys listed above. Pulleys may be used in pairs as listed in table below and will provide the speeds listed in the third column when used with 1725 r.p.m. motor.

All cone pulleys available in ½", ⅝" and ¾" bores. ⅝" and ¾" bores have a 3/16" keyway. ½" bore furnished unless otherwise ordered.

No. 718—1¼ lbs. No. 932—2 lbs.
No. 720—1¾ lbs. No. 985—2 lbs.

Pulley No.	Pulley (outside) Dimensions —Inches A	B	C	D
718	1.750	2.230	2.700	3.150
720	3.150	3.620	4.060	4.500
932	2.500	3.156	3.875	4.500
985	2.156	3.109	4.250	5.250

Driver	Driven	Speeds			
718	718	905	1410	2100	3340
720	720	1180	1520	2000	2530
718	720	610	910	1255	1725
720	718	1725	2370	3290	4900
932	932	915	1380	2150	3260
985	985	656	1240	2400	4500

V-BELT PULLEYS

For A section V-belts. Safety disc type—no spokes. Have 5/16" hollow head set screw, ⅝" and ¾" bores have a 3/16" keyway. All sizes can be furnished in ½", ⅝" and ¾" bores. ½" bore furnished unless otherwise specified. Maximum bore available on Nos. 5200 to 5300 is ¾".

Catalog No.	Outside Diameter
5200	2"
5225	2¼"
5250	2½"
5275	2¾"
5300	3"
5350	3½"
5400	4"
5450	4½"
5500	5"
5550	5½"
5600	6"
5650	6½"
5700	7"
*5710	7½"
5800	8"
6100	10"
6200	12"

*¾" bore only.

MANY USES FOR LAMP ATTACHMENT

For use on the drill press, band saw, scroll saw, or other machine it brings light to your work just where it is needed, in volume enough for accuracy in following layouts. Does not glare. Can be swung back at touch of the fingers. It furnishes every machine with its own individual illumination, independent of the shop lighting system. Uses 15 or 25 watt bulbs.

No. 882—Lamp Attachment. Uses standard bulb. 1½ lbs.

¾" LINE SHAFTING

Carefully ground to precision limits, this accurate shafting must not be confused with the cheap cold-rolled shafting sometimes offered.

No. 378—¾" dia. Ground Shafting for 16 Speed Lathe, 20" long (available in 20" lengths only). 4 lbs.

SELF-ALIGNING HANGERS

This sturdy, practical Line Shaft Hanger is self-aligning in every direction and is adjustable up and down from 4" to 5" in height. Once properly adjusted it will give years of quiet, trouble-free service. Oil wells hold a large supply of lubricant—keep bronze bearings properly lubricated. Made for ¾" shafting only.

No. 49-370—Line Shaft Hanger as shown. 6 lbs.

¾" SHAFT COLLARS

These shaft collars are of steel, with ¾" bore to fit line shafting. Equipped with special 5/16"x 5/16" hollow head set screws. Used to keep shaft in proper position lengthwise, and at side of loose pulleys.

No. 49-374—¾" Shaft collar. ¼ lb.

FLEXIBLE COUPLINGS

Necessary where motors are connected directly to the end of line shafts or to the shafts of machines. One side bored ¾" to suit line shafts. Other, bored to ½", ⅝" or ¾". Specify bore when ordering.

No. 49-379—Flexible Coupling as shown. 1 lb.

MAKE YOUR OWN SANDING SHAPES

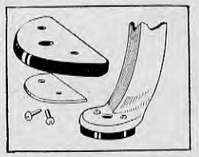
When you are working with irregular shapes where flat sandpaper will not do the job, use this new Sanding Kit. You can make disks or drums of any shape for your lathe—or drums shaped for your needs on the drill press and scroll saw. You can make your own blocks shaped the way you need them for irregular work. Easily applied. Ready for use as soon as quick setting glue dries. Ideal for any shop where much sanding is done.

No. 4017—Delta Sanding Kit containing 1 can of adhesive, one can of fine abrasive, 1 can of coarse abrasive and instructions. 4 lbs.

STEEL STANDS

No.	For Use With	Top	Height
50-168	Saw-Jointer Comb.	16"x30"	26⅜"
50-406	Belt Sander.....	8"x16"	29"
50-432	12" Disk Sander...	12½"x16½"	31½"
31-441	Deburring Machine.	16½"x26¼"	31½"
50-656	6" Jointer.....	8"x16"	29"
50-716	24" Scroll Saw.....	7"x33"	31½"
50-821	Welders.....	12½"x16½"	31¼"
50-891	14" Band Saw.....	8"x16"	24"
	10" Circular Saw...	With	

RUBBER FEET FOR STEEL STANDS



Rubber feet provide smoother, quieter operation of machines. Are of the correct composition to stand hard use, while having enough flexibility to absorb slight vibrations. With metal plates to fit into the recesses of stand feet, and drilled and tapped for machine screws inserted from the top of feet.

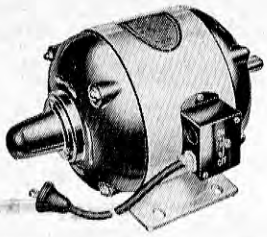
No. 50-353 (old No. 353)—Set of (4) rubber feet with plates and screws. 1 lb.

WRENCHES AND ALLEN KEYS

No.	Description
192	Allen Key, W = 5/32" with 4¾" metal handle
194	Allen Key, W = 5/32".....
942	¾" C. I. Box Wrench.....
949	1½" Forged Open End.....
1520	⅝" Hex. closed, 1-1/16" Stamped Open End, ⅜" and ½" Shaper Spindle Holes.....
1521	Allen Key for Moulding Cutter Heads W = 3/16".....
1522	Double end 5/16" Forged open end.....
1523	⅝" and 11/16" double end box wrench....
1524	9/16" and ⅞" Stamped double end box...
1525	⅝" closed, ⅞" Stamped open end.....
1526	7/16" and 9/16" Stamped double end box.
1527	⅝" C. I. box wrench.....
1529	½" Hex. Socket Wrench.....
1530	Allen Key, W = ⅛".....
1531	Allen Key, W = ⅜".....
1532	Allen Key, W = ¼".....
1533	Allen Key, W = 7/32".....
1534	Allen Key, W = ⅛".....
1535	Allen Key, W = 3/16".....
1536	Allen Key, W = 5/16".....
1538	⅝" and ¾" Stamped double end box.....

(For Prices See Attached Price List)

You Get Correct Driving Power With DELTA Motors



Designed and built in accordance with the best practice in motor construction. Frames are of heavy welded steel, accurately balanced rotor insures smooth operation.

EQUIPMENT FURNISHED:

With Two Shafts. One Shaft Guard. Sealed, Lubricated-for-life Ball Bearings.

Split Phase Motors—Equipped with heavy duty rubber covered cord and soft rubber plug together with double pole switch.

Capacitor and Repulsion Induction Motors—Equipped with heavy duty rubber covered cord and soft rubber plug together with double pole switch. Made for use on either 115 or 230 volt lines, they are normally supplied connected for 115 volts.

Direct Current Motors—Equipped with heavy duty rubber covered cord and soft rubber plug together with double pole switch.

Three Phase Motors—Do not have switch, cord or plug. Motor must be connected in conduit by an electrician.

SWITCHES

ALL SWITCHES FULLY UNDERWRITER APPROVED

Toggle Switch for Single Phase and D.C. Motors up to 1 H.P.

132

These two-pole toggle switches break both sides of line . . . are mounted in a heavy case complete with mounting screws, less cover . . . can be locked with padlock.

No. 132—On-an-off toggle switch with box, motor lead wire and connectors. For use on No. 28-205, 28-305, 31-506, 34-305, 34-405, 34-407, 37-205 and 43-205.

No. 49-314—On-and-off toggle switch with box, 3-wire ground and power cord with plug and 2-wire motor lead wires, for use on No. 28-350.

1115

These two-pole toggle switches break both sides of line . . . have flush mounting.

No. 1115—On-and-off toggle switch only for use with switch rods.

No. 49-312—On-and-off toggle switch (same as No. 1115) with No. 16 gage 3-wire rubber covered cord 8 ft. long, clamp and plug. For use with coolant pump.

Reversing Switches

These reversing switches are chiefly used on the shaper where the spindle must rotate in both directions.

49-316

1325

No. 1325—Reversing drum switch (rated 2 H.P. 440 V. max.) for 3-phase or D.C. motors.

No. 49-316—Reversing switch with connected 4-wire cord for any standard split-phase or capacitor motor.

3-Phase Manual Starters

These 3-phase manual starters provide accurate overload protection. Have silver alloy contacts — double break. With start, stop and reset buttons.

1320

No. 1320—3-phase manual starter for A.C. motors up to 2 H.P. and D.C. motors up to 1 H.P. (specify voltage).

No. 1328—3-phase manual starter for 3 HP., A.C. motors. Used on cut-off machines (specify voltage).

3-Phase Magnetic Starters

These magnetic starters are of the approved type. With Overload and Under-voltage protection. Stop, start and reset button in cover.

No. 1321—3-phase across-the-line magnetic starter, rating 2 H.P., 440 V., 60-cycle only.

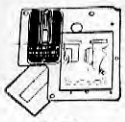
No. 1323—3-phase across-the-line magnetic starter, rating 2 H.P., 550 V., 60-cycle only.

No. 1329—3-phase across-the-line magnetic starter, rating 2 H.P., 220 V., 60-cycle only.

Mounting Parts

1322

No. 1322—Mounting Brackets, together with screws, used to mount No. 1320 Manual Starter and Magnetic Starters No. 1321, 1323, and 1329 on all steel stands and all drill presses.

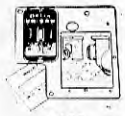


1327

No. 1327—Mounting parts together with screws, used to mount No. 1320 starter on the No. 43-205 shaper or the No. 1320 starter with the No. 1325 reversing switch on the No. 43-205 shaper.

No. 1459—Mounting parts, together with screws, for mounting No. 1320, 1321, and 1329 starters on No. 34-405 and No. 34-407.

Motor Cords



1459

These motor cords are heavy and well insulated with flexible rubber and fully approved. Are 8 feet long and supplied with plug.

No. 1119—No. 14 gage 2-wire cord for ½, ¾ and 1 H.P. single phase and D.C. large frame motors.

No. 49-307—No. 16 gage 2-wire cord for ⅓ H.P. single phase and D.C. small frame motors.

No. 49-309—No. 14 gage 3-wire cord with ground wire for single phase large frame motors.

No. 49-310—No. 16 gage 3-wire cord with ground wire for single phase small frame motors.

49-307

1119

Armoured Cable

No. 49-315—3-wire Armoured Cable connection from "Motor to Switch" of 3-phase motors. Complete with necessary clamp fittings. (Can also be used for single-phase and D.C. power and ground connectors.)

MOTORS

6" Frame Motors, ½" Shaft

Cat. No.	Type	H.P.	Cur.	Voltage	Cycles	R.P.M.	Sh. Wt. Lbs.
62-110	Cap.	⅓	AC	115/230	60	1725	33
x▲62-213	Cap.	½	AC	115	60	3450	34
62-610	Cap.	½	AC	115/230	60	1725	36
66-320	3 Ph.	½	AC	208-220/440	50/60	1425/1725	31
*66-321	3 Ph.	½	AC	220/440	50/60	2850/3450	33
*68-110	D. C.	⅛	DC	115	..	1725	30
*68-120	D. C.	⅛	DC	230	..	1725	30
*68-310	D. C.	½	DC	115	..	3450	38
*68-320	D. C.	½	DC	230	..	3450	38

6" Frame Motors, ⅝" Shaft

▲62-253	Cap.	¾	AC	115	60	3450	36
▲62-653	Cap.	½	AC	115	60	1725	36

8½" Frame Motors, ¾" Shaft

82-710	Cap.	½	AC	115/230	60	1725	66
82-910	Cap.	¾	AC	115/230	60	1725	76
84-910	R. I.	1	AC	115/230	60	1725	84
86-520	3 Ph.	½	AC	208-220/440	50/60	1425/1725	58
86-720	3 Ph.	¾	AC	208-220/440	50/60	1425/1725	59
86-920	3 Ph.	1	AC	208-220/440	50/60	1425/1725	68
86-921	3 Ph.	1	AC	208-220/440	50/60	2850/3450	74
86-922	3 Ph.	1	AC	208-220/440	50/60	960/1140	66
87-120	3 Ph.	1½	AC	208-220/440	50/60	1425/1725	80
*88-510	D. C.	½	DC	115	..	1725	70
*88-520	D. C.	½	DC	230	..	1725	70
*88-511	D. C.	½	DC	115	..	1140	70
*88-521	D. C.	½	DC	230	..	1140	70
*88-710	D. C.	¾	DC	115	..	1725	82
*88-720	D. C.	¾	DC	230	..	1725	82

8½" Frame, for Wood Shaper, ¾" Shaft

▲85-080	R. I.	1	AC	115/230	60	3450	85
86-921	3 Ph.	1	AC	220/440	50/60	2850/3450	85
87-121	3 Ph.	1½	AC	208-220/440	50/60	2850/3450	85

8½" Frame, for 10" Tilting Arbor Saw, ¾" Shaft

†°85-010	R. I.	1	AC	115/230	60	1725	85
87-010	3 Ph.	1	AC	208-220/440	50/60	1425/1725	70
87-210	3 Ph.	1½	AC	208-220/440	50/60	1425/1725	80

No. 225 NEMA Frame, for 12" Tilting Arbor Saw, 1" Shaft

▲98-111	1 Ph.	3	AC	115/230	60	3450	145
▲98-321	3 Ph.	5	AC	220/440	60	3450	145

No. 225 NEMA Frame Motors, 1" Shaft

▲84-977	1 Ph.	3	AC	110/230	50/60	1425/1725	145
▲97-320	3 Ph.	3	AC	208-220/440	50/60	1425/1725	133
▲* †97-420	3 Ph.	3	AC	208-220/440	50/60	1425/1725	133

* Motors not carried in stock. ▲Single shaft motors. † Fully enclosed motor.

° Special Double Pole, On and Off Switch furnished with motor.

x No. 49-316 Reversing Switch recommended for use with No. 43-110 Shaper.

Motors not regularly carried in stock will be ordered special and are not subject to cancellation.

SWITCH RODS PROVIDE FINGER-TIP CONTROL

No.	For Use On
1330	34-307
1331	14" Drill Presses
1332	17" Drill Presses
1333	37-207
1334	28-207; 28-307; 31-505; 37-595; 46-305; and wood top benches
31-442	Deburring machines.

Rockwell MANUFACTURING COMPANY

DELTA POWER TOOL DIVISION PITTSBURGH 8, PENNSYLVANIA

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