

DELTA MILWAUKEE

Industrial

Machine Tools

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PITTSBURGH, PA.

C A T A L O G A B - 5 0

DELTA POWER TOOL DIVISION
Rockwell Manufacturing Company
Milwaukee 1, Wisconsin



Band Saw
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Belt Abrasive
Finishing
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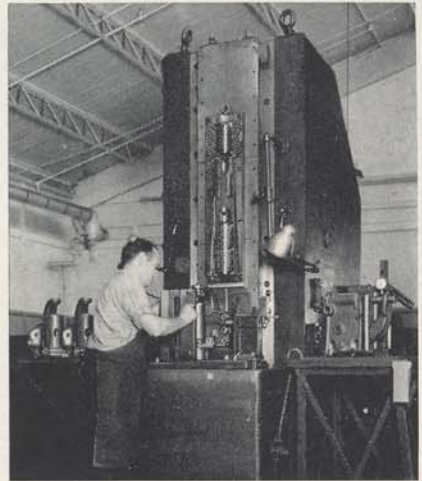
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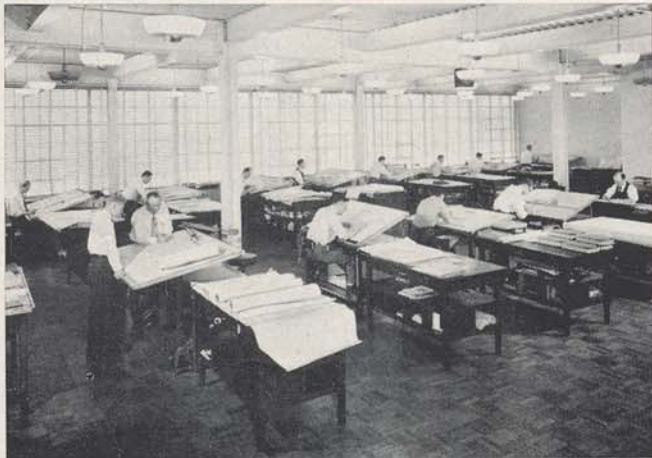
Where and How Delta Tools are "Quality" Designed and Built



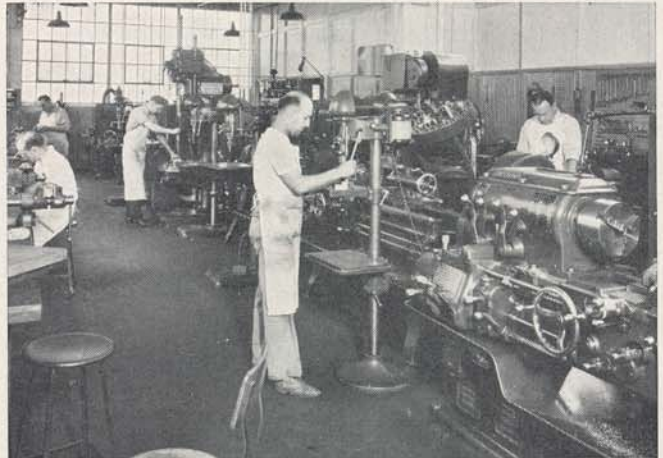
Only by increasing plant facilities could Delta supply you with the tools you need. Above is the result, a New, Modern addition which more than doubles the old floor space, and which is devoted solely to the production of Delta-Milwaukee Machines. Just for comparison—the old building is the dark area in the above picture.



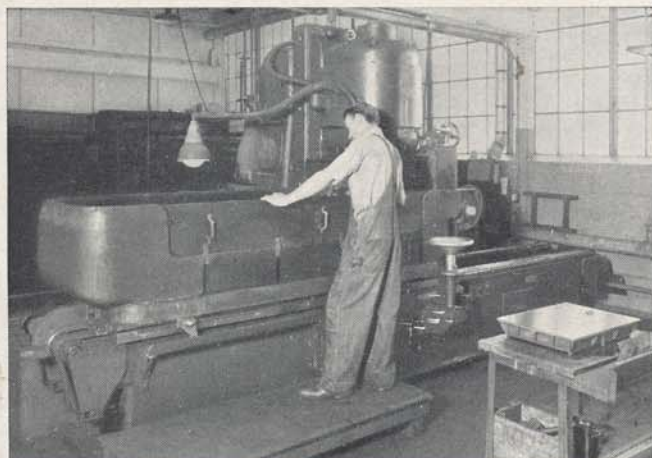
Modern high-production precision vertical broaching machine—just one of the many fine production units used in the manufacture of our machine tools.



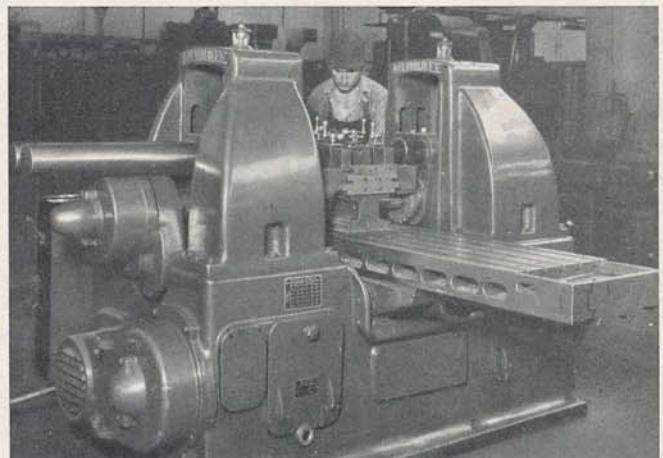
A well organized, well managed engineering department manned by experienced engineers who have spent most of their lives in the development, design and construction of light machine tools results in a product with hundreds of exclusive, superior features.



Practically every worthwhile improvement in light machine tools made in recent years has been developed in this modern experimental shop. Staffed by expert technicians and supervised by experienced tool engineers, it guarantees a perfect product for you.



One of the battery of heavy-duty production milling machines which help to make possible the world's finest light machine tools at extremely low prices.



These grinding machines insure absolute accuracy of all flat surfaces. All jointer tables are ground twice; once individually in accurate fixtures, then again after assembly, to assure precise alignment.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Look For These Quality Features Found in Delta-Milwaukee Machine 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.

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 main-

tained 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

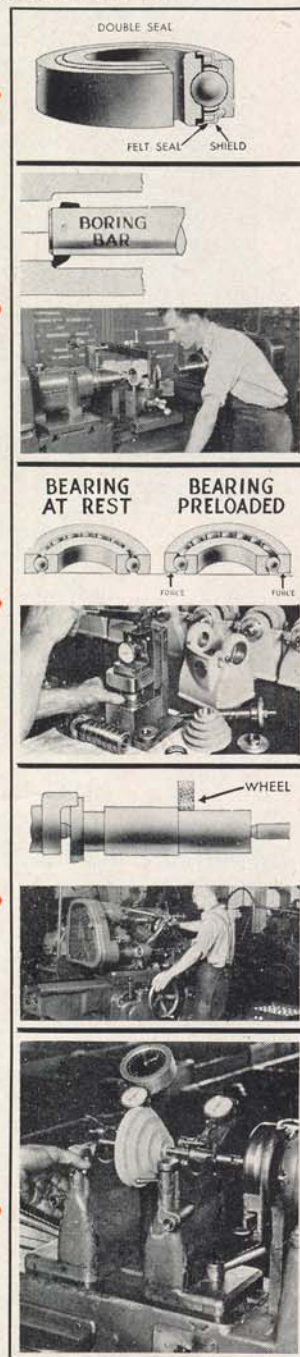
A pulley not in perfect balance causes vibration which places a tremendous strain on the bearings. This causes undue wear and an immediate loss of accuracy. To overcome this, all pulleys running at high speed in Delta machines are dynamically balanced. In dynamic or running balance each pulley is put upon a sensitive balancing machine

as shown to the left 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.

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.



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; 2,352,235; 2,353,202; 2,360,921; 2,372,699; 2,374,716; 2,384,512; 2,386,283; 2,396,733; 2,397,178; 2,413,016; 2,415,121; 2,428,049; 2,429,250; 2,430,448; 2,432,058; 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; Canadian patents: 314,585—1931; 340,750—1934; 340,751—1934; 340,752—1934; 346,174—1934; 346,175—1934; 351,531—1935; 353,074—1935; 354,273—1935; 354,274—1935; 365,682—1937; 370,828—1937; 427,831; 435,705; 460,144—1950. Union of South Africa 637/43. Great Britain 574,335. Australia 120,058; 123,057; 125,599; 125,600.

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.

All prices F. O. B. factory, Milwaukee, Wis. or Leetonia, Ohio. 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.

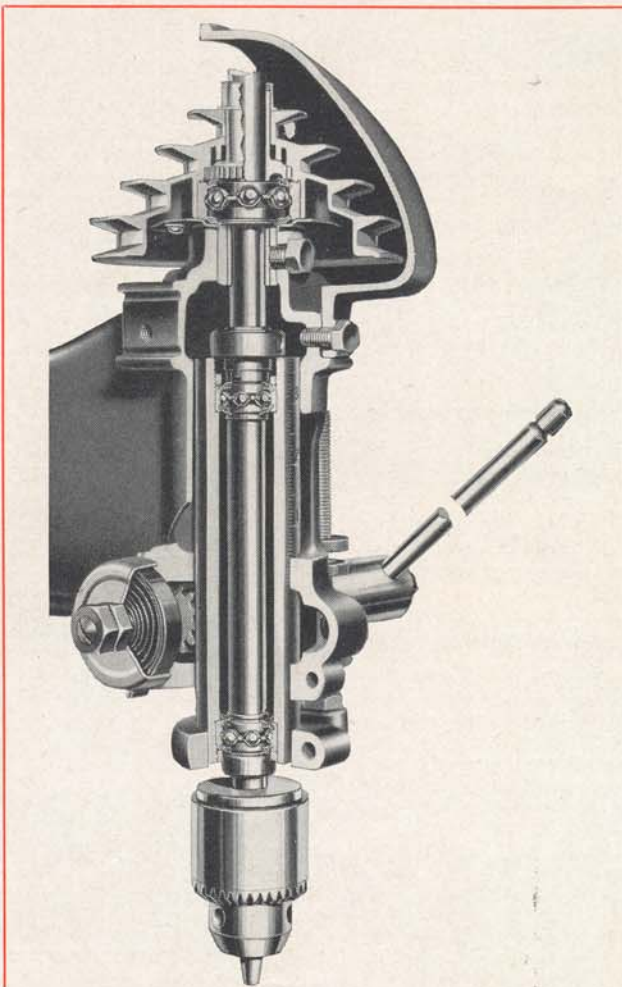


DELTA POWER TOOL DIVISION

Rockwell MANUFACTURING COMPANY

MILWAUKEE 1, WISCONSIN

14-inch Drill Press Has Free-Floating, Self-Aligning Drive



Before you buy a Drill Press make sure it has both a Self-Aligning Drive and a Free-Floating Spindle

WITH the latest and most modern machine equipment, it is an easy matter to bore drill-press bearing housings, quill seats, etc., to close tolerances. But 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. And there are a number of factors which make this a problem than can be handled properly only thru careful engineering and quality construction.

First, the comparatively long range telescoping of the spindle and quill; second, the high speed at which the spindle rotates; third the fact that the quill and spindle must be locked or clamped in various locations; fourth, the fact that the spindle is often subjected to severe side thrusts, and so on. When all these factors are considered, it is obvious that the slightest variation in alignment is likely to produce difficulties.

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

The Spindle Drive STAYS Aligned!

From the outside, our spindle pulley looks like any other simple pulley. But, as the photos show, it is actually radically different. The pulley itself is balanced and is carried on a huge sealed, lubricated-for-life ball bearing, of special deep-groove tight-fitting design, with enormous reserve capacity above that required to take the belt pull, and requiring no attention whatever. This bearing is mounted by means of a special extension of the inner race so that it cannot be sprung. This is very important.

The actual drive of the pulley is transmitted to the spindle through a floating sleeve, with spur-gear teeth cut around its rim. 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 3½" long. The under-side of the pulley is covered with a pressed-steel plate, which not only secures the bearing in the pulley, but which also covers the pulley ribs and 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!

Construction and Assembly of the Spindle Pulley

A. Shows the spindle pulley with its internal gear, the floating sleeve with its spur gear, the huge ball bearing that carries the pulley and the lower cover plate.

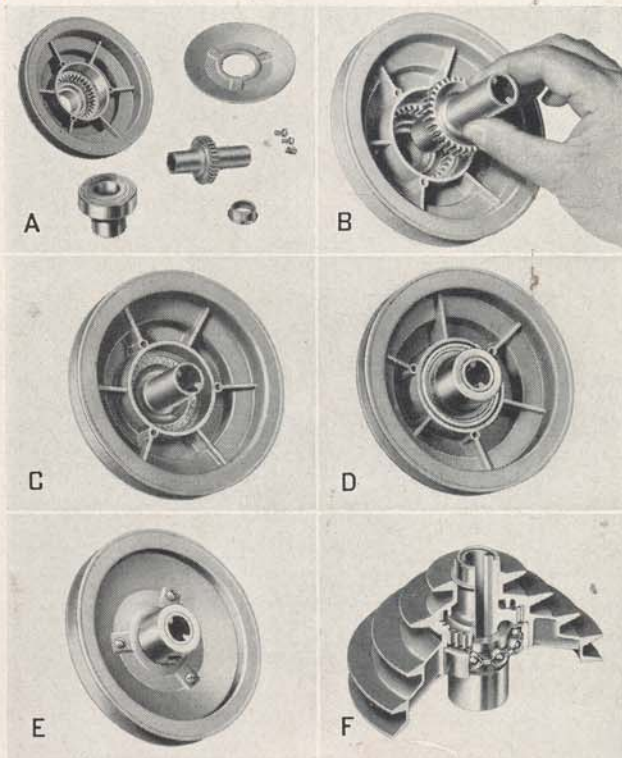
B. How the floating sleeve is engaged with the internal gear in the pulley is shown here. This forms a clutch which permits the sleeve to float in all directions but one.

C. The floating sleeve engaged with the pulley. This forms a positive driving medium for the spindle, but at the same time takes up any minute variations in alignment that may occur in service.

D. The pulley is carried on a large sealed-for-life ball bearing, requiring no lubrication, and with a load capacity far in excess of any pull ever placed on it by the belt.

E. There is no power-wasting fan action in this pulley, because the plate that secures the bearing in place also completely covers the pulley ribs—the final detail of a high grade design.

F. This photo shows a section through the complete spindle pulley assembly.

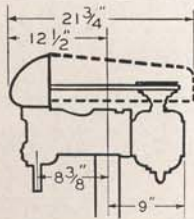


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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



SPECIFICATIONS

Height—
 Floor Mod. 66 1/2"
 Bench Mod. 36 1/2"
 Col. Diam. 2 3/4"
 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. . . 1/2" Cast Iron,
 3/8" in Steel
 Built-In Depth Gage
 Depth Scale on Quill
 Pulley Guard



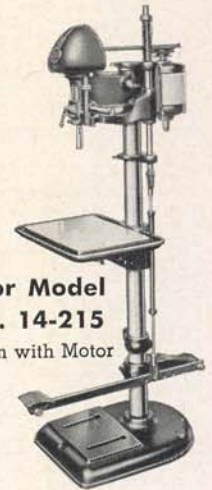
**Bench Model
No. 14-007**
Shown with Motor



**Floor Model
No. 14-207**
Shown with Motor



**Floor Model
No. 14-212**
Shown with Motor



**Floor Model
No. 14-215**
Shown with Motor

Type	Standard Tilting Table		Standard Tilting Table		Production Table		Prod. Table and Foot Feed	
	Slo-Speed	High Speed	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	14-215	14-216
Table Working Surface . . .	10" x 10"	10" x 10"	10" x 10"	10" x 10"	11" x 16"	11" x 16"	11" x 16"	11" x 16"
Spin. to Table Max.	11 7/8"	11 7/8"	41 3/4"	41 3/4"	36 1/2"	36 1/2"	29 1/2"	29 1/2"
Spin. to Base Max.	17 3/8"	17 3/8"	46 3/4"	46 3/4"	46 3/4"	46 3/4"	44 3/4"	44 3/4"
Ship. Wt. Lbs.	110	110	176	170	237	211	258	258
Table Drain Hole . . . . .	.....	.....	.....	.....	Two 3/8" Pipe Tap at rear See Page 17		Two 3/8" Pipe Tap at rear See Page 17	
Type of Cool. Pump Req.	.....	.....	.....	.....	.....		.....
WITH 1/2 INCH JACOBS CHUCK SPINDLE								
Machine No.	14-007	14-008	14-207	14-208	14-212	14-213	14-217	14-218
Table Working Surface . . .	10" x 10"	10" x 10"	10" x 10"	10" x 10"	11" x 16"	11" x 16"	11" x 16"	11" x 16"
Spin. to Table Max.	11 3/8"	11 3/8"	41 3/4"	41 3/4"	36"	36"	29"	29"
Spin. to Base Max.	17 3/8"	17 3/8"	46 3/4"	46 3/4"	46 1/4"	46 1/4"	44 1/4"	44 1/4"
Ship. Wt. Lbs.	110	110	176	170	220	220	258	258
Table Drain Hole . . . . .	.....	.....	.....	.....	Two 3/8" Pipe Tap at rear See Page 17		Two 3/8" Pipe Tap at rear See Page 17	
Type of Cool. Pump Req.	.....	.....	.....	.....	.....		.....

MOTORS, SWITCHES, COOLANT PUMP, TANK AND PIPING NOT INCLUDED WITH MACHINE. ORDER SEPARATELY.

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 1/2" 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 sealed, 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 Jacobs Chuck spindle machines where straight shank drills only are to be used. This chuck will take drills from No. 60 to full 1/2".

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

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

Motors Recommended: Heavy Duty: 62-610, 66-320; Medium Duty: 62-110, 66-320; Light Duty: 60-310, 62-110, 66-110.

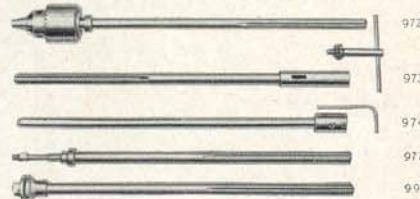
For 3 Ph. motors use No. 1320 3-Phase Manual Starter or Magnetic Starters No. 1329 or No. 1321 with No. 1322 Mounting Parts.

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

See page 64 for Motors and Switch Parts.

Interchangeable Spindles for 14" Drill Presses

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. This also means you can keep the work up close to the bearings for greater accuracy. All chucks are balanced for high speed work. Spindles have deep splines which insure proper balance and long wear.

No. 972—Spindle with Jacobs Chuck and Key. No. 60—1/2" Cap., 3 1/2 lbs.

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

No. 974—Spindle with 1/2" Hole for Router Bits. 2 1/2 lbs.

No. 977—Spindle with pin and collar for Shaper Cutters with 5/16" Hole. 2 lbs.

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

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

14" Bench and Floor Type 1, 2, 3 and 4-Spindle Drill Presses. One-Piece Tables.

Type	1 Spin. Bench Type		2 Spin. Floor Type		3 Spin. Floor Type		4 Spin. Floor Type	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 1 MORSE TAPER SPINDLE								
Machine No.	14-305	14-306	14-405	14-406	14-410	14-411	14-415	14-416
Table Working Surface	14"x 16"	14"x 16"	14 1/2"x 28"	14 1/2"x 28"	16 1/2"x 51"	16 1/2"x 51"	16 1/2"x 51"	16 1/2"x 51"
Spin. to Table Max.	19 1/2"	19 1/2"	26 1/4"	26 1/4"	26 1/4"	26 1/4"	26 1/4"	26 1/4"
Spindle Spacing	12"	12"	12"	12"	15"	15"	11 1/2"	11 1/2"
Shp. Wt. Lbs.	215	215	528	528	900	900	898	898
Table Drain Hole	Two 3/4" Pipe Tap at rear		One 3/4" Pipe Tap at rear		One 1" Pipe Tap at rear		One 1" Pipe Tap at rear	
Type of Cool. Pump Req.	See Page 17		See Page 17		See Page 17		See Page 17	
WITH 1/2 INCH JACOBS CHUCK SPINDLE								
Machine No.	14-307	14-308	14-407	14-408	14-412	14-413	14-417	14-418
Table Working Surface	14"x 16"	14"x 16"	14 1/2"x 28"	14 1/2"x 28"	16 1/2"x 51"	16 1/2"x 51"	16 1/2"x 51"	16 1/2"x 51"
Spin. to Table Max.	19"	19"	25 3/4"	25 3/4"	25 3/4"	25 3/4"	25 3/4"	25 3/4"
Spindle Spacing	12"	12"	12"	12"	15"	15"	11 1/2"	11 1/2"
Shp. Wt. Lbs.	205	205	528	528	900	900	898	898
Table Drain Hole	Two 3/4" Pipe Tap at rear		One 3/4" Pipe Tap at rear		One 1" Pipe Tap at rear		One 1" Pipe Tap at rear	
Type of Cool. Pump Req.	See Page 17		See Page 17		See Page 17		See Page 17	

14-inch Floor Type 5, 6 and 8-Spindle Drill Presses. Sectional Tables.

Type	5 Spindle		6 Spindle		8 Spindle	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 1 MORSE TAPER SPINDLE						
Machine No.	14-515	14-516	14-520	14-521	14-525	14-526
Table Working Surface	18"x 65"	18"x 65"	18"x 95"	18"x 95"	18"x 95"	18"x 95"
Spin. to Table Max.	26 1/4"	26 1/4"	26 1/4"	26 1/4"	26 1/4"	26 1/4"
Spindle Spacing	12"	12"	15"	15"	11 1/2"	11 1/2"
Shp. Wt. Lbs.	1450	1450	1875	1875	2000	2000
Table Drain Hole	Two 3/4" Pipe Tap at ends		Two 3/4" Pipe Tap at ends		Two 3/4" Pipe Tap at ends	
Type of Coolant Pump Required	See Page 17		See Page 17		See Page 17	
WITH 1/2 INCH JACOBS CHUCK SPINDLE						
Machine No.	14-517	14-518	14-522	14-523	14-527	14-528
Table Working Surface	18"x 65"	18"x 65"	18"x 95"	18"x 95"	18"x 95"	18"x 95"
Spin. to Table Max.	25 3/4"	25 3/4"	25 3/4"	25 3/4"	25 3/4"	25 3/4"
Spindle Spacing	12"	12"	15"	15"	11 1/2"	11 1/2"
Shp. Wt. Lbs.	1450	1450	1875	1875	2000	2000
Table Drain Hole	Two 3/4" Pipe Tap at ends		Two 3/4" Pipe Tap at ends		Two 3/4" Pipe Tap at ends	
Type of Coolant Pump Required	See Page 17		See Page 17		See Page 17	

The 1, 2, 3 and 4 spindle drill presses all have one piece tables. The 5, 6 and 8 spindle drill presses have sectional tables. Dimensional drawings show sizes of tables. Single spindle units shown on this page available in bench type only. Multiple spindle units in floor type. Tables on multiple spindle units have 1 1/2" oil trough. Working surface 32" from floor. Multiple Spindle Units have counterbalance for raising and

lowering heads.

Sectional tables consist of center section to which end sections are bolted. This permits drill press to be made of any desired length with spindle spacing at minimum center distance of 11 1/2" or any greater distance as desired. Sectional table units with three sections have three cast iron legs other units have two legs as illustrated.

Motors, Switches, Coolant Pump, Tank and Piping Not Included with Machine. Order Separately. For Prices See Attached Price List.

Capacity: 1/2" in cast iron, 3/8" in steel.

Machines include: Built-in depth gage. Depth scale on quill. Front pulley guard. Quill has 4-inch stroke or travel. Multiple spindle models include counterbalance for head.

Speeds: High-Speed Models—680, 1250, 2400 and 4600 r.p.m.

Slo-Speed Models—470, 780, 1300 and 1950 r.p.m.

High-Speed Models include No. 387 V-belt and No. 985 motor pulley. (Specify bore.)

Slo-Speed Models include No. 430 V-belt and No. 985 motor pulley. (Specify bore.)

Order Jacobs spindle machines where straight shank drills only are to be used. This chuck will take drills from No. 60 to full 1/2".

Order No. 1 Morse taper spindle machines where taper shank drills only are to be used.

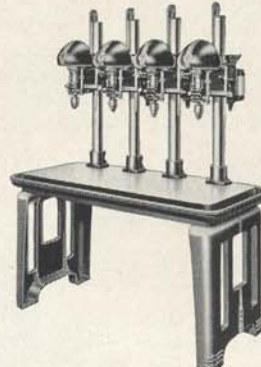
Spindles in these machines are easily changed. See complete listing on page 5. For individual parts for special setups and for accessories, see page 7.

Motors Recommended: Heavy Duty: 62-610, 66-320; Medium Duty: 62-110, 66-320; Light Duty: 60-310, 62-110, 66-110.

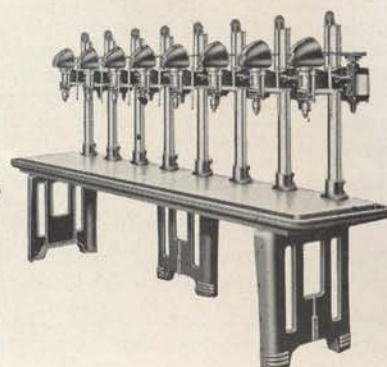
For 3 Ph. Motors use No. 1320 3-Phase Manual Starter, or Magnetic Starters No. 1329 or No. 1321 with No. 1322 Mounting Parts. Use No. 1331 Switch Rod for all Single-Phase Motors. See page 64 for Motors and Switch Parts.



**Bench Model
No. 14-308**
Shown with Motor



No. 14-417
Shown with Motor



No. 14-527
Shown with Motor

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Special Setups Made Economically With Standard Delta Drill Press Parts

14" DRILL PRESS PARTS

- †No. 14-220—(Old No. 970-B)—14" High-Speed Drill Press Head with 1/2" Jacobs 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 1/2" Jacobs 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. 14-817—Set of Parts for changing Slo-Speed Drill Press to High-Speed, consisting of 387 Belt and DP-265-S Spindle Pulley Assembly. 13 lbs.
- *No. 1290—Set of Parts for changing High-Speed Drill Press to Slo-Speed, consisting of No. 430 Belt and DP-283-S Spindle Pulley Assembly. 13 lbs.
- *No. 387—V-Belt for 14" High-Speed Drill Press. 1 lb.
- *No. 430—V-Belt for 14" Slo-Speed Drill Press. 1 lb.
- No. 969—Pilot Wheel. 4 lbs.
- No. 992—3 1/2" x 1 1/2" Cup Wheel, 1/2" hole. 2 lbs.
- *No. 985—4-Step Motor Pulley for 14" Drill Press. Specify bore. 2 lbs.
- No. 1022—Complete Belt and Pulley Guard for 14" Drill Press. 21 lbs.
- *No. 14-803—Belt Guard. Same as No. 1022, without Spindle Pulley Guard. Use only when machine has No. DP-257-S Spindle Pulley Guard. 9 lbs.
- No. 1010—Head or table Support Collar for Column. 2 lbs.
- No. 1019—Mounting Flange and Screws for 14" Drill Press Column. 10 lbs.
- No. 1020—Column for 14" Drill Press. 36 3/4" long. 13 lbs.
- No. 1006—Production Table for 14" Single Spindle Floor Type Drill Press, complete with Rack, Raising Mechanism, Collar and Bearing. 61 lbs.
- No. 1516—Single Spindle One Piece Table, Working space of 14" x 16" for 14" Drill Press Head. (This table cannot be mounted on the No. 1399 Cast Iron Legs.) 110 lbs.
- No. 1517—2-Spindle One Piece Table. Working surface of 18 5/8" x 28" for 14" Drill Press Heads. 225 lbs.

- No. 1519—4-Spindle One Piece Table. Working surface of 21 1/4" x 51" for 14" Drill Press Heads. 460 lbs.
 - No. 1399—Cast Iron Legs (one pair) for mounting One Piece Table Nos. 1517 and 1519 and all other Multiple Spindle Drill Presses. 163 lbs.
 - No. 1030—Spring Counterbalance Assembly for 14" Drill Presses. Consisting of Spring, Chain, Column Top Casting with Ball Bearing Roller and Screws. 8 lbs.
 - No. 1007—Foot Feed for Floor Type 14" Drill Press. 38 lbs.
 - No. 1009—Production Table for 14" Single Spindle Floor Type Drill Press. Same as No. 1006, without Rack, Raising Mechanism, Collar and Bearing. 52 lbs.
 - No. 1008—Table Raising Mechanism with Rack, Collar and Bearing. For No. 1009 Table. 9 lbs.
- * These parts cannot be used with Super-Hi Drill Press.
† Motor Pulley comes with 1/2" bore unless otherwise specified.

*New Delta Tapping Attachment for 14" Drill Press

Produces quality threads—increases production—can be operated in any position—easy to operate—saves taps—runs at speed suitable to material being tapped—housing made of heat treated magnesium.

The internal expanding drum clutch itself expands and firmly grips the entire circumference of the shell from the inside. There is no top or bottom pressure. This means more uniformity in holes tapped, less chance of wear, and no loss through slippage.

- No. 14-843—Tapping Attach. for 14" Drill Press, 0.3/16" cap. Complete with spindle. 6 lbs.
 - No. 14-844—Tapping Attach. for 14" Drill Press, 3/16"-5/16" cap. Complete with spindle. 8 lbs.
- * Cannot be used with Super-Hi Drill Press.



Handy, Quick-Set Vises



Of tested quality and usefulness, these vises are for Drill Press, Grinder or Bench work. Quickly raised to any angle and just as quickly locked into place. Side of vise accurately graduated for angle work. Accurately machined with base, body and sliding jaws of semi-steel, clamping jaws of hardened steel. Clamping screw has fine pitched thread and long bearing in vise body.

No.	Jaw	Opening Length	Ship. Wt. Lbs.
*1024	1 1/2" x 1"	1 5/8"	4 5/8" 5
1025	1 1/2" x 1"	1 5/8"	4 5/8" 6 1/2
1026	2 1/2" x 1 1/8"	2 1/2"	6 1/4" 10

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

MULTI-SPEED ATTACHMENT

For Standard 14" Drill Presses only, provides a wide range of speeds on both the Slo and High-Speed models. Consists of a heavy casting, 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 Standard 14" High-Speed Drill Presses, including column casting, cone pulley and two belts. Twelve speeds from 270 RPM to 11,000 RPM. The 11,000 RPM speed should be only used for occasional work due to the excessive wear on the bearings which are designed for 5000 RPM. 7 lbs.
- No. 1029—Multi-Speed Attachment for Standard 14" Slo-Speed Drill Presses including Column Casting, Cone Pulley and two Belts. Twelve speeds from 185 RPM to 4825 RPM. 7 lbs.
- No. 271—Motor Pulley Belt for No. 1028 or No. 1029 Multi-Speed. 1/2 lb.
- No. 272—Spindle Pulley Belt for No. 1028 Multi-Speed. 1/2 lb.
- No. 273—Spindle Pulley Belt for No. 1029 Multi-Speed. 1/2 lb.

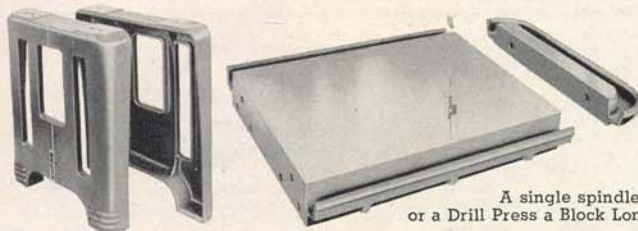


SURFACE PLATES

Has a true surface, corner out of flat tolerance + or -.0005, a properly ribbed casting, ledges at the edges of the plate for clamping purposes and edges that are machined square with each other and with the face. Plate may easily be made into a precision plate by simply scraping to a master plate or to each other.

- No. 640—15" x 18" x 3". 63 lbs.
- No. 641—16" x 22" x 3". 71 lbs.

RIGID, SECTIONAL TABLES for DRILL PRESSES



A single spindle— or a Drill Press a Block Long.

The drill press is built upon a section table—each table section being 23 3/8" by 30" and with the addition of the end sections is increased to 35" long. On these sections, any type of 17" or 14" head can be easily installed and on centers which meet your individual needs. This means that the maximum amount of flexibility is assured—you can have all 17" or 14" heads on one machine or a combination of both—you can have them spaced at any distance you desire—either close together or far apart.

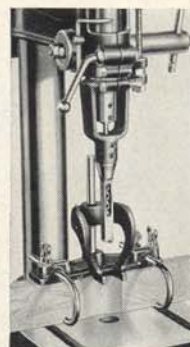
Minimum center to center distances for columns: Super-Hi-Speed 14"-9"; Standard 14"-11 1/2"; Standard 17"-15"; Power Feed 17"-18".

- No. 1504—One End section. 55 lbs.
- No. 1505—One Center section. 365 lbs.

IMPORTANT—Give these specifications with your order: (1) number of drill press heads needed, (2) if 14" or 17" heads, (3) spacing between heads, (4) if table is to be completely assembled, (5) if table should be drilled and tapped for the drill press mounting flange.

- No. 1506—One only cast iron leg. 80 lbs.
- No. 1399—Cast iron legs. 1 pair. 163 lbs.

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.

Using this simple, easily installed attachment, the standard 14" drill press may be converted into an accurate mortising machine. Consists of heavy fence bolted to the drillpress 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 4 3/4"; capacity from ends of hooked rods to fence 2 3/4". Requires the use of No. 974 spindle.

- No. 976—Mortising Attachment complete. Without spindle 7 lbs.
- (For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

14" Drill Press Accessories For Many Jobs

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"

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

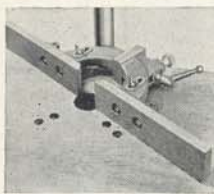
No. 979—Set of six depth collars. 5/16" hole.

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 end-wise so opening may be made small as possible to fit the work—a good safety feature. Used with shaper table No. 11-806.

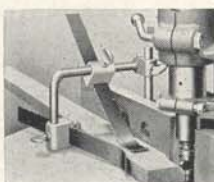
No. 982—Shaper Fence. 12 lbs.



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", 3/4" 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 3 1/2" thick.



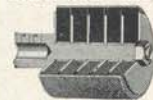
No. 983—Set of Spring Hold-Downs with straight and bent posts, two springs, two spring brackets, and one post bracket. 2 lbs.



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.

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 1/2" diameter stem to fit 1/2" hollow spindle or chuck. Others have 1/2" 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 1/2" dia. shaft. 2 lbs.

No. 831—1/2 doz. 3"x3" Sleeves, No. 1 1/2 Grit coarse garnet. 1/2 lb.

No. 832—1/2 doz. 3"x3" Sleeves, No. 1/2-60 Grit medium garnet. 1/2 lb.

No. 833—1/2 doz. 3"x3" Sleeves, No. 1-50 Grit Al. Oxide (for metal). 1/2 lb.

No. 835—1 3/4" dia. x 2" Drum, with one sleeve. Fits 1/2" dia. shaft. 1 3/4 lbs.

No. 836—1/2 doz. 1 3/4"x2" Sleeves, No. 1 1/2-40 Grit med. garnet. 1/4 lb.

No. 837—1/2 doz. 1 3/4"x2" Sleeves, No. 1/2-60 Grit fine garnet. 1/4 lb.

No. 838—1/2 doz. 1 3/4"x2" Sleeves, No. 1-50 Grit Al. Oxide (for metal). 1/4 lb.

No. 840—1 1/16" dia. x 2 1/2" Drum, with one sleeve. With 1/2" shank to fit hollow spindle or chuck. 8 oz.

No. 841—1/2 doz. 1 1/16"x2 1/2" Sleeves, No. 1 Grit medium garnet. 1/2 lb.

No. 842—1/2 doz. 1 1/16"x2 1/2" Sleeves, No. 1/0-80 Grit fine garnet. 1/2 lb.

No. 847—1/2 doz. 1 1/16"x2 1/2" Sleeves, No. 50 Grit Al. Oxide (for metal). 1/2 lb.

No. 11-834—Auxiliary Shaft 1/2"x2 1/2" 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—1 1/2"x1" Drum, with one sleeve, 5/16" shank. 1/2 lb.

No. 682—1/2 doz. 1 1/2"x1" No. 40-grit Al. Oxide sleeves. 1/4 lb.

No. 683—1/2 doz. 1 1/2"x1" No. 80-grit Al. Oxide sleeves. 1/4 lb.

No. 680—2-3/16"x1" Drum, with one sleeve, 5/16" shank. 1/2 lb.

No. 684—1/2 doz. 2-3/16"x1" No. 40-grit Al. Oxide sleeves. 1/4 lb.

No. 685—1/2 doz. 2-3/16"x1" No. 80-grit Al. Oxide sleeves. 1/4 lb.

No. 681—3"x1" Drum with one sleeve, 5/16" shank. 3/4 lb.

No. 686—1/2 doz. 3"x1" No. 40-grit Al. Oxide sleeves. 1/2 lb.

No. 687—1/2 doz. 3"x1" No. 80-grit Al. Oxide sleeves. 1/2 lb.

CHISELS, BITS, BUSHINGS, PLUG CUTTERS, Etc.

HOLLOW CHISELS



Selected steel. Bit operates inside of chisel. Shank of chisel 5/8"x1 1/2". Weight per set 2 1/8 lbs.

No.	504	505	506	508
Size, Inches	1/4x1/4	5/8x5/8	3/8x3/8	1/2x1/2
Depth of Mortise	1 7/8"	1 7/8"	2 3/4"	3 1/4"

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	1/4"	5/16"	3/8"	1/2"
Diameter Shank	3/16"	1/4"	19/64"	19/64"



BUSHINGS

1/2" Outside Diameter

No.	524	525	526
Hole	3/16"	1/4"	19/64"

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

ROUTER BITS



For routing, round-end mortises and grooving work. 1/2x1 1/2 inch shank. Use No. 974 Spindle with these Router Bits.

No.	474	475	476	477	478
Size	1/4"	5/8"	3/8"	1/2"	1/2"

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

PLUG CUTTERS



Used for making wood plugs and dowels. 1/2x2 inch shank, barrel 2 1/4" long.

No.	814	815	816	817	819
Size	3/8"	1/2"	5/8"	3/4"	1"

No. 822—Complete set of 5 Plug Cutters. 2 1/2 lbs.

MACHINE SPUR BITS



Selected steel. Have brad point and two cutting lips. Approximately 6" long overall, with a 1/2" shank. Weight per set 3 lbs.

No.	804	805	806	807	808	809	810	812
Size	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"

No. 818—Complete set of 8 machine spur bits.

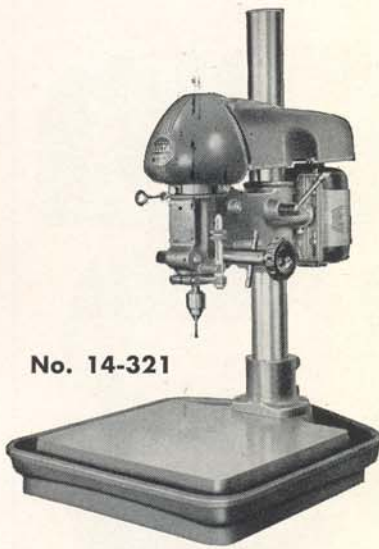
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

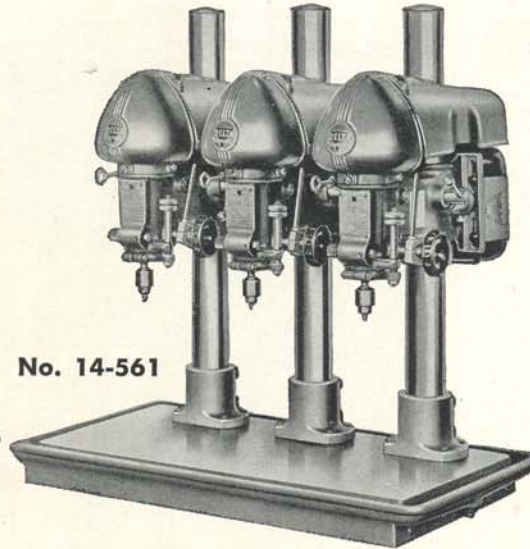
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Single and Multiple Spindle Super-Hi 14-inch Drill Presses



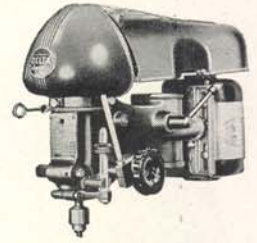
No. 14-321



No. 14-561

Super-Hi Drill Press Heads are available separately for special setups.

For your convenience the Super-Hi Drill Press head with special motor is available. This head will fit any Delta-Milwaukee 14" Drill Press Column so that you can replace any standard 14" head with the new Super-Hi head, thus permitting you to make up your own floor type models or multiple spindle models.



Complete as illustrated, including specially balanced motor, belt guard, belt and pulley set for the speed listed, special Jacobs chuck taking drills from No. 72 to 1/4". Cord, plug, switch and switch rod furnished on single-phase and D.C. motors only.

No. 14-821—Head only with 1/3 H.P. Single Ph. 3450 r.p.m., 115/230 V. 60 Cy. Motor and Switch Rod. Speeds: 12,000, 8,000 and 5,000 r.p.m. 115 lbs.

No. 14-822—Head only with 1/3 H.P. Single Ph. 2850 r.p.m., 115/230 V. 50 Cy. Motor and Switch Rod. Speeds: 10,000, 6,600, and 4,100 r.p.m. 115 lbs.

No. 14-823—Head only with 1/3 H.P. 3 Ph. 2850/3450 r.p.m., 220/440 V. 50/60 Cy. Motor. Switch and Switch Rod not furnished but No. 1320 switch and No. 1322 Switch Mounting Parts recommended. Speeds for 50 Cy.: 10,000, 6,600 and 4,100 r.p.m.—for 60 Cy.: 12,000, 8,000 and 5,000 r.p.m. 115 lbs.

No. 14-824—Head only with 1/3 H.P. 3450 r.p.m., 115 V., D.C. Motor and Switch Rod. Speeds: 12,000, 8,000 and 5,000 r.p.m. 115 lbs.

No. 14-825—Head only with 1/3 H.P., 3450 r.p.m., 230 V., D.C. Motor and Switch Rod. Speeds: 12,000, 8,000 and 5,000 r.p.m. 115 lbs.

No. 14-832—Replacement Belt. Length, 38 1/2". 1/4 lb.

TYPE	SINGLE SPINDLE	2 SPINDLE	3 SPINDLE	4-SPINDLE
With 1/3 H.P. Single Phase Motor 115/230 V. 60 Cy. 3450 R.P.M.				
SPINDLE SPEEDS: 12,000, 8,000 and 5,000 RPM. With Switch Rod.				
Catalog No.	14-321	14-551	14-561	14-571
Table Surface	10 3/4 x 9	10 3/4 x 19	10 3/4 x 28	10 3/4 x 37
Ship. Wt.	175	670	900	1180
With 1/3 H.P. Single Phase Motor 115/230 V. 50 Cy. 2850 R.P.M.				
SPINDLE SPEEDS: 10,000, 6,600 and 4,100 RPM. With Switch Rod.				
Catalog No.	14-322	14-552	14-562	14-572
Table Surface	10 3/4 x 9	10 3/4 x 19	10 3/4 x 28	10 3/4 x 37
Ship. Wt.	175	670	900	1180
With 1/3 H.P. 3 Phase Motor 220/440 V. 50/60 Cy. 2850/3450 R.P.M.				
SPINDLE SPEEDS: 50 Cy.: 10,000, 6,600 and 4,100 RPM. 60 Cy.: 12,000, 8,000 and 5,000 RPM. Switch and Switch Rod not furnished. No. 1320 Manual Starter and No. 1322 Mounting Parts are Recommended.				
Catalog No.	14-323	14-553	14-563	14-573
Table Surface	10 3/4 x 9	10 3/4 x 19	10 3/4 x 28	10 3/4 x 37
Ship. Wt.	175	670	900	1180
With 1/3 H.P. D.C. Motor 115 V. 3450 R.P.M.				
SPINDLE SPEEDS: 12,000, 8,000 and 5,000 RPM. With Switch Rod.				
Catalog No.	14-324	14-554	14-564	14-574
Table Surface	10 3/4 x 9	10 3/4 x 19	10 3/4 x 28	10 3/4 x 37
Ship. Wt.	175	670	900	1180
With 1/3 H.P. D.C. Motor 230 V. 3450 R.P.M.				
SPINDLE SPEEDS: 12,000, 8,000 and 5,000 RPM. With Switch Rod.				
Catalog No.	14-325	14-555	14-565	14-575
Table Surface	10 3/4 x 9	10 3/4 x 19	10 3/4 x 28	10 3/4 x 37
Ship. Wt.	175	670	900	1180

NOTE: Take drills from No. 72 to 1/4". Single Spindle Units have One-piece Table. All 2, 3 and 4 Spindle Units have Sectional Tables. Coolant Pump and Tank can be used when production type table is used with Super-Hi Drill Press.
Table Drain Hole—Single spindle model has two 3/8" Pipe Tap at rear—two, three and four spindle models have two 1/2" Pipe Tap at rear.
See page 17 for Coolant Equipment, Accessories and Dimensions.

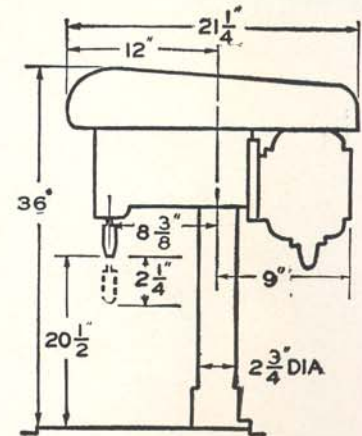
Pulley and Belt Units for Additional Speeds

- No. 14-829**—Spindle Pulley and No. 14-833 39" flat belt, for 50 and 60 cycle motors. Speeds for 60 Cy. Motor: 10,000, 7,000 and 4,500 rpm.—for 50 Cy. Motor: 8,250, 5,800 and 3,700. 1/2 lb.
- No. 14-833**—Replacement Belt. Length 39". 1/4 lb.
- No. 14-830**—Spindle Pulley and No. 14-834 39 1/2" flat belt, for 50 and 60 cycle motors. Speeds for 60 Cy. Motors: 9,000, 6,200 and 4,000 rpm.—50 Cy. Motors: 7,400, 5,100 and 3,300 rpm. 1/2 lb.
- No. 14-834**—Replacement Belt. 39 1/2". 1/4 lb.

Table Sections and Column Parts

So that you may assemble a drill press unit to meet your own requirements we make available the sectional table parts, the columns and the heads. Heads are listed above. Minimum center to center distance for column is 9".

- No. 14-836**—Table section 9"x 15 5/8" for Super-Hi—no ends. 50 lbs.
- No. 14-837**—Two end sections for Super-Hi sectional Table. 25 lbs.
- No. 14-838**—Column cover for Super-Hi. 2 lbs.
- No. 14-839**—Column 2 3/4" dia. x 30" long for Super-Hi. 12 lbs.
- No. 14-840**—One Piece Table 9"x 10 3/4". 50 lbs.
- No. 1019**—Col. Mount. Flange and Screws. 10 lbs.
- No. 1010**—Head-Support Collar for Column. 2 lbs.
- No. 1320**—3-Ph. Manual Starter for 1 1/2 H.P. A.C. Motors. 6 lbs.
- No. 1321**—3 Ph. Across-the-line Magnetic Starter with overload and under voltage protection, rating 2 H.P., 440 V. 60 Cy. only. 6 lbs.
- No. 1322**—Mounting Parts. 2 lbs.
- No. 1329**—3 Ph. Across-the-line Magnetic Starter with overload and under voltage protection, rating 2 H.P., 220 V. 60 Cy. only. 6 lbs.



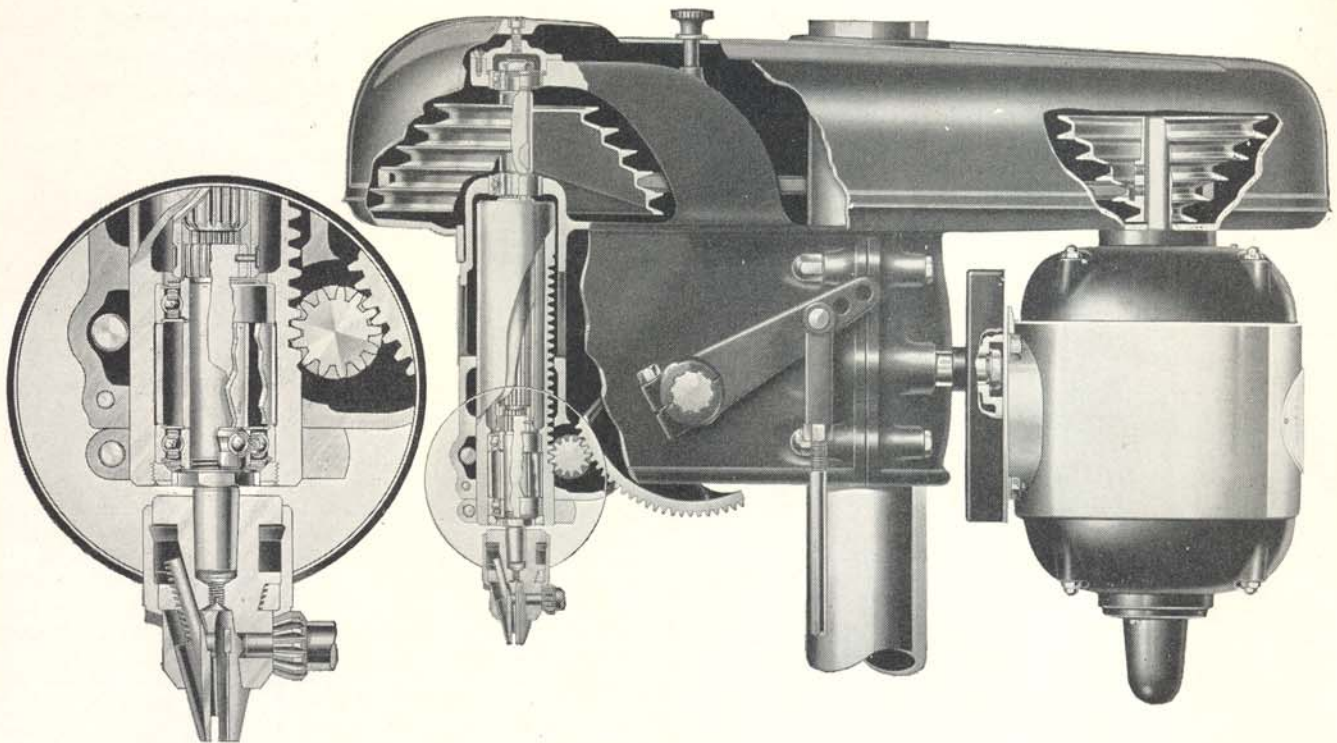
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

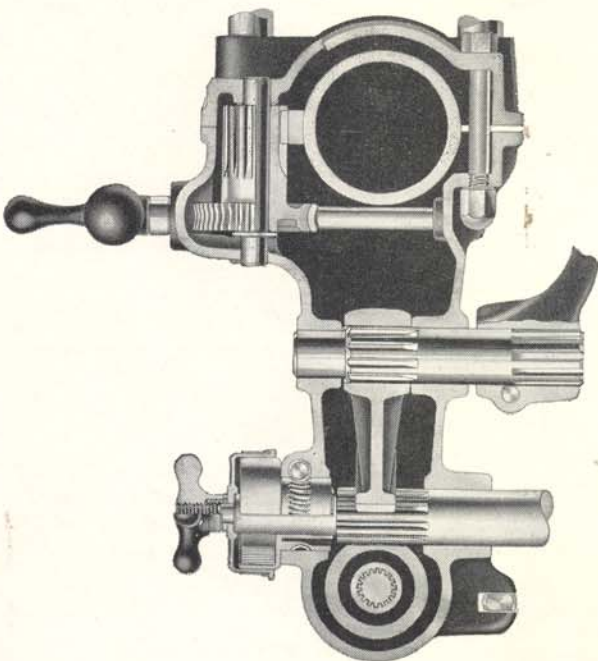
600 E. VIENNA AVE. MILWAUKEE 1, WIS.

17" Delta Drill Press Engineering And Features Make It Tops In Quality



Above: Cross-section of head and quill assembly showing the exceptionally fine design and husky construction which makes these drill presses deliver unusually long and dependable service at very low maintenance costs.

Below: Section through head, showing the worm-and-gear wind for the spindle return spring to prevent "fly-back," the splined spindle and sleeve, splined shaft, gear segment and lever for foot feed, and the worm-and-gear head raising mechanism—all evidence of care used in the design and construction of these drill presses.



ACCURATE SPINDLE

The lower end of the pulley shaft is machined to form a 16-tooth automobile type spline, fitting into a husky sleeve of large diameter, internally splined to fit the shaft. The exceptionally long bearing between sleeve and spindle practically eliminates wear and retains the original accuracy of the fit. In addition, it insures very sensitive action of the spindle.

BELT AND PULLEY GUARD

The pulley shaft does not project through the pulley but is keyed to it as shown above. This design permits the enclosure of both belt and pulleys in a streamlined, pressed steel guard of two pieces that completely encloses the moving parts. To remove the upper half of the guard for speed adjustment, it is only necessary to turn the top guard knob counter-clockwise and lift the guard straight up. A spring catch allows ample lift.

LUBRICATED-FOR-LIFE BEARINGS

The spindle pulley runs on two sealed, lubricated-for-life ball bearings which take all belt pull so that none is transmitted to the spindle. The spindle is also carried in two sealed, lubricated-for-life ball bearings which are pre-loaded and set close together near the bottom of the quill to assure maximum stiffness and to eliminate spindle whip.

SPINDLE EASILY CHANGED

The quill has a long bearing in the head and is completely enclosed. The entire lower spindle assembly may be simply and easily removed by loosening the threaded lock ring. Either the No. 2 Morse spindle or a 1/2" geared chuck may be used.

UNIQUE SPRING HOUSING

The spindle return spring housing is provided with a worm and gear wind to eliminate danger of "fly-back" when adjusting spring tension. The spring housing also has a depth gauge, another distinctive feature of these drill presses. With this gauge it is possible to set the scale at zero after the drill or tap has been brought down to the work thus enabling the operator to determine the exact amount of depth to drill or tap without resorting to arithmetic computations.

HEAD AND TABLE RAISING MECHANISM

The head and table raising mechanism rack rests on a ball thrust bearing to permit easy rotation of head or table. The compound gear assembly is made in two parts, fabricated tightly and permanently together. This design enables the use of the best metal for each part.

CLOSE-TOLERANCE TABLE SURFACES

All table surfaces are ground to very close tolerances, and both the face of the table bracket and the face of the table are milled accurately. When they are assembled together, the tables will not indicate a variance of more than .005" in a 12" diameter.

NEW STANDARD OF DRILL PRESS VALUE

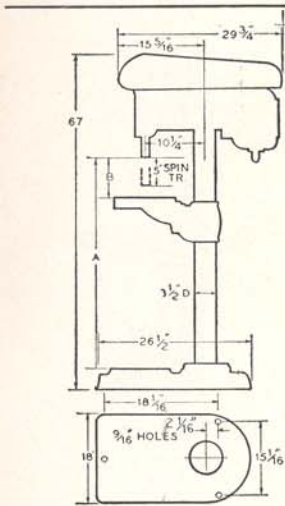
The features shown on this page are only a few of the many that make this drill press the outstanding value in the field. No matter what you pay for a 17" Drill Press, you will not find another with all these construction features, it is years ahead of other drill presses in design and engineering.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

17-inch Floor Type, Single Spindle Drill Presses



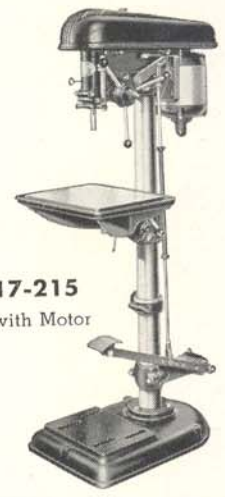
No. 17-205
Shown with Motor



No. 17-210
Shown with Motor



No. 17-215
Shown with Motor



Type	Standard Tilting Table		Production Table		Prod. Table and Foot Feed	
	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE						
Machine No.	17-205	17-206	17-210	17-211	17-215	17-216
Table Working Surface	11 1/8" x 12"	11 1/8" x 12"	12 1/2" x 17"	12 1/2" x 17"	12 1/2" x 17"	12 1/2" x 17"
Spindle to Table (B) Max.	33"	33"	31 1/8"	31 1/8"	27 7/8"	27 7/8"
Spindle to Base (A) Max.	43 3/4"	43 3/4"	43 3/4"	43 3/4"	43 3/4"	43 3/4"
Ship. Wt. Lbs.	310	310	370	370	404	404
Table Drain Hole	None	None	One 3/4" Pipe Tap at rear See Page 17		One 3/4" Pipe Tap at rear See Page 17	
Type of Coolant Pump Required	None	None				
WITH 1/2 INCH JACOBS CHUCK and SPINDLE						
Machine No.	17-207	17-208	17-212	17-213	17-217	17-218
Table Working Surface	11 1/8" x 12"	11 1/8" x 12"	12 1/2" x 17"	12 1/2" x 17"	12 1/2" x 17"	12 1/2" x 17"
Spindle Chuck to Table (B) Max.	33 1/2"	33 1/2"	31 7/8"	31 7/8"	28 3/8"	28 3/8"
Spindle Chuck to Base (A) Max.	44 1/4"	44 1/4"	44 1/4"	44 1/4"	44 1/4"	44 1/4"
Ship. Wt. Lbs.	310	310	370	370	404	404
Table Drain Hole	None	None	One 3/4" Pipe Tap at rear See Page 17		One 3/4" Pipe Tap at rear See Page 17	
Type of Coolant Pump Required	None	None				

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: 3/4" 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 Jacobs spindle models where straight shank drills 0"-1/2" 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 13. For individual parts for special setups and for accessories, see page 13.

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 64 for Motors and Switch Parts.



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"-5/8" Capacity. Weight, 16 lbs.

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

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 6 1/2" thick, capacity from ends of hooked rods to fence 2 1/2" thick. Mortising bit is held in standard Jacobs chuck.

No. 1381—Mortising Attachment. 15 lbs.



Hollow Chisels			
No.	Size	Depth	Wt. lb.
504	1/4"	1 7/8"	1/4
505	3/8"	1 7/8"	1/2
506	3/8"	2 3/4"	1/2
508	1/2"	3 1/4"	5/8

Mort. Bits		
No.	Size	Wt. lb.
514	1/4"	3/8
515	3/8"	1/2
516	3/8"	1/2
518	1/2"	1/2

Machine Spur Bits			
6 1/4" long, 1/2" shanks			
No.	Size	Wt. lb.	
804	1/4"	5/8	
805	3/8"	5/8	
806	3/8"	5/8	
807	1/2"	5/8	
808	1/2"	5/8	
809	5/8"	5/8	
810	5/8"	5/8	
812	3/4"	5/8	
818	set of 8 bits		3

Plug Cutters			
Shank, 1/2"			
No.	Size	Depth	Wt. lb.
814	3/8"	2 1/8"	3/8
815	1/2"	2 1/8"	3/8
816	5/8"	2 1/8"	3/8
817	3/4"	2 1/8"	1/2
819	1"	2 1/8"	1/2
822	set of 5 cutters		2 1/2

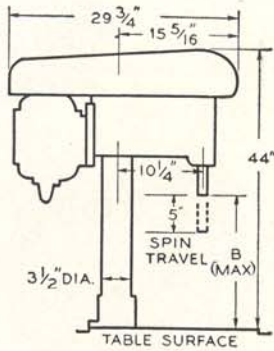
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

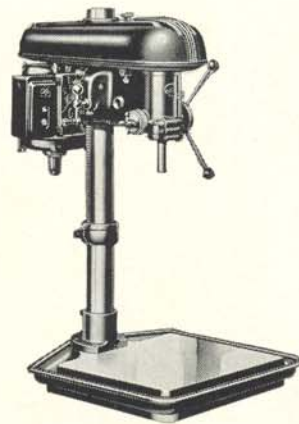
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

17-inch 1, 2 and 4-Spindle Drill Presses. One Piece Tables



Single Spindle Machines are Bench Type only.
Two and Four-Spindle Floor Type only. Working surface is 32" from floor.



No. 17-305
Shown with Motor



No. 17-410
Shown with Motors

Type	1 Spin. Bench Type		2 Spin. Floor Type		4 Spin. Floor Type	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE						
Machine No.	17-305	17-306	17-405	17-406	17-410	17-411
Table Working Surface	16" x 18"	16" x 18"	17 1/2" x 36"	17 1/2" x 36"	17 1/2" x 77"	17 1/2" x 77"
Spin. to Table (B) Max.	26"	26"	26"	26"	26"	26"
Spindle Spacing			18"	18"	18"	18"
Ship. Wt. Lbs.	340	340	723	723	1578	1578
Table Drain Hole	Two 3/4" Pipe Tap at rear		One 3/4" Pipe Tap at rear		Two 1/2" Pipe Tap at rear	
Type of Coolant Pump Required	See Page 17		See Page 17		See Page 17	
WITH 1/2 INCH JACOBS CHUCK SPINDLE						
Machine No.	17-307	17-308	17-407	17-408	17-412	17-413
Table Working Surface	16" x 18"	16" x 18"	17 1/2" x 36"	17 1/2" x 36"	17 1/2" x 77"	17 1/2" x 77"
Spin. to Table (B) Max.	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"
Spindle Spacing			18"	18"	18"	18"
Ship. Wt. Lbs.	340	340	723	723	1578	1578
Table Drain Hole	Two 3/4" Pipe Tap at rear		One 3/4" Pipe Tap at rear		Two 1/2" Pipe Tap at rear	
Type of Coolant Pump Required	See Page 17		See Page 17		See Page 17	

MOTORS, SWITCHES, COOLANT PUMP, TANK AND PIPING NOT INCLUDED WITH MACHINE. ORDER SEPARATELY.

These 17-inch drill presses are all furnished with a one-piece table in sizes as shown by the dimensional drawing in the table above. The single spindle machines are available as bench types only—the two and four spindle machines are floor types and are furnished with a set of cast iron legs as illustrated. With these legs, the working surface of the two and four spindle machines is 32" from the floor. The heavy table has a 1/2" oil trough all around.

Capacity: 3/4" in Cast Iron. Quill has 5-inch stroke or travel.
Machines Include: Head raising mechanisms. Streamlined belt guard. Built-in depth gage. Depth scale on spindle return spring housing.
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 Jacobs spindle machines where straight shank drills 0" to 1/2" 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 models with No. 2 Morse taper spindle and use the No. 968 chuck listed on page 13. For individual parts for special setups and for accessories, see page 13.

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 64 for Motors and Starters.



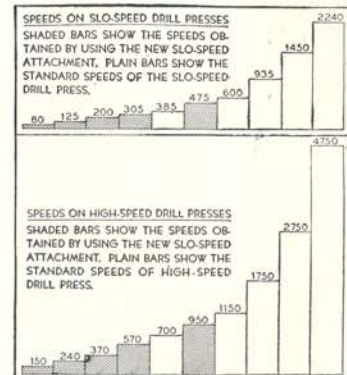
EFFICIENT OPERATING SLO-SPEED ATTACHMENT

To meet the requirement of extra slow operation of the 17" Drill Press for spot facing, reaming, counterboring, core drilling and drilling of hardened parts; 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)

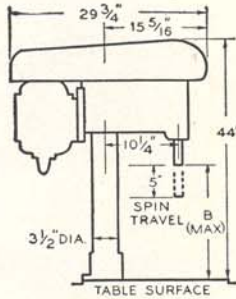


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

17-inch Floor Type 3, 4, 5, 6 and 8-Spindle Drill Presses. Sectional Tables



SPECIFICATIONS

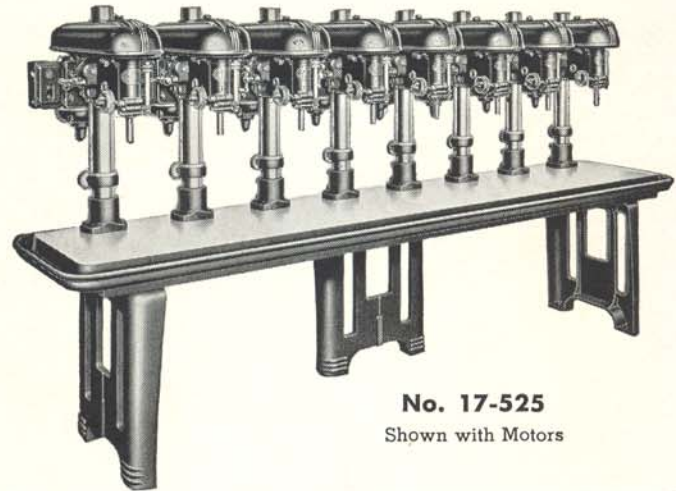
Capacity: 3/4" in cast iron. Quill has 5" stroke or travel. Minimum center to center distance 15". Tables have 1 1/2" trough. Working surface 32" from floor. With head raising mechanism, belt guard, built-in depth gage and depth scale on spindle return spring housing.

Speeds: High Speed Model—700, 1150, 1750, 2750 and 4250 RPM.

Slo-Speed Model—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.



No. 17-525
Shown with Motors

Type	3 Spindle		4 Spindle		5 Spindle		6 Spindle		8 Spindle	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE										
Machine No.	17-505	17-506	17-510	17-511	17-515	17-516	17-520	17-521	17-525	17-526
Table Working Surface	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 125"	17 1/2" x 125"
Spin. to Table (B) Max.	26"	26"	26"	26"	26"	26"	26"	26"	26"	26"
Spindle Spacing	18"	18"	15"	15"	18"	18"	15"	15"	15"	15"
Ship. Wt. Lbs.	1570	1570	1750	1750	2370	2370	2540	2540	3250	3250
Table Drain Hole	Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends	
Type of Cool. Pump Req.	See Page 17		See Page 17		See Page 17		See Page 17		See Page 17	
WITH 1/2 INCH JACOBS CHUCK SPINDLE										
Machine No.	17-507	17-508	17-512	17-513	17-517	17-518	17-522	17-523	17-527	17-528
Table Working Surface	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 125"	17 1/2" x 125"
Spin. to Table (B) Max.	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"	26 1/2"
Spindle Spacing	18"	18"	15"	15"	18"	18"	15"	15"	15"	15"
Ship. Wt. Lbs.	1570	1570	1750	1750	2370	2370	2540	2540	3250	3250
Table Drain Hole	Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends		Two 3/4" Pipe Taps at ends	
Type of Cool. Pump Req.	See Page 17		See Page 17		See Page 17		See Page 17		See Page 17	

MOTORS, SWITCHES, COOLANT PUMP, TANK AND PIPING NOT INCLUDED WITH MACHINE. ORDER SEPARATELY.

The 17-inch drill presses listed here are all furnished with sectional tables. These tables are made up of center sections to which end sections are bolted. This arrangement allows for a wide variety of combinations—and although we show here the most popular production type of machines, many other units are available. The sectional table allows a drill press to be made of any desired length with spindle spaced at any centers desired.

Tables of three or more sections have three cast iron legs, other machines have two legs.

Order Jacobs spindle machines where straight shank drills 0"-1/2" 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 the No. 968 chuck listed below.

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 64 for Motors and Switches.

SPECIAL SETUPS AT LITTLE COST WITH STANDARD 17" DRILL PRESS PARTS

- *No. 17-200—(old No. 1378) 17" Slo-Speed Drill Press Head with No. 2 Morse Taper Spindle, No. 520 Belt and No. 1311 Motor Pulley. 95 lbs.
- *No. 17-201—(old No. 1378-H) 17" High Speed Drill Press Head with No. 2 Morse Taper Spindle, No. 501 Belt and No. 1312 Motor Pulley. 95 lbs.
- *No. 17-202—(old No. 1379) 17" Slo-Speed Drill Press Head with 1/2" Jacobs Chuck Spindle, No. 520 Belt and No. 1311 Motor Pulley. 95 lbs.
- *No. 17-203—(old No. 1379-H) 17" High Speed Drill Press Head with 1/2" Jacobs Chuck Spindle, No. 501 Belt and No. 1312 Motor Pulley. 95 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.
- No. 501—V-Belt for 17" High Speed Drill Press. 1/2 lb.
- No. 520—V-Belt for 17" Slo-Speed Drill Press. 1/2 lb.
- 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. 1366—Mounting Flange and Screws for 17" Drill Press Column. (Not for floor type). 17 lbs.
- No. 1367—Column for Floor Type 17" Drill Press. 60" long and 3 1/2" diameter. 34 lbs.

*Motor Pulley comes with 3/4" bore unless otherwise specified.

- No. 1368—Column for Bench Type 17" Drill Press. 38 1/2" long and 3 1/2" diameter. 22 lbs.
- No. 1372—Production Table to fit Standard Bracket on Floor Type 17" Drill Press. 65 lbs.
- No. 1513—2 Spindle One Piece Table. Working Surface of 17 1/2" x 36" for 17" Drill Press Heads. 320 lbs.
- No. 1515—4 Spindle One Piece Table. Working Surface of 17 1/2" x 77" for 17" Drill Press Heads. 970 lbs.
- No. 1514—Single Spindle One Piece Table. Working Surface of 16" x 18" for 17" Drill Press Head. (This table cannot be mounted on the No. 1399 Cast Iron Legs.) 120 lbs.
- No. 1399—Cast Iron Legs (one pair) for mounting One Piece Tables Nos. 1513 and 1515 and all other Multiple Spindle Drill Presses. 163 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. 1371—Foot Feed for Floor Type Single Spindle 17" Drill Press. 34 lbs.
- No. 968—1/2" Geared Jacobs 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. 2 1/2 lbs.

(See page 7 for Sectional Tables, End Pieces and Legs.)

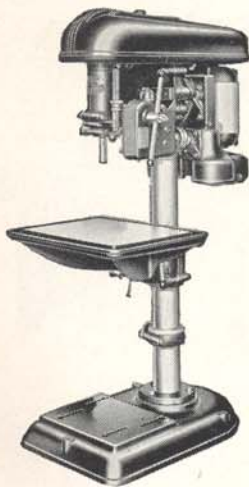
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

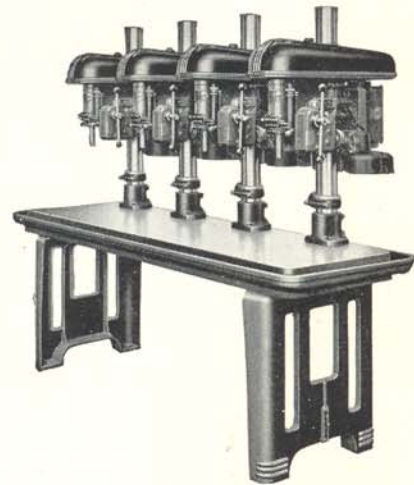
17-inch 1-, 2-, and 4-Spindle Power Feed Drill Presses. One Piece Tables



No. 17-260
Shown with Motor



No. 17-355
Shown with Motor
Available Only as a Bench Type Machine



No. 17-460
Shown with Motors

Type	Floor Type Single Spindle		Bench Type Single Spindle		Floor Type Two Spindle		Floor Type Four Spindle	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE								
Machine No.	17-260	17-261	17-355	17-356	17-455	17-456	17-460	17-461
Table Working Surface.	12 1/2" x 17"	12 1/2" x 17"	16" x 18"	16" x 18"	17 1/2" x 36"	17 1/2" x 36"	17 1/2" x 77"	17 1/2" x 77"
Spin. to Base Max.	44"	44"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"
Spin. to Table Max.	32"	32"	23 3/8"	23 3/8"	18"	18"	18"	18"
Spindle Spacing	Table	Table	Head	Head	Head	Head	Head	Head
Raising Mechanism	418	418	390	390	843	843	1750	1750
Ship. Wt. Lbs.	One 3/4" Pipe Tap at rear See Page 17		Two 3/4" Pipe Tap at rear See Page 17		One 3/4" Pipe Tap at rear See Page 17		Two 1/2" Pipe Tap at rear See Page 17	
Table Drain Hole	WITH 1/2 INCH JACOBS CHUCK SPINDLE							
Type of Cool. Pump Req.	17-262	17-263	17-357	17-358	17-457	17-458	17-462	17-463
Machine No.	12 1/2" x 17"	12 1/2" x 17"	16" x 18"	16" x 18"	17 1/2" x 36"	17 1/2" x 36"	17 1/2" x 77"	17 1/2" x 77"
Table Working Surface.	44 1/2"	44 1/2"	23 1/8"	23 1/8"	23 1/8"	23 1/8"	23 1/8"	23 1/8"
Spin. to Base Max.	32"	32"	23 1/8"	23 1/8"	18"	18"	18"	18"
Spin. to Table Max.	Table	Table	Head	Head	Head	Head	Head	Head
Spindle Spacing	418	418	440	440	843	843	1750	1750
Raising Mechanism	One 3/4" Pipe Tap at rear See Page 17		Two 3/4" Pipe Tap at rear See Page 17		One 3/4" Pipe Tap at rear See Page 17		Two 1/2" Pipe Tap at rear See Page 17	
Ship. Wt. Lbs.								
Table Drain Hole								
Type of Cool. Pump Req.								

MOTORS, SWITCHES, COOLANT PUMP, TANK AND PIPING NOT INCLUDED WITH MACHINE. ORDER SEPARATELY.

These power feed 17 inch drill presses are of advanced design, incorporating all good features of machines of this type. They can be both manual and power operated. The operator can bring the drill down to the work in one swift motion by hand, and with a flip of the power lever engage the power feed. Upon completion of the operation the drill automatically returns. There are eight rates of feed for each of the 5-spindle speeds—see page 15.

Furnished as single spindle floor type, single spindle bench type and two and four spindle floor types which have cast iron legs. Tables have 1 1/2" oil trough all around, working surface 32" from floor. Capacity: 3/4" in cast iron.

Machines include: Streamlined belt guard. Built-in depth gauge. Depth scale on spindle return spring housing. Quill has 4 1/2 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.

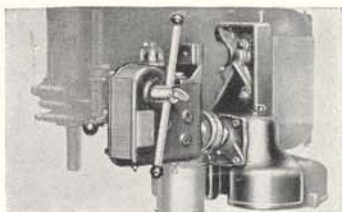
Slo-speed models include No. 520 V-belt and No. 1311 motor pulley.

Order Jacobs spindle machines where straight shank drills 0"-1/2" 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 13. The single spindle floor type drill press has a table raising mechanism. All other machines are furnished with head raising mechanisms.

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

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 64 for Motors and Switches.



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 is 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 17" drill presses only. 84 lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

17-inch Floor Type 3-, 4-, 5-, 6- and 8-Spindle Power Feed Drill Presses

Sectional Tables

SLOW SPEED DRILL PRESS	
WITH SMALL PULLEY ON LOWER MOTOR SHAFT	
R.P.M. SPINDLE	FEED PER REV. OF SPINDLE
2240	.0027 | .0020 | .0013 | .0010
1450	.0041 | .0030 | .0020 | .0016
935	.0064 | .0044 | .0031 | .0024
600	.0100 | .0073 | .0048 | .0038
385	.0156 | .0114 | .0075 | .0060
WITH SMALL PULLEY ON WORM SHAFT	
R.P.M. SPINDLE	FEED PER REV. OF SPINDLE
2240	.0025 | .0034 | .0046 | .0061
1450	.0038 | .0052 | .0072 | .0093
935	.0059 | .0081 | .0104 | .0135
600	.0092 | .0126 | .0176 | .0225
385	.0146 | .0197 | .0270 | .0350
HIGH-SPEED DRILL PRESS	
WITH SMALL PULLEY ON LOWER MOTOR SHAFT	
R.P.M. SPINDLE	FEED PER REV. OF SPINDLE
4250	.0013 | .0009 | .0006 | .0005
2750	.0022 | .0016 | .0010 | .0008
1750	.0034 | .0025 | .0016 | .0011
1150	.0040 | .0038 | .0019 | .0015
700	.0086 | .0063 | .0041 | .0033
WITH SMALL PULLEY ON WORM SHAFT	
R.P.M. SPINDLE	FEED PER REV. OF SPINDLE
4250	.0012 | .0016 | .0022 | .0028
2750	.0020 | .0027 | .0038 | .0049
1750	.0031 | .0043 | .0059 | .0077
1150	.0037 | .0051 | .0069 | .0090
700	.0079 | .0108 | .0148 | .0195

FEED CHART

Shows rate of feed per revolution of spindle on both slow and high-speed models. There are eight rates of feed for each spindle speed, which means that the correct rate of feed for your drilling operation is always available. Two cast iron 4-step cone pulleys and a special belt tension release built into guard make rate of feed changes quick and safe.



No. 17-570
Shown with Motors

Type	3 Spindle		4 Spindle		5 Spindle		6 Spindle		8 Spindle	
Model	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed	Slo-Speed	High Speed
WITH No. 2 MORSE TAPER SPINDLE										
Machine No.	17-555	17-556	17-560	17-561	17-565	17-566	17-570	17-571	17-575	17-576
Table Working Surface Spin. to Table Max.	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 125"	17 1/2" x 125"	17 1/2" x 155"	17 1/2" x 155"
Spindle Spacing	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"
Ship. Wt. Lbs.	18"	18"	21"	21"	18"	18"	20"	20"	18"	18"
Table Drain Hole	1720	1720	1950	1950	2620	2620	2840	2840	3650	3650
Type of Cool. Pump Req.	Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17	
WITH 1/2 INCH JACOBS CHUCK SPINDLE										
Machine No.	17-557	17-558	17-562	17-563	17-567	17-568	17-572	17-573	17-577	17-578
Table Working Surface Spin. to Table Max.	17 1/2" x 65"	17 1/2" x 65"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 95"	17 1/2" x 125"	17 1/2" x 125"	17 1/2" x 155"	17 1/2" x 155"
Spindle Spacing	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"	23 3/8"
Ship. Wt. Lbs.	18"	18"	21"	21"	18"	18"	20"	20"	18"	18"
Table Drain Hole	1720	1720	1950	1950	2620	2620	2840	2840	3650	3650
Type of Cool. Pump Req.	Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17		Two 3/4" Pipe Tap at ends See Page 17	

MOTORS, SWITCHES, COOLANT PUMP, TANK AND PIPING NOT INCLUDED WITH MACHINE. ORDER SEPARATELY.

The general specifications of these Power Feed Drill Presses are shown in the first paragraph on the preceding page. The machines listed here are all floor type machines and have sectional tables. These tables are made up of center sections to which end sections are bolted. This arrangement allows for a wide variety of combinations—and although we show here the most popular production types of machines, many other units are available. The sections have a 1 1/2" trough and the end sections are tapped for a drain. Tables of three or more sections have three cast iron legs, other machines have two legs. Working surface is 32" from floor. Capacity: 3/4" in cast iron.

Machines include: Head raising mechanism. Streamlined belt guard. Built-in depth gage. Depth scale on spindle return spring housing. Quill has 4 1/2 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 Jacobs spindle machines where straight shank drills 0"-1/2" 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 the No. 968 chuck listed on page 13.

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

For 3 phase motors use No. 1320 3 phase 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 64 for Motors and Switches.

Power Feed Heads Used For Special Applications

*No. 17-220—(old No. P-1378) 17" Slo-Speed Power Feed Drill Press Head with No. 2 Morse Taper Spindle, 520 Belt and 1311 Motor Pulley, 175 lbs.

*No. 17-221—(old No. P-1378-H) 17" High Speed Power Feed Drill Press Head with No. 2 Morse Taper Spindle, No. 501 Belt and No. 1312 Motor Pulley, 175 lbs.

*No. 17-222—(old No. P-1379) 17" Slo-Speed Power Feed Drill Press Head with 1/2" Jacobs Chuck Spindle, 520 Belt and 1311 Motor Pulley, 175 lbs.

*No. 17-223—(old No. P-1379-H) 17" High Speed Power Feed Drill Press Head with 1/2" Jacobs Chuck Spindle, No. 501 Belt and No. 1312 Motor Pulley, 175 lbs.

No. 17-857—Power Feed Unit, 84 lbs.

No. 49-100—V-Belt for Power Feed. Cir. In. 26 5/8"; Out. 28 1/4". For use with NEMA frame motors up to 16-13/16" over-all length. 1/2 lb.

No. 49-103—V-Belt for Power Feed. Cir. In. 26 5/8"; Out. 28". For use with Delta Motors. 1/2 lb.

*Motor Pulley comes with 3/4" bore unless otherwise specified.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

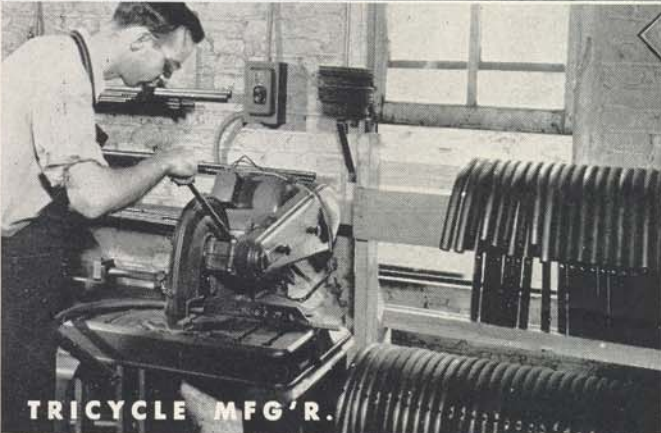
There Is No End To The Number Of Jobs Delta Machines Will Do



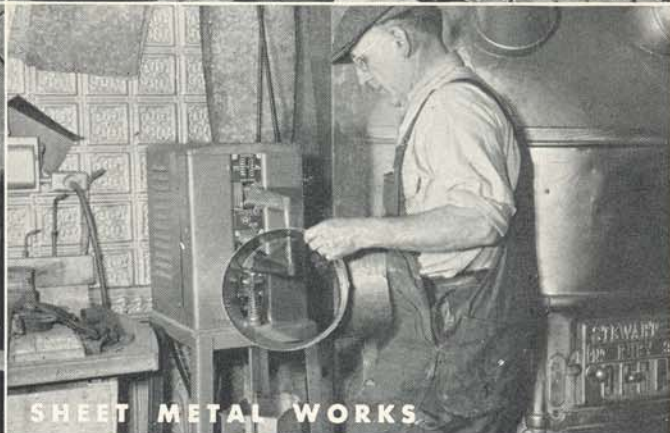
TOOL AND DIE CO.



MACHINE TOOL CO.



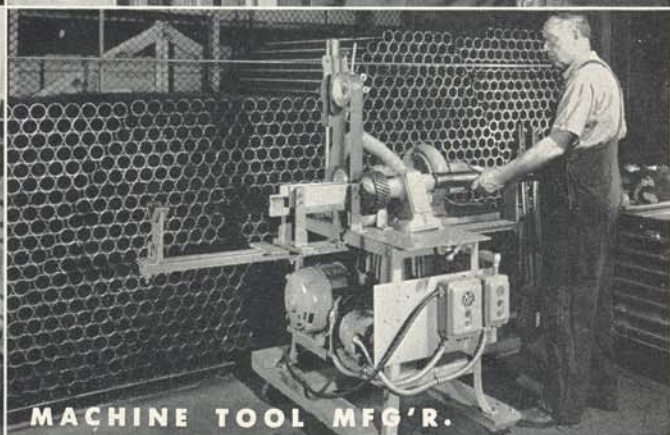
TRICYCLE MFG'R.



SHEET METAL WORKS



COUNTING MACHINE MFG'R.



MACHINE TOOL MFG'R.



STEEL CASTINGS CO.



SPECIALTY MFG'R.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Cut Costs With Delta-Milwaukee Coolant Equipment



You Get More With The Delta-Milwaukee Coolant Pump and Tank

1. Exceptionally low cost—compare it with other makes of similar capacity.
2. Highly adaptable—flat machined flange permits use on most wet machine tools.
3. Wide capacity—(see chart of coolant feeds).
4. Motor fully enclosed—not affected by moisture or caustic solutions.
5. Double-sealed, lubricated-for-life ball bearings, mean complete bearing protection and long life.
6. Adjustable—can be shut down to mere trickle without damage—coolant is applied where you want it at feed you need.

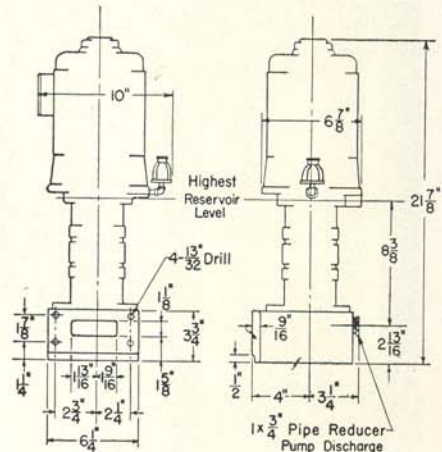
7. ¼ H.P. Motor—provides adequate power for most needs.
8. Portable—can be installed in minimum time—easily moved from one machine to another.
9. Drilled and tapped for standard pipe fittings.
10. Six bladed impeller connected directly to motor shaft.
11. Large tank capacity—16 gallons—ample for most needs.
12. Settling basin and wire mesh filter screen keeps coolant free of chips.
13. Single unit fits needs of single spindle drill press or multiple spindle unit up to 8 spindles.

CATALOG LISTING

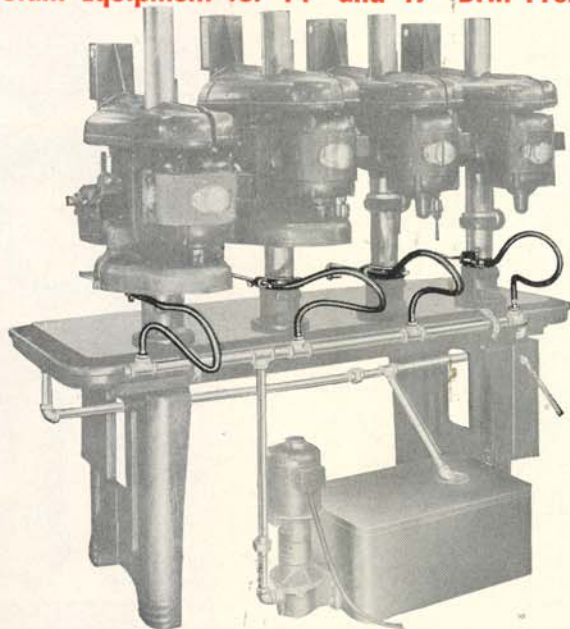
- No. 49-610**—Coolant Pump complete with single phase, ¼ H.P. 60 cy., 115 V., 1725 R.P.M. motor, 65 lbs.
- *No. 49-611**—Coolant Pump complete with single phase, ¼ H.P. 60 cy., 230 V., 1725 R.P.M. motor, 65 lbs.
- *No. 49-612**—Coolant Pump complete with single phase, ¼ H.P. 50 cy., 115 V., 1425 R.P.M. motor, 65 lbs.
- *No. 49-613**—Coolant Pump complete with single phase, ¼ H.P. 50 cy., 230 V., 1425 R.P.M. motor, 65 lbs.
- No. 49-614**—Coolant Pump complete with 3-phase, ¼ H.P. 50/60 cy., 220/440 V., 1425/1725 R.P.M. motor, 65 lbs.
- *No. 49-615**—Coolant Pump complete with D.C., ¼ H.P. 115 V., 1725 R.P.M. motor, 65 lbs.
- *No. 49-616**—Coolant Pump complete with D.C., ¼ H.P. 230 V., 1725 R.P.M. motor, 65 lbs.
- No. 49-618**—Tank, 16 gal. capacity, required with any of above pumps, 38 lbs.
- No. 49-312**—3-Wire Cord with Toggle Switch, Clamp and Plug, ¾ lb.
- No. 1320**—3-Phase Manual Starter, 6 lbs.
- *Not Carried in Stock. Delivery Information Upon Application.**

Coolant Flow in Gal. Per Min. with a 1725 R.P.M. Motor at 70° F. (1425 R.P.M. Motor About 1/6 Less)				
Head in Feet	Pipe Dia.	COOLANT		
		Water and Sal-Soda Solution	Lard Oil	SAE 20 Machine Oil
Flow in Gal. Per Min.				
0	¾"	20	12	10
	1"	32	20	20
5	¾"	14	8	6
	1"	27	15	15
10	¾"	7	—	—
	1"	17	—	—

14 ft. Maximum Lift with water. Discharge for water and Sal-Soda solution applies to all solutions of similar viscosity and density. Higher viscosity and density less flow.



Coolant Equipment for 14" and 17" Drill Presses



The Delta-Milwaukee coolant equipment gives you many advantages. The pump is a centrifugal type pump and is mounted directly to the tank with a flat machined flange. It can be used on most wet machine tools in your plant. The tank has a 16 gal. capacity and is 25 5/8" x 15 5/8" x 11" high.

No. 17-802—One only, nozzle, valve, column mounting clamp and flexible hose assembly for providing coolant feed and connection to piping.

Note: Coolant piping and table connections not furnished, must be secured from your local dealer.



Coolant Pan, Pump and Tank for Cut-Off Machine

"Wet Cutting" is sometimes the proper method for doing an efficient job, and we therefore have made available attachments for the Cut-Off Machine which change it into a wet cutting unit.

A heavy cast-iron pan which fits between the machine and the cast-iron legs and the pump and tank assembly which rests on the floor below the machine.

With the combination of these units (which must be ordered separately) you can change any of your standard Delta Cut-Off Machines into wet units, easily and at low cost.

Coolant Pan for Cut-Off Machine

The coolant pan assembly can be used with either the Abrasive or Non-Ferrous Cut-Off Machines for wet-cutting.

No. 20-840—Coolant Pan Attachment complete with spray nozzle, splash control accessories, deflector plate and bracket. Piping, control valve and reducer from ¾" to ½" must be purchased separately, 140 lbs.

The No. 20-840 Coolant Pan Attachment is complete and ready to install on all Cut-Off Machines carrying the serial number 28-3700 or higher, which have the improved wheel guard Catalog No. 1608 to minimize the splash encountered in wet cutting, and the labyrinth type cartridge assembly COS-382-S to prevent coolant from washing out the bearing lubricant. Earlier models were designed for dry cutting only, and additional changes are necessary to adapt them for wet cutting, as follows:

Parts For Conversion of Cut-Off Machines with a serial number below 28-3700.

No. 1608—Guard Assembly for Wet or Dry Cutting.

No. COS-382-S—Cartridge Assembly for Wet or Dry Cutting.

No. COS-383-R—Motor Bracket Assembly. Includes COS-382-S Cartridge.

Serial Numbers 19-5484 to 28-3699 inclusive:

For these machines the cartridge COS-382-S and guard Catalog No. 1608 should be purchased and installed in place of the original ones.

Serial Numbers below 19-5484:

These machines can be changed over only by installing the guard Catalog No. 1608 and the complete motor bracket assembly COS-383-R which includes the cartridge COS-382-S.

(For Prices See Attached Price List)

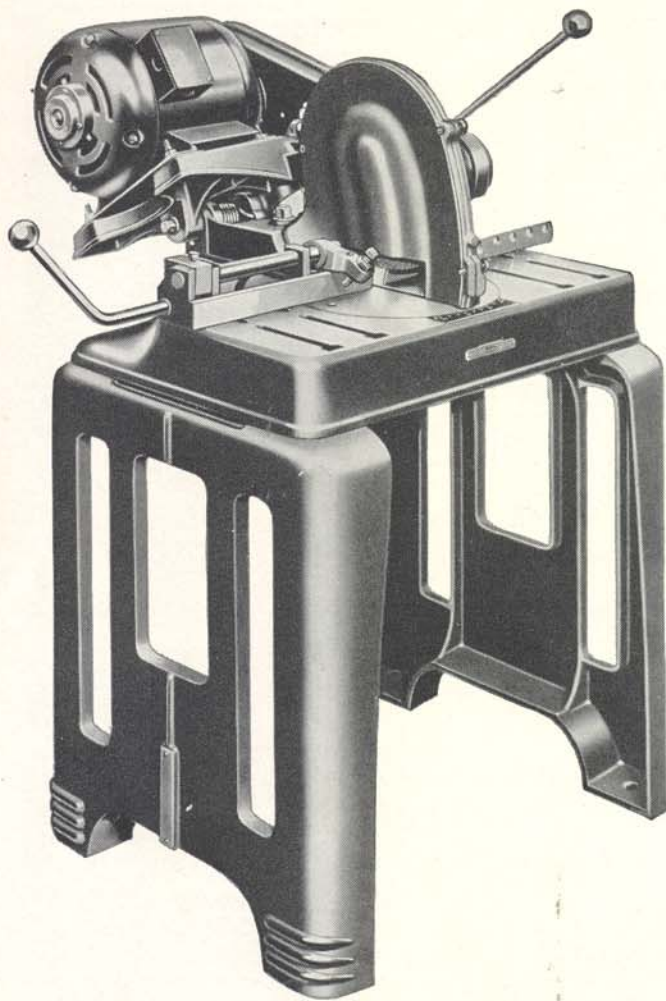


DELTA POWER TOOL DIVISION

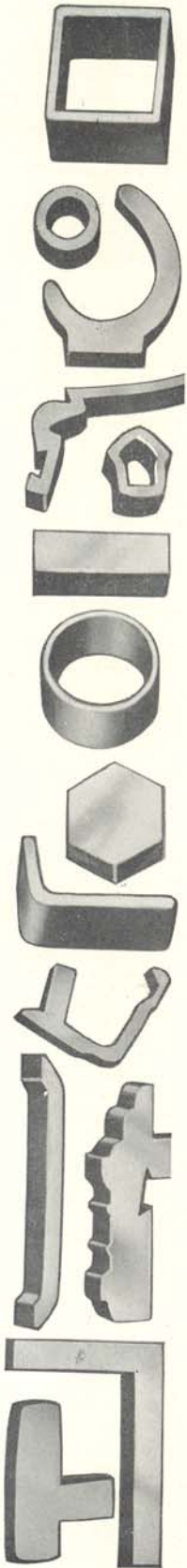
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Abrasive Cut-Off Machine Offers Accuracy, Convenience and Long Life



Cut-Off Many Shapes and Many Materials



The Abrasive Cut-Off Machine uses an abrasive wheel for cutting steel. An exceptionally smooth cut is obtained with little burr if proper cutting wheel is used. In many cases a second operation is unnecessary, thus reducing costs and speeding up the operation.

Practically every kind and type of shop can use this cut-off machine to cut costs and increase production. It can be used for hundreds of operations (cutting old drills, mouldings, pipe and conduit, tool steel, tubing, rods, wire rope, etc.), operations now being done on costlier machines or done by hand with the resultant high cost.

There is no end to the applications of this Abrasive Cut-Off Machine, new uses, new applications present themselves every day—it actually creates jobs for itself, saving time—saving labor in the plants where it is used. It is sturdy—cuts clean and accurately—is powerful—has rugged construction with heavy castings throughout—widely spaced Timken roller pivot bearings and double sealed arbor bearings which require no lubrication—balanced steel pulleys—powerful 3-belt, texpoe drive—accurately machined—adjustable fence.

Exceptionally low cost and low maintenance costs—coupled with the best engineering design and construction make this an outstanding machine.

Capacity and Recommendations

HIGH SPEED STEEL: High speed steel bars and sections up to the equivalent of 3/4" solid round stock can be cut with an abrasive wheel.

COLD ROLLED STEEL: Cold rolled steel bars and sections up to the equivalent of 3/4" solid round stock can be accurately and quickly cut using an abrasive wheel.

STEEL TUBING: This material up to 1 1/4" in diameter and up to a wall thickness of approximately 5/32" can be cut fast and clean using an abrasive wheel.

Specifications

Spindle Speed 4,000 RPM
 Surface Speed 10,500 FPM
 Wheel Diameter 10"
 Arbor Hole 5/8"
 Wheel Collar Sizes 3 1/2" and 5" dia.
 Table Angle or Adjustment Travel, 45° left, 45° right
 Working Height of table 32"
 Working Height of table with coolant pan 36"
 Size of machine, approximately
 . . . 30" wide, 35" deep, 47" high, 23" high without legs

Many Wood Working Applications

The Cut-Off Machine is ideally suited for cutting wood to exact lengths. The ease of operation, the convenience with which the material can be fed into the machine and the accurate method of adjusting for both angle and straight cross cutting makes the Cut-Off Machine a high production unit for the cutting of wood.

A wood cutting circular saw blade of 10" diameter is used and a swing guard is employed which moves with the blade yet covers it completely giving perfect protection. A 6" motor pulley is used which gives the proper speed. A 1 or 1 1/2 H.P. motor will supply sufficient power for wood cutting. 2"x6" capacity with 10" blade.

No. 1609—Swing Guard for Wood Saw Blades... 13 lbs.
No. 1605—6" Motor Pulley, 3/4" bore 5 lbs.
No. 294—V-Belt (3 required) 1/2 lb.

WOOD CUTTING BLADES

No. 1018—10" Dia. Wood Cutting Cross-Cut Blade 2 lbs.
No. 1015—10" Dia. Combination Saw Blade 2 lbs.
No. 1016—10" Dia. Hollow-Ground Saw Blade 2 lbs.

Motors Recommended for Wood Cutting Applications:
 Heavy Duty—87-120; Light and Medium Duty—84-910, 86-920, 88-910.

For complete motor and switch listing see page 64.

(For Prices See Attached Price List)

Catalog Listing of Abrasive Cut-off Machine

No. 20-210 Abrasive Cut-Off Machine as illustrated for 60 cy. or D.C. service, complete with No. 1608 Wheel Guard, Belt Guard, Chip Guard, Flanges and Fence with Stop, No. 1399 Pair of Cast Iron Legs, No. 1610 Universal Clamp Fixture, three No. 294 V-belts and No. 1606 Motor Pulley. Without Abrasive Wheel, motor or switch. 570 lbs.

No. 20-211 Abrasive Cut-Off Machine for 50 or 25 cycle service complete with No. 1608 Wheel Guard, Belt Guard, Chip Guard, Flanges and Fence with Stop, No. 1399 Pair of Cast Iron Legs, No. 1610 Universal Clamp Fixture, three No. 501 V-belts and No. 1604 Motor Pulley. Without Abrasive Wheel, Motor or Switch. 570 lbs.

No. 294—V-belt (3 required) for 6" motor pulley. 1/2 lb.

No. 501—V-belt (3 required) for 7" motor pulley. 1/2 lb.

No. 1399—Cast Iron Legs (pair). 163 lbs.

No. 1600—Bench Type Cut-off Machine with No. 1608 wheel guard, belt guard, chip guard, flanges, and fence with stop. 235 lbs.

No. 1604—7" Motor Pulley, 1" bore for 25 and 50 cycle, 3 H.P. NEMA Motors. 9 lbs.

No. 1606—6" Motor Pulley, 1" bore for 60 cycle or D.C., 3 H.P. Motors. 5 lbs.

No. 1610—Universal Clamp Fixture. 18 lbs.

No. 1615—Abrasive Wheel for Soft and Hard Steel and Hard Brass; best general purpose wheel, 3/32"x10" with 5/8" hole. 1/2 lb.

No. 1616—Abrasive Wheel same as No. 1615 but only 1/16" thick, for use where less burr is permissible. 1/16"x10" with 5/8" hole. 1/2 lb.

No. 1617—Abrasive Wheel for all Steels and Hard Bronze where maximum life of wheel is required, and burr is permissible. 3/32"x10" with 5/8" hole. 1/2 lb.

No. 1619—Abrasive Wheel for thin Steel Tubing and Molding where little or no burr is permissible. 1/16"x10" with 5/8" hole. 1/2 lb.

No. 20-815—10" diameter x 1/16" thick rubber wheel with 5/8" hole for wet cutting of steel tubing. 2 lbs.

No. 20-816—10" diameter x 3/32" thick rubber wheel with 5/8" hole for wet cutting of steel solids. 2 lbs.

Motors Recommended: No. 97-320 and 97-420.

For complete motor and switch listing see page 64.

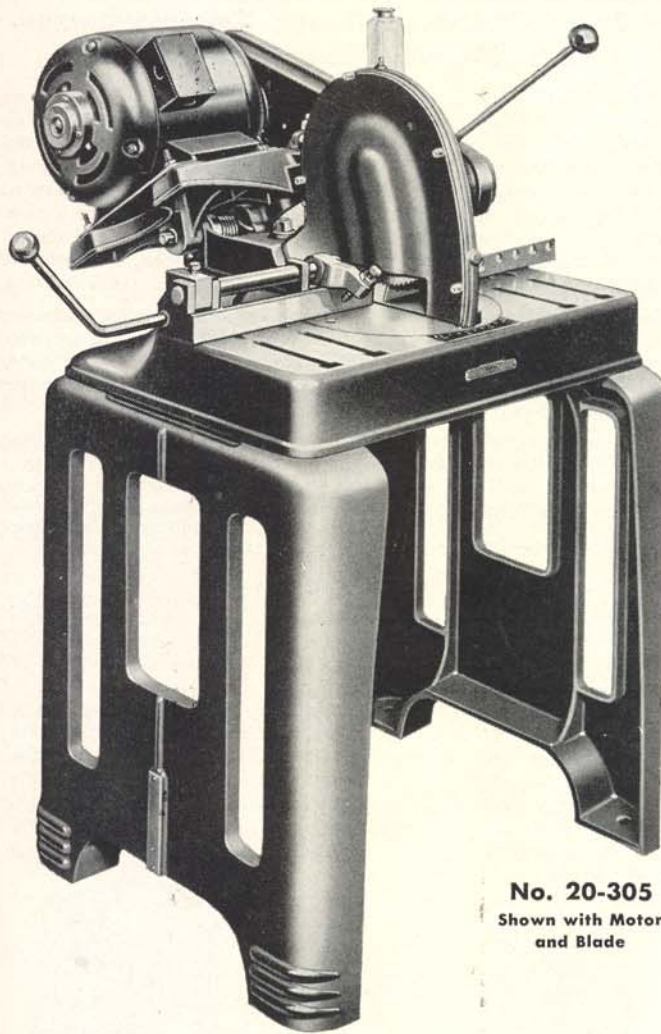
For a Coolant Pan, and an Efficient Pump and Tank for Wet Cutting Operations see page 17.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Non-Ferrous Cut-Off Machine Cuts Metals with "Polished Smoothness"



No. 20-305
Shown with Motor
and Blade

Catalog Listing of Non-Ferrous Cut-off Machine

- No. 20-305** Non-Ferrous Cut-Off Machine as illustrated, complete with No. 1608 Wheel Guard, Belt Guard, Chip Guard, Collars and Fence with Stop, No. 1632 Drip Coolant attachment and Flange, No. 1399 Pair of Cast Iron Legs, No. 1610 Universal Clamp Fixture, Three No. 289 V-belts, and No. 1634 Motor Pulley. Without Saw Blade, Motor or Switch. 570 lbs.
- No. 289**—V-belt (3 required). 1/2 lb.
- No. 1399**—Cast Iron Legs (pair). 163 lbs.
- No. 1600**—Bench Type Cut-Off Machine with No. 1608 wheel guard, belt guard, chip guard, collars, and fence with stop. 235 lbs.
- No. 1610**—Universal Clamp Fixture. 18 lbs.
- No. 1625**—10" Metal Cutting blade, 5/64" thick, 5/8" hole, 190 teeth. 2 1/8 lbs.
- No. 1626**—10" Metal Cutting blade, 3/32" thick, 5/8" hole, 80 teeth. 2 1/8 lbs.
- No. 1632**—Drip Coolant Attachment and Flange. 3 lbs.
- No. 1633**—3" Motor Pulley, 3/4" bore. 3 lbs.
- No. 1634**—3" Motor Pulley, 1" bore for 3 H.P. NEMA motor. 3 lbs.
- No. 20-810**—8" Metal Cutting blade, 1/16" thick, 5/8" hole, 100 teeth. 1 3/4 lbs.
- No. 20-811**—8" Metal Cutting saw blade, .045" thick, 5/8" hole, 144 teeth, for light walled tubing only on non-ferrous metals. 1 3/4 lbs.
- No. 20-812**—10" Metal Cutting saw blade, 1/8" thick, 5/8" hole, 132 teeth, for non-ferrous metal. 2 lbs.
- No. 20-815**—Manhattan No. 805 10" dia. x 1/8" thick rubber wheel with 5/8" hole for wet cutting of steel tubing. 2 lbs.
- No. 20-816**—Manhattan No. 808 10" dia. x 3/8" thick rubber wheel with 5/8" hole for wet cutting of steel solids. 2 lbs.
- Motors Recommended:** No. 97-320, 97-420.

For complete listing of motors and switches see page 64.

SPECIFICATIONS

Spindle speed.....	2000 RPM	Wheel collar sizes 3 1/2" and 5" dia.
Surface Speed	5250 FPM	Working height of table.....
Blade diameter, max.	10"	Working height of table with coolant pan
Arbor hole	3/8"	Size of machine (approx.).....
Circular table and blade swing,	45° left and right	30" wide, 35" deep, 47" high

For a Coolant Pan and an Efficient Pump and Tank for Wet Cutting Operations see Page 17.

As the name implies, the Non-Ferrous Cut-Off Machine has been specially developed for the cutting of aluminum, copper and brass which it does with "polished smoothness." This eliminates expensive de-burring operations and the thin steel blades used conserve material. Excellent results are obtained with this outstanding Cut-Off Machine in hundreds of production shops.

Capacity

Here is a list of recommendations as to the type of material to be cut and the capacity of the machine on these materials:

SOLID SECTIONS: Soft Brass—up to 1 1/2" diameter. • Half-Hard Brass—up to 1 1/4" diameter. • Aluminum—up to 1 1/2" diameter. • Alum. Extruded Sections—up to equivalent of 2 sq. in. • Copper—up to 1 1/2" diameter, or equivalent of 2 sq. in. • Magnesium (Dow Metal)—up to 1 1/4" diameter. • Micarta and similar rods—up to 1 1/2" diameter.

TUBULAR SECTIONS—Soft Brass, Hard Brass, Aluminum, Copper, Dow Metal, Micarta and similar Tubing—up to 2" diameter.

Very hard non-ferrous metals, such as Duralumin, Tobin Bronze, Navy Bronze, etc., should not be cut with the saw blade. For this work the abrasive cut-off machine using abrasive wheel is recommended.

Standard Blades Perform Variety of Work

The general tooth shape and clearance angles have been especially developed to cut aluminum without loading of the tooth gullets. At the same time they are extremely free cutting on the various brasses and on copper. The blades are similar in tooth shape, etc., and each makes a rapid, polished cut on any material for which it is recommended, as below. These blades handle a large variety of work most satisfactorily, but other blades for specialized types of production, are available from the standard blade manufacturers or their dealers.

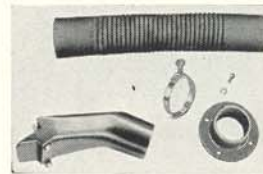
Blade No. 1626

This is a 10" diameter blade, 3/32" thick with 5/8" bore and having 80 teeth. It is the most versatile of all blades, in fact it might be called a general purpose blade. The No. 1626 Blade should always be used where a wide variety of non-ferrous metals and plastics are to be cut on the same machine without changing blades. It is especially suitable for steady production on the following sizes of material: (1) Large solid bars and rods up to the maximum capacity listed. (2) Large diameter heavy walled tubing. (3) Extruded or irregular sections having heavy walls.

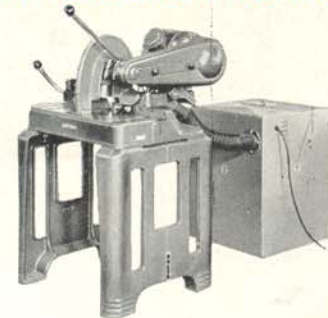
Blade No. 20-810

This is an 8" diameter blade, 1/16" thick with 5/8" bore and having 100 teeth. The No. 20-810 blade is especially suitable for: (1) Small solid bars and rods up to 3/4" diameter. (2) Small heavy walled tubing up to 1" outside diameter x 1/8" wall thickness. (3) Small extruded or irregular shaped sections having walls up to 1/8".

PROTECT HEALTH—PROTECT MACHINES WITH THE METAL DUST COLLECTOR FOR CUT-OFF MACHINE



No. 20-837
Attachment Package
for use with
Cut-Off Machine



The large amount of abrasive material and metal dust produced by the Cut-Off Machine is thrown into the air and must be collected to protect the operator and the machines. The Dust Collector is perfectly adapted for this use, catching the metal dust and abrasive material in the tray and filter of the unit.

The cabinet is of pressed steel, strong and husky. A large door on the back is removable for access to the filter, another at the top allows inspection of motor. The fan is a highly efficient unit of the squirrel cage type. It has lubricated-for-life ball bearings so that there are no lubrication problems. The filter is fireproof, has high filtering qualities, can easily be removed, cleaned and re-used thus reducing operating costs and at the same time maintaining the highest efficiency in dust collection.

SPECIFICATIONS

Height	28"	H. P.	1/2
Depth	21"	Static Suction	4 inches
Width	22"	Air Removed	350 cu. ft. per min.

CATALOG LISTING OF DUST COLLECTOR

- No. 49-520**—Dust Collector with 1/2 H.P., Single Phase, A.C., 3450 RPM, 115/230 V., 60 Cycle Motor. Without attachment fittings. 120 lbs.
- No. 49-521**—Dust Collector with 1/2 H.P., 3 Phase, A.C., 2850/3450 RPM, 220/440 V., 50/60 Cycle Motor. Without attachment fittings. 120 lbs.
- No. 49-522**—Dust Collector with 1/2 H.P., D.C., 3450 RPM, 115 V. Motor. Without attachment fittings. 120 lbs.
- No. 49-523**—Dust Collector with 1/2 H.P., D.C., 3450 RPM, 230 V. Motor. Without attachment fittings. 120 lbs.
- No. 49-524**—Dust Collector with 1/2 H.P., Single Phase, A.C., 2850 RPM, 115/230 V., 60 Cycle Motor. Without attachment fittings. 120 lbs.
- No. 49-529**—Extra Standard Filter to replace dirty filter while it is being cleaned. 8 lbs.
- No. 49-531**—Filter Pad Holder with two Expanded Fiber Pads. 7 lbs.
- No. 49-532**—24 Expanded Fiber Filter Pads per carton. 15 lbs.

ATTACHMENT PACKAGE

- No. 20-837**—Cut-Off Machine Attachment Package complete as illustrated. 13 lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Low Cost Belt Grinding, Polishing and Deburring Machine

Grind, Polish, Buff and Remove Burrs with this New Low Cost Machine

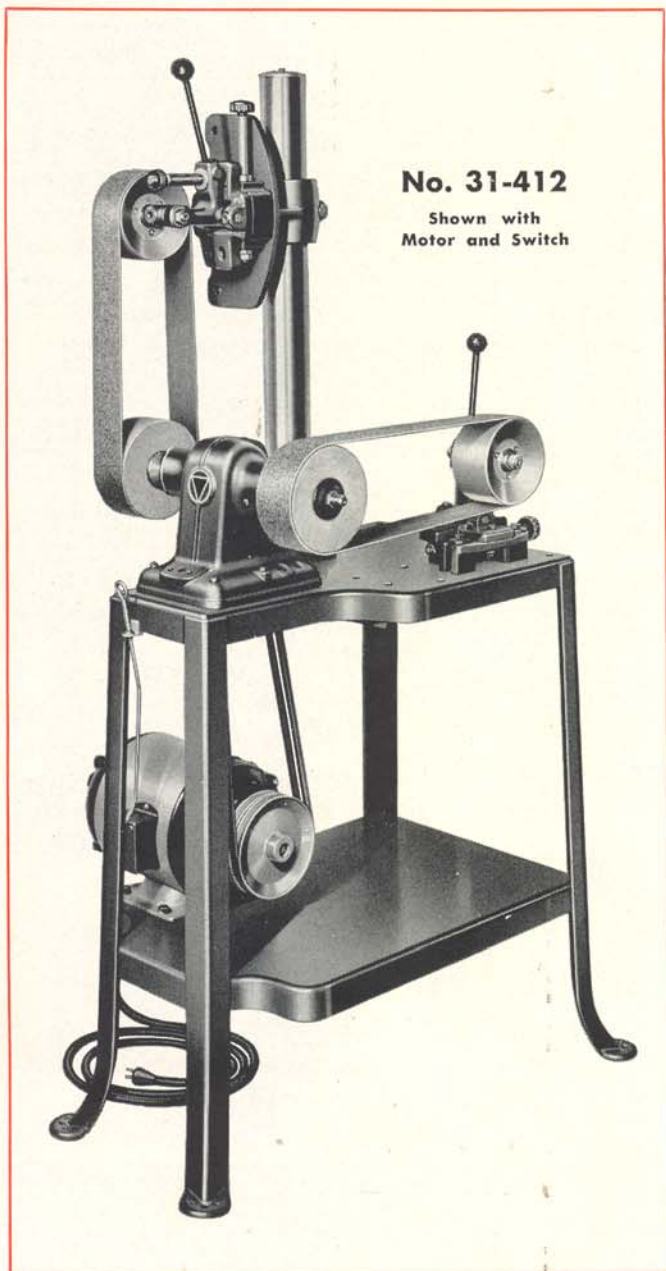
ASTOUNDING! That's what you'll say when you figure the savings that result from using the new Delta-Milwaukee Belt Grinding, Polishing, and Deburring Machine. FIRST OFF, you have a low initial cost. Secondly, you have the Delta Quality features, making for long, trouble-free service . . . the lubricated-for-life, double-sealed, preloaded ball bearings . . . the precision bored seats . . . the precision ground shafts . . . the dynamically balanced arbor pulleys . . . and the all around rugged construction. Third, you have the newest, most efficient and inexpensive method of doing Grinding, Polishing, and Deburring.

ELIMINATE the bother of "Set-Up Wheels" and the necessary dressing of "Grinding Wheels." Abrasive belts are inexpensive, long wearing, quick and easy to replace. The New Delta Belt Grinding, Polishing and Deburring Machine is the answer to many of your present day flashing, cleaning and grinding problems.

It can be assembled into many combinations to meet your production requirements. It is a Production machine fully capable of doing a multitude of metal finishing operations formerly done on heavy, expensive machines. It is a completely condensed unit on a steel stand. And, it is a portable unit that occupies minimum floor space and will perform hundreds of costly operations at a big saving.

SPECIFICATIONS

Overall length	32 1/2"
Overall length with dust collector	57 3/4"
Overall width	22 1/4"
Overall height in vertical position	61 1/2"
Overall height in horizontal position	40 1/2"
Steel stand	31 3/8" x 32 1/2" x 22 1/4"
Maximum abrasive belt length	60 3/4"
Contact roll capacity	7/8" to 2 7/8"
Diameter of idler drum	5 5/8"
Diameter of vertical support column	2 3/4"
Belt speed 5400 f.p.m. with 6" contact roll using standard 1725 r.p.m. motor	



No. 31-412

Shown with Motor and Switch



No. 31-411
Shown with Motor and Switch



No. 31-413
Shown with Motor and Switch



No. 31-414
Shown with Motor and Switch

CATALOG LISTING

No. 31-411—Belt Grinding, Polishing and Deburring Machine with No. 31-441 Steel Stand, No. 31-438 Arbor Head, No. 31-430 Idler Unit, No. 31-867 Contact Roll, No. 31-861 Aluminum Oxide Belt, two No. 560 V-Belts in position, and two No. 5600 Motor Pulleys 3/4" bore. Without motor, switch or switch rod. 195 lbs.

No. 31-412—Belt Grinding, Polishing and Deburring Machine with No. 31-441 Steel Stand, No. 31-438 Arbor Head, No. 31-437 Vertical Support Unit, No. 31-430 and No. 31-431 Idler Units, two No. 31-867 Contact Rolls, No. 31-861 and No. 31-862 Aluminum Oxide Belts, two No. 560 V-Belts in position and two No. 5600 Motor Pulleys 3/4" bore. Without motor, switch or switch rod. 265 lbs.

No. 31-413—Belt Grinding, Polishing and Deburring Machine with No. 31-441 Steel Stand, No. 31-438 Arbor Head, No. 31-430 and No. 31-431 Idler Units, two No. 31-867 Contact Rolls, No. 31-861 and No. 31-862 Aluminum Oxide Belts, two No. 560 V-Belts in position, and two No. 5600 Motor Pulleys 3/4" bore. Without motor, switch or switch rod. 230 lbs.

No. 31-414—Belt Grinding, Polishing and Deburring Machine with No. 31-441 Steel Stand, No. 31-438 Arbor Head, No. 31-430 and No. 31-431 Idler Units, two No. 31-437 Vertical Support Units, two No. 31-867 Contact Rolls, No. 31-861 and No. 31-862 Aluminum Oxide Belts, two No. 560 V-Belts in position and two No. 5600 Motor Pulleys 3/4" bore. Without motor, switch or switch rod. 300 lbs.

No. 560—V-Belt 58-5/16 O.C. (2 required.) 1/2 lb.

No. 1320—3-phase manual starter for A.C. motors up to 2 H.P. and D.C. motors up to 1 H.P. 6 lbs.

No. 1322—Mounting parts for manual starter on 3-phase motors. 2 lbs.

No. 5600—6" Motor pulley 3/4" bore (2 required.) 1 1/2 lbs.

No. 31-442—Switch rod for single phase and D.C. motors. 1 1/2 lbs.

No. 31-869—Dust Collector Attachment package. 8 lbs. For complete listing of dust collectors, see page 31.

Motors Recommended: 84-910, 86-920, 87-120. For complete listing of motors and switches see page 64.

(For Prices See Attached Price List)



Belt Grinding, Polishing and Deburring Machine with Dust Collector

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Select The Units You Need For Your Individual Machine

ARBOR HEAD HAS LUBRICATED FOR LIFE BALL BEARINGS



The Arbor Head is the hub of this machine around which is built the many different polishing, grinding and deburring units. It is, therefore, necessary to have an arbor head engineered for long life and accurate, precise work.

The above illustrated Arbor Head is a fine-grained grey iron casting, sturdy and strong, which can be mounted on either the machine stand or a bench top, as desired. The $\frac{5}{8}$ " arbor runs in pre-loaded, double-sealed ball bearings, lubricated at the factory and requiring no further lubrication for the life of the bearings. The Arbor Shaft extends $3\frac{1}{2}$ " out from the inner flange on either side of the Arbor Head. Both ends of the Arbor Shaft have a $2\frac{1}{2}$ " ground acme thread to accommodate contact rolls and wheels from $\frac{7}{8}$ " to $2\frac{7}{8}$ " in width.

No. 31-438—Arbor Head complete with dynamically balanced arbor pulley, two No. 560 drive belts, two $2\frac{1}{32}$ " diameter flanges with nuts to fit $\frac{5}{8}$ " arbor. 31 lbs.

STEEL STAND IS STURDY AND RIGID



Every efficient shop or factory wants a compact, sturdy, portable machine. This steel stand makes available these features for the New Delta Belt Grinding, Polishing and Deburring Machine.

Drilled and slotted to fit all attachments and accessories for the machine, the stand is of steel, light but extremely sturdy. The motor mounts below on the shelf.

No. 31-441—Steel Stand $31\frac{3}{8}$ " high, $32\frac{1}{2}$ " deep and $22\frac{1}{4}$ " wide. 84 lbs.

VERTICAL SUPPORT UNIT

The Vertical Support Unit is the idler support for the vertical abrasive belt. In many instances the vertical abrasive belt is more convenient for the operator, especially when deburring heavy, bulky or odd-shaped castings.

The unit shown is for the left side. When used for the right side the upper mounting bracket is turned over. Maximum belt length $60\frac{3}{4}$ ".

No. 31-437—Complete Vertical Support Unit consists of column, $2\frac{3}{4}$ " diameter by 30" long, upper mounting flange with screws, column cap and base mounting flange with screws. 35 lbs.



IDLER UNIT OR BACK STAND

The Idler Unit, or back stand, as it is frequently referred to, is relatively new in the industrial field. The unit fastens to the rear of the machine stand and provides not only the idler pulley for the abrasive belt but also tension for the flexible belt at all times. The Idler is available in either right or left hand units for use on either side of your stand. All parts of each unit are fully interchangeable. Used for either vertical or horizontal belt operation.

No. 31-430—Complete right Idler Unit. 20 lbs.

No. 31-431—Complete left Idler Unit. 20 lbs.



COMPLETE SAFETY WITH GUARDS

Protection of the operator is essential and these abrasive belt guards provide protection from the lash of a broken belt and at the same time reduce the amount of grinding dust and flying chips.

The abrasive belt guard comes in right and left units and can be used on either the vertical or horizontal belt arrangement. Each belt guard consists of the body and the cover. The cover is held in place on the guard body with three knurled knobs and can be moved back to expose working area of belt as desired. Guard is on hinges and can be swung clear to enable easy, quick belt change.

No. 31-439—Complete (right) Belt Guard. 12 lbs.

No. 31-440—Complete (left) Belt Guard. 12 lbs.



PLATEN IS FULLY ADJUSTABLE



The Platen provides another working surface other than the contact roll. For either right or left side of horizontal unit. It can be adjusted to fit under any abrasive belt for varied operations. Platen can be inverted so that light or thin parts can be held in the hand and finished with underside of belt.

Platen is $2\frac{1}{2}$ " wide by 7" long and has enough "beef" to make it a solid and long-wearing unit. Can be used on horizontal arrangement only, does not fit vertical.

No. 31-434—Platen Complete. 10 lbs.

GENERAL PURPOSE CONTACT ROLL

The Contact Roll is a straight faced medium density, square stitched, glued roll, six inches in diameter and two and one-half inches wide. It is fitted with steel bushings of $\frac{5}{8}$ " bore for smooth, even, vibrationless running. It is sent from the factory, trued and ready to install.



The Contact Roll as used on the Belt Grinding, Polishing and Deburring Machine is a frictionless support where heavy cuts can be taken with no unnecessary heat generated. Provides Abrasive Belt speed of 5400 feet per minute when used with 6" dia. Motor Pulley and 1725 r.p.m. motor. Higher velocities not recommended.

No. 31-867—Contact Roll Complete. 3 lbs.

ALUMINUM OXIDE COATED ABRASIVE BELTS



The coated abrasive belts offered here are general purpose aluminum oxide belts $2\frac{1}{2}$ " wide by 48" in circumference, for use on forgings, steel, brass, die cast, and plastic materials.

For hard materials of low tensile strength silicon carbide belts are recommended. For special cases always call in an abrasive belt expert for recommendations as to proper belt.

Number	Grit	Ship. Wt. lbs.
31-860 —Coarse	36	1
31-861 —Coarse	50	1
31-862 —Fine	100	1
31-863 —Fine	180	1

ADJUSTABLE TOOL REST FOR GRINDING

Very useful for finishing the edges of flat or thin work the Tool Rest forms a rigid work surface when using the contact roll as the working surface. Tool Rest Supports adjustable to operation—used on both right and left side—either or both sides can be removed when not needed.



No. 31-435—Tool Rest Complete. 8 lbs.

DUST AND CHIP CHUTE

This chute effectively catches grinding dust, metal sparks and chips on work being done on the contact roll. Fits on either side of machine. Chutes are large enough so that operator can finish large parts without interference, long work can project down into chute. Shipped with a standard 3" fitting for Delta metal dust collector.



No. 31-436—Dust Chute Complete. 14 lbs.

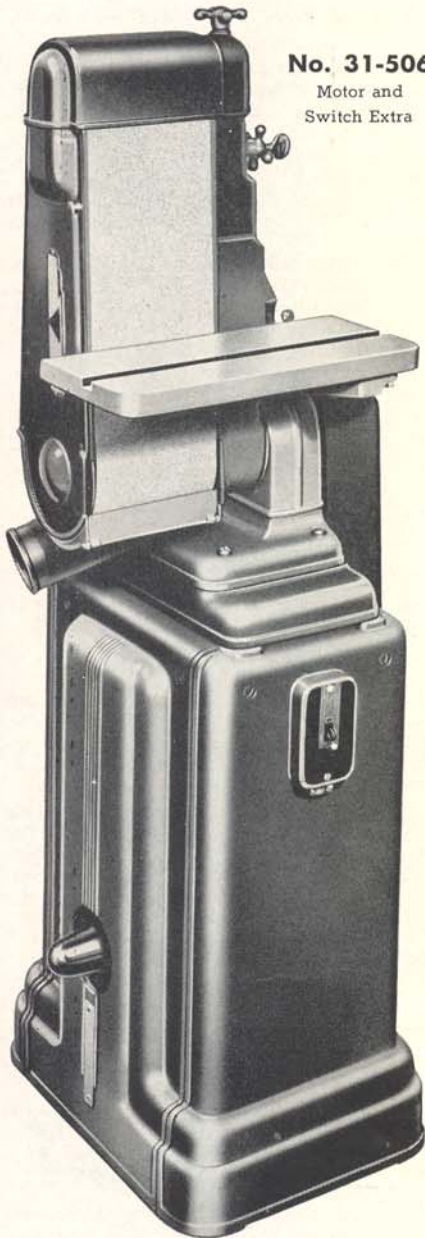
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Abrasive Belt Finishing Machine Has Many Industrial Uses



No. 31-506
Motor and
Switch Extra

SPECIFICATIONS

Table size7 $\frac{3}{8}$ "x14 $\frac{3}{4}$ "
Tilting Table (tilts 45° from belt, 20° toward belt)
Miter gage groove $\frac{3}{8}$ "x $\frac{3}{4}$ "
Cloth-backed belt6" wide x 48" long
Belt capacity above table . . .6" wide x 9 $\frac{7}{8}$ " high
OVERALL DIMENSIONS: 28" long, 18" wide, 36"
high in horizontal position, 54" high in vertical
position.

Abrasive Belt Finisher With Dust Collector



See
page 31 for
Dust Collec-
tor Desired

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 (5 $\frac{1}{2}$ "). 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.

CATALOG LISTING

No. 31-505 Complete Abrasive Belt Finishing Machine with No. 1414 Aluminum Oxide Belt; No. 1401 Tilting Table; No. 50-405 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 Complete Abrasive Belt Finishing Machine with No. 1414 Aluminum Oxide Belt; No. 1401 Tilting Table; No. 31-852 Cast Iron Stand with sub-base and belt guard; No. 595 V-belt and No. 5500 Motor Pulley (specify bore). Without Fence, Backstop, Motor or Switch. 205 lbs.

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. 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. 1 $\frac{1}{2}$ lbs.

No. 1401—Tilting Table. 15 lbs.

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

No. 1410—Wood Fence (3 $\frac{1}{4}$ "x17 $\frac{1}{2}$ ") 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. 1 $\frac{1}{2}$ lbs.

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

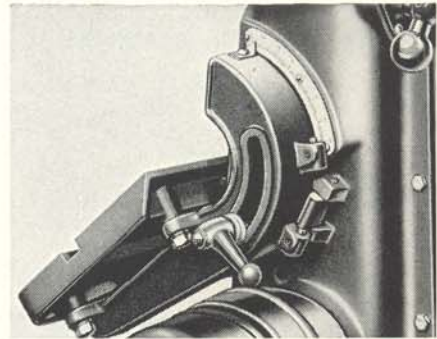
No. 31-856—Attachment Package for connecting Dust Collector to Abrasive Belt Finishing Machine. 7 lbs.

No. 50-406—(Old No. 1406)—Steel Stand. Top 8"x16". Height 29 $\frac{1}{4}$ ". 30 lbs.

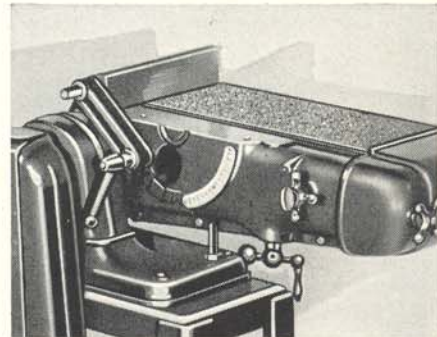
Motors Recommended. Heavy Duty—84-910, 86-920, 87-120; Medium Duty—82-910, 86-720; Light Duty—82-710, 86-520.

For complete listing of Motors and Switches see page 64.

(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.

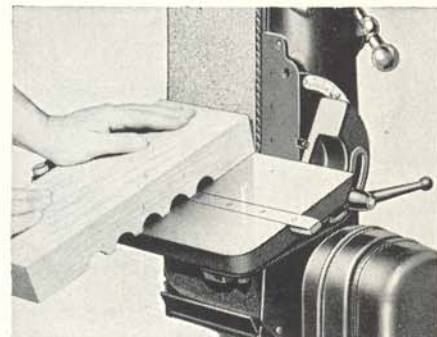
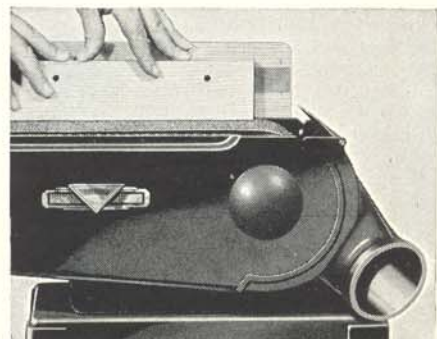


Table tilts easily and quickly 20° toward belt, 45° from belt. Standard No. 864 Miter Gage can be used. Handy locking handle locks table securely in position.



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.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

A Fully Automatic, Low Cost Spot Welder With Repeat, Non-beat Feature

Why The Delta-Milwaukee 5-KVA Welder Has Such A Wide Range Of Capacity When Compared To Other 5-KVA Welders

It is the only spot welder incorporating . . . 1. the latest type, efficient *Wound Transformer Core* . . . 2. A *Moving Primary Coil* providing an infinite variation of welding current, and . . . 3. A *One Piece Solid Secondary Coil* that is also the *Welding Horns*, which means no loss of power generally due to inefficient connections in the secondary circuit.

This Welder has been rated in full compliance with RWMA standards and the basic Spot Welder has been fully approved by Underwriter's Laboratories, Incorporated. A complete line of accessories is available.

Check These Specifications

Welder Transformer Rating	5-KVA or 5000 Volt Amperes
Duty Cycle	50%
Open Circuit Secondary Voltage	2.7 Volts
Standard Throat Depth	10 Inches
Electrode Size	3/4" Diameter
Gap Setting	5 Inches
Welding Tips	No. 1 Morse Taper RWMA Standard
Maximum Stable Short Circuit Secondary Current	7000 Amperes
Transformer Primary Input	230 Volts 1-Phase, A.C., 50/60 Cycles
Rated Primary Current	21.8 Amperes
Control Circuit Voltage	8 Volts
Weld Timer	NEMA Type 1AX
Welder Operation	Air; Line Pressure 50 to 80 PSI

Catalog Listing

No. 26-120—Automatic Repeat, non-beat, Air Operated, Fully Controlled High Production 5-KVA Spot Welder. Unit includes 5-KVA Rocker Arm Type Spot Welder installed on a fully enclosed cabinet type stand, housing the control circuit, double action air cylinder, weld timer and pneumatic off time control. Complete with foot switch and water-cooled electrode holders, but less air lubricator and regulator.

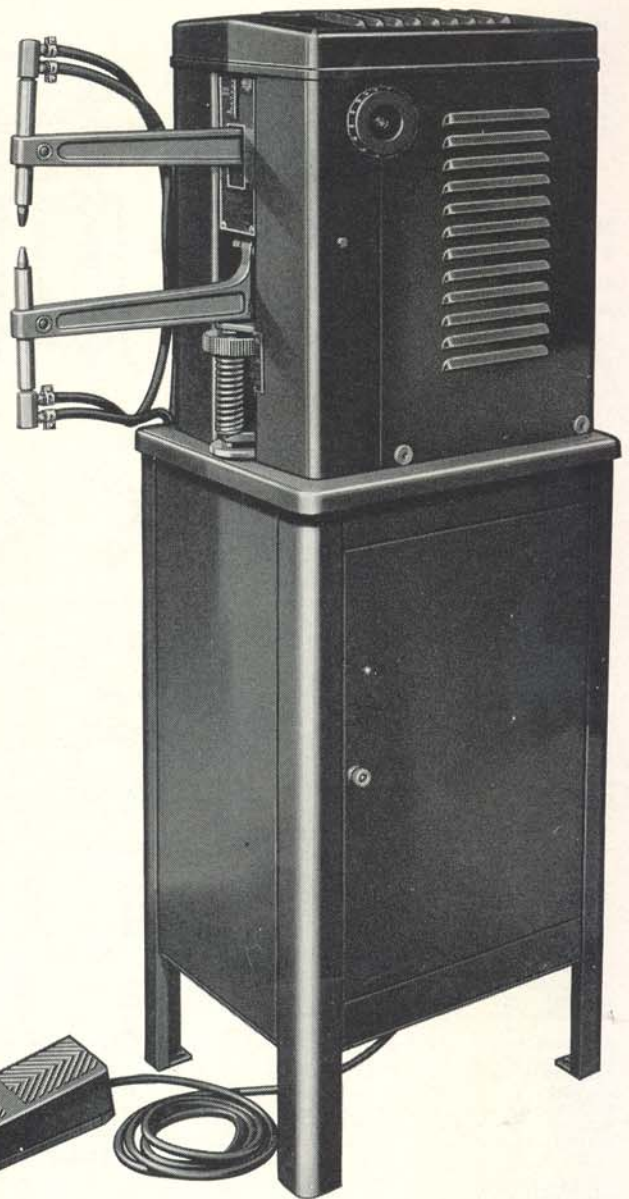
Each resistance weld made requires *controlled heat* (Hand knob on side of Welder), *controlled pressure* (pressure control on front of welder just below welding horns) and *controlled time* (illustrated below).



A NEMA Type 1AX timer provides for the so necessary weld time control. Range from 3 to 120 weld cycles. This normally expensive equipment is standard in the Delta Automatic Welder.



Automatic welding requires an off time control or dwell, before the horns reclose. This allows for proper weld spacing in stitch welding. Control is pneumatic and is simple to adjust.



CHECK THESE FEATURES

Production Capacity:

2 pieces of 14 gage mild steel down to 2 pieces of paper thin .002" thick steel shim stock.

Production Rate:

Automatic Repeat feature provides up to 6000 3 cycle welds per hour.

Production Quality Control:

Precision Controlling and non-beat feature means no product spoilage.

Weld Current: Infinitely variable between maximum and minimum.

Weld Pressure: Infinitely variable between maximum and minimum.

Weld Timing: Precision Controlled. Provides control from 3 to 120 cycles.

Welding Rate: Dwell or Off Time between welds fully adjustable.

Small Investment:

Low initial cost . . . Low operating cost . . . Low Maintenance Cost.

Contact Your Delta Dealer. Have Him Demonstrate What This Welder Will Do For You.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Spot . . . Accessories And Attachments . . . Arc

No. 26-806—Power Cable consisting of a heavy duty 3 conductor No. 10 wire, rubber covered, 10 foot cord with 50 ampere plug and wall mounted receptacle. Fitted with eyelets for connection to welder terminals. 6 lbs.



No. 26-806—Power Cable consisting of a heavy duty 3 conductor No. 10 wire, rubber covered, 10 foot cord with 50 ampere plug and wall mounted receptacle. Fitted with eyelets for connection to welder terminals. 6 lbs.

No. 50-821—(Old No. 26-821)—Steel Stand for both Spot and Arc Welders. The correct height for ease in spot welding—standing or sitting. All necessary holes provided for mounting welder and foot pedal parts. Includes bag of nuts, bolts and washers for attaching welder. 47 lbs.



No. 26-805—Arc Welder Helmet. Light weight, good quality fiber shield giving full protection to face, eyes and throat. Provided with replaceable type No. 9 lens. Adjustable head band and chin rest. 2 lbs.



No. 26-825—One set (2) Universal Electrode Holders, 3/4" dia. Makes possible holding electrodes at any angle for the hard-to-get-at job. Makes off-set spot welding easy. 3 lbs.



No. 26-810—One set (2) Arc Welding Cables consisting of two 10 foot, No. 6 wire, rubber covered arc weld cables, with male jack for quick connection to welder. Does not include ground clamp or electrode holder. 3 1/2 lbs.



No. 26-826—One set (2) Water Cooled Electrode Holders, 3/4" dia. with No. 1 M.T. holes for replaceable tips. Complete with two 8 foot connecting hose and fittings and one set of No. 26-827 Straight tips. Water cools right down to the tip. For high production use when water cooling is necessary. Prevents welding heat from being carried into the transformer. 3 1/2 lbs.



No. 26-812—Ground Clamp, fastens to end of one arc cable. For securing cable to ground side of arc welding. 1 lb. ...



No. 26-827—One set (2) No. 1 M.T. Standard Straight Replaceable Welding Tips, 1/8" dia. welding face. RWMA class No. 1 alloy tip for general use on mild steel, black iron, coated materials like galvanized iron, terne plate, etc., also for scaly stock, aluminum and aluminum alloys. Tip shape for general purpose spot welding where no unusual difficulties are encountered. 1/4 lb.



26-827

No. 26-813—Chip Hammer, an all steel hammer for chipping scale from weld for examination, prior to painting. 3/4 lb.



No. 26-828—One set (2) No. 1 M.T. Standard Flat Replaceable Tips, 1/2" dia. welding face. Same alloy as No. 26-827. Used where weld appearance is critical. Leaves no appreciable indentations in metal. Can be used in conjunction with standard straight or dome tip where only one face of weld must be smooth 1/4 lb.



26-828

No. 26-814—Wire Brush. A handy size stiff bristle wire brush for cleaning metal for good electrical contact. Also good for cleaning scale from welds. 1/4 lb. ...



No. 26-829—One set (2) No. 1 M.T. Standard Off-Set Replaceable Tips, 3/16" dia. welding face, 30° off-set. Same alloy as No. 26-827. Generally used for corner welds or places where straight tips will not fit. 1/4 lb.



26-829

No. 26-820—Electrode Holder. A light weight but rugged electrode or rod holder, fastens to end of one arc cable. For holding welding electrodes, 1/8" to 5/32" capacity. 1 lb.



No. 26-830—One set (2) No. 1 M.T. Standard Dome Point Replaceable Tips, 1/8" dia. welding face. Same alloy as No. 26-827. 1/4 lb.



26-830

No. 26-831—One set (2) No. 1 M.T. Special Forged Off-Set Replaceable Tips, approximately 3/8" off-set by 30°, 3/8" tip height. RWMA class No. 2 Alloy. A superior electrode material for high production work on clean steels, weldable non-ferrous metals, etc. Tip shape for special "hard-to-get-at" places. 1/2 lb.



26-831

No. 26-835—Arc Welding Electrode 1/16" dia. for welding mild steel. 2 lb. pkg.



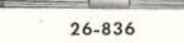
26-835

No. 26-832—One set (2) No. 1 M.T. Special Forged Replaceable Off-Set Tips, approximately 3/4" off-set, 1/8" tip height. Same alloy as No. 26-831 for approximately the same use 1/2 lb.



26-832

No. 26-836—Arc Welding Electrode 3/32" dia. for welding mild steel. 4 lb. pkg.



26-836

No. 26-833—One set (2) No. 1 M.T. Special Forged Replaceable Off-Set Tips, approximately 7/8" off-set by 30°, 3/8" tip height. Same alloy as No. 26-831 for approximately the same use. 1/2 lb.



26-833

No. 26-837—Arc Welding Electrode 1/8" dia. for welding mild steel. 5 lb. pkg.



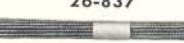
26-837

No. 26-834—One set (2) No. 1 M.T. Special Forged Off-Set Replaceable Tips, approximately 1" off-set by 30°, 1" tip height. Same alloy as No. 26-831 for approximately the same use. 1/2 lb.



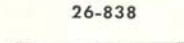
26-834

No. 26-838—Arc Welding Electrode 1/8" dia. for welding cast iron (machinable). 2 lb. pkg.



26-838

No. 26-839—Special Arc Welding Electrode 3/32" dia. for welding stainless steel. 2 lb. pkg.



26-839

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The "Dual Weld" a Combination 5KVA Spot Welder and 120 Ampere Arc Welder

Amazingly Low Initial Cost—Two Units in One Machine—Quick, Simple Change-Over—Low Maintenance and Operation Costs—Approved and Listed by Underwriters Laboratories

HERE is the welder for any shop doing a lot of light duty production spot welding and intermittent arc welding. Because of its unique design, its careful engineering and high production methods, you can get this welder at an exceptionally low price; considerably under that of two individual welders a 5KVA Spot Welder and 120 Ampere Arc Welder.

Just a few of its outstanding features are... wound transformer core... moving primary coil... solid cast, high conductivity, copper alloy secondary coil, which is also the welding horns... full spot weld pressure adjustment, giving an infinite amount of control from minimum to maximum pressure... double glass covered wire used in all transformer coils plus a wrapping of glass-mica-glass insulation and fibre glass tape to protect against burn out... current scale... infinite adjustment of current throughout the full range of both spot and arc units... etc.

It is especially suitable for small sheet metal contractors, maintenance and repair departments of factories, experimental departments, research laboratories, schools, garages, farms, light metal fabrication industries, radio, electric and electronic industries.

There is no other welder like it on the market today. Investigate its many uses... find out how it will do your welding jobs better, faster, more uniformly and with greater economy. Any shop can afford one, all shops need one.

With a Delta-Milwaukee "Dual Weld" Combination Welder You Can Do . . . Spot Welding . . . Arc Welding . . . Brazing . . . Soldering

CATALOG LISTING

- No. 26-105**—"Dual Weld" Combination Spot and Arc Welder consisting of 120 Ampere Arc Welder, and 5KVA Bench Type, Foot Operated Spot Welder for 230 V., 50/60 cy., single phase, A.C. Fully enclosed in ventilated steel cabinet, with foot lever, two 3/4" dia. solid electrodes with No. 1 Morse Taper hole for replaceable spot welding tips and sample pkg. of assorted welding electrodes for arc welder, power supply cord and receptacle. Without arc weld cables, ground clamp, electrode holder, helmet or steel stand. 170 lbs.
- No. 26-106**—(as illustrated) consisting of No. 26-105 combination spot and arc welder, No. 50-821 steel stand, No. 26-806 power cable, No. 26-810 arc weld cables, No. 26-812 ground clamp, No. 26-820 electrode holder and No. 26-805 arc welding helmet241 lbs.

SPECIFICATIONS

- Spot Welder**—Rated in full compliance with RWMA Standards.
- Weld Rating5KVA or 5000 Volt Amperes
 - Duty Cycle50 Percent
 - Open Circuit Secondary Voltage2.7 Volts
 - Standard Throat Depth10 inches
 - Maximum Stable Short Circuit Secondary Current7000 Amperes
 - Primary Input230 Volts, Single Phase, 50/60 Cycle, A.C.
 - Rated Primary Current21.8 Amperes
 - Welding Capacity2 pcs. of clean 16 gage mild steel at production rate
 - Electrode Size3/4 inch Diameter
 - Replaceable Tips UsedNo. 1 M.T. Std. RWMA
- Arc Welder**—Rated in full compliance with NEMA Standards.
- Rated Amperes Output (Maximum obtainable at rated load voltage)120 Amperes
 - Minimum Welding Current30 Amperes
 - Rated Load Voltage25 Volts
 - Open Circuit Voltage65 Volts
 - Duty-Cycle at Rated Load20 Percent
 - Recommended Electrodes1/16" to 1/8" Diameter
 - Primary Input230 Volts, 50/60 Cycle, Single Phase, A.C.
 - Power Factor55 Percent
 - Current Input at Rated Load33 Amperes
 - Current Input at No Load85 Amperes
 - Temperature Rise90 degrees C.
 - Overall Dimensions26 5/8" long, 14" wide, 19 3/4" high, 51" high on stand



THE DELTA-MILWAUKEE 5KVA SPOT WELDER

Approved and Listed by Underwriters Laboratories

The only Spot Welder with Wound transformer core — moving primary coil — solid cast copper alloy secondary coil that is also the welding horns

SPECIFICATIONS

- Rated in full compliance with R.W.M.A. standards
- Weld Rating5KVA or 5000 Volt Amperes
 - Duty Cycle50 Percent
 - Open Circuit Secondary Voltage2.7 Volts
 - Throat Depth10 inches
 - Maximum Stable Short Circuit Secondary Current7000 Amperes
 - Primary Input230 Volts, Single Phase, 50/60 Cycle, A.C.
 - Rated Primary Current21.8 Amperes
 - Welding Capacity2 pcs. of clean 16 gage mild steel at production rate
 - Electrode Size3/4 Inch Diameter
 - Replaceable Tips UsedNo. 1 M.T. Std. RWMA
 - Overall Dimensions14" wide, 26 5/8" long, 19 3/4" high
 - Shipping Weight155 lbs.



CATALOG LISTING

- No. 26-109**—5KVA bench type, foot operated Spot Welder, with 10" throat depth, for 230 V., 50/60 cy., single phase, A.C. Production capacity 2 pcs., 16 gage mild steel. Enclosed in ventilated steel cabinet, with foot lever, two straight 3/4" diameter solid electrodes with No. 1 M.T. hole, one end for replaceable tips, power supply cord and receptacle. Without steel stand. 160 lbs.
- No. 26-110** (as illustrated) consisting of No. 26-109 spot welder, No. 50-821 steel stand and No. 26-806 power cable. 223 lbs.

(For Prices See Attached Price List)

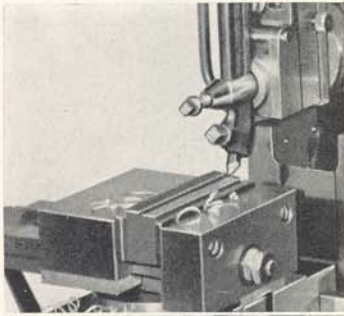
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

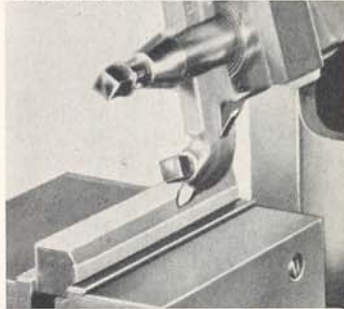
600 E. VIENNA AVE. MILWAUKEE 1, WIS.

You Can Do A Wide Variety Of Work On The Delta Shaper

Designed for: Shop production work . . . Tool Makers . . . Model Makers . . . Experimental Departments . . . Machinists . . . Schools . . . Laboratories . . . Mobile Machine & Automotive Shops



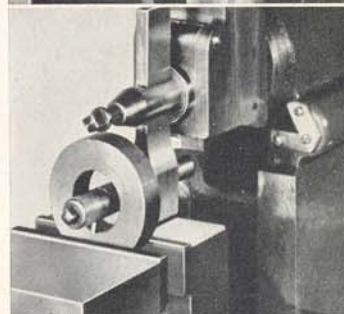
Straight cut on a flat piece of work.



Angular cut on the edge of a piece of work.



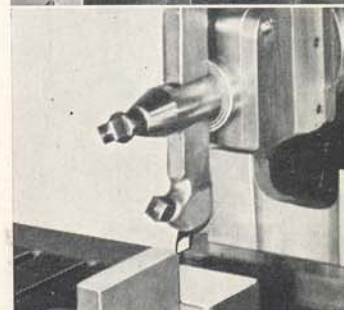
Set-up for a part placed in vise ready for machining.



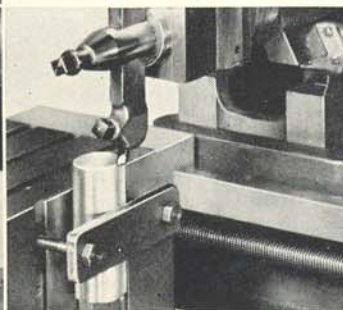
Cutting internal keyway.

Check these outstanding construction features

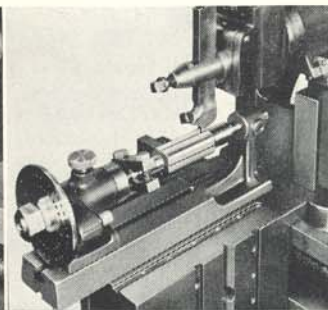
- "V" type ways on Ram, Tool Head and Front Face of main frame are carefully fitted together and ground and lapped to insure accuracy and longer life.
- Gibbed ways have adjusting screws to take up any wear which may develop.
- Adjustable table support bears on the accurately machined surface of main frame to give exceedingly rigid construction.
- The Cross Rail feed incorporates an important safety feature—the table will run off of the Cross Rail feed screw when it has traveled its maximum length in either direction. The machine operates through the end of its cross feed without attention and without possibility of jamming.
- Base of the shaper is deep, heavily ribbed and ruggedly constructed.
- The column, like the base, is ribbed and reinforced to produce maximum rigidity.
- Bearings are reamed and honed.
- Feed mechanism is reversible and adjustable.
- Scale on rocker arm affords accurate stroke adjustment.
- Hinge type Safety Belt Guard for quick and easy belt change.
- Adjustable countershaft has a 4 step "V" pulley with separate adjustment for drive belt and motor belt.
- Rugged Vise is graduated for any angle from 0° to 90° on either side of center.
- Adjustable Tool Head, graduated from 0° to 90° for angle work, can be loosened or tightened quickly and easily.
- Precision ground, high carbon steel drive shaft.
- Spiral cut teeth on bull gear and main drive pinion, for quiet, smooth operation.



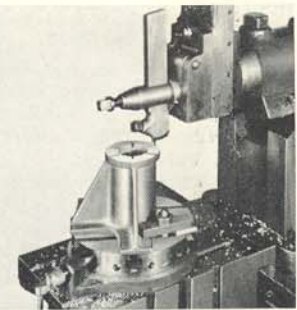
Squaring up the end of a piece of work held in vise.



Machining end of round piece of work held in "V" groove on side of table.



The Delta index centers mounted on the table of machine.



Slotting operation on small casting mounted on rotary table.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

7-inch Precision Metal Shaper—The Machine of A Thousand Uses

SPECIFICATIONS

RAM —

Extreme length of stroke	7¾"
Total length of ram	16¾"
Length of bearing in main frame	10¾"
Width of bearing in main frame	3½"
Speeds	4
Strokes per minute	40, 70, 115, 180

TABLE —

Horizontal travel	9½"
Vertical travel	4¼"
Maximum distance from ram	5¼"
Minimum distance from ram	1½"
Length of top	6"
Width of top	4½"
Depth of table	5½"
Feeds	6
Cross feed range (reversible)	.003, .006, .009, .012, .015, .018"

TOOL HEAD —

Vertical travel	3¼"
*Size of tool holder	
	¾" x 7/8" for ¼" tool bit
	¾" x ¾" for 3/16" tool bit
Diameter of tool head	2½"

WISE —

Width of jaws	4"
Depth of jaws	1"
Maximum opening	4¼"
Height of vise over table	2½"

POWER APPLICATION —

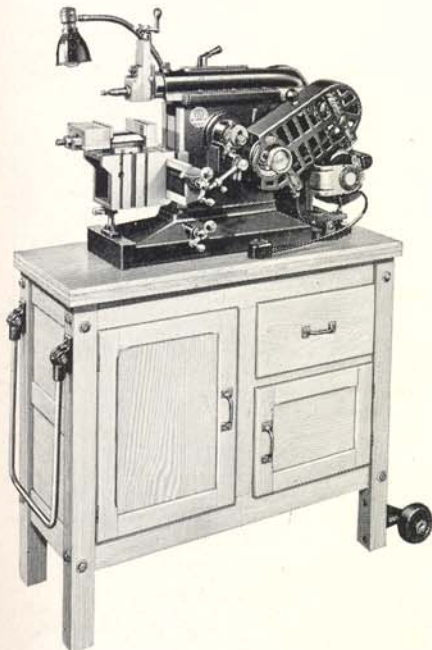
Adjustable countershaft having 4 step V pulley with separate adjustment for drive belt and motor belt.

OVERALL DIMENSIONS — BENCH MODEL —

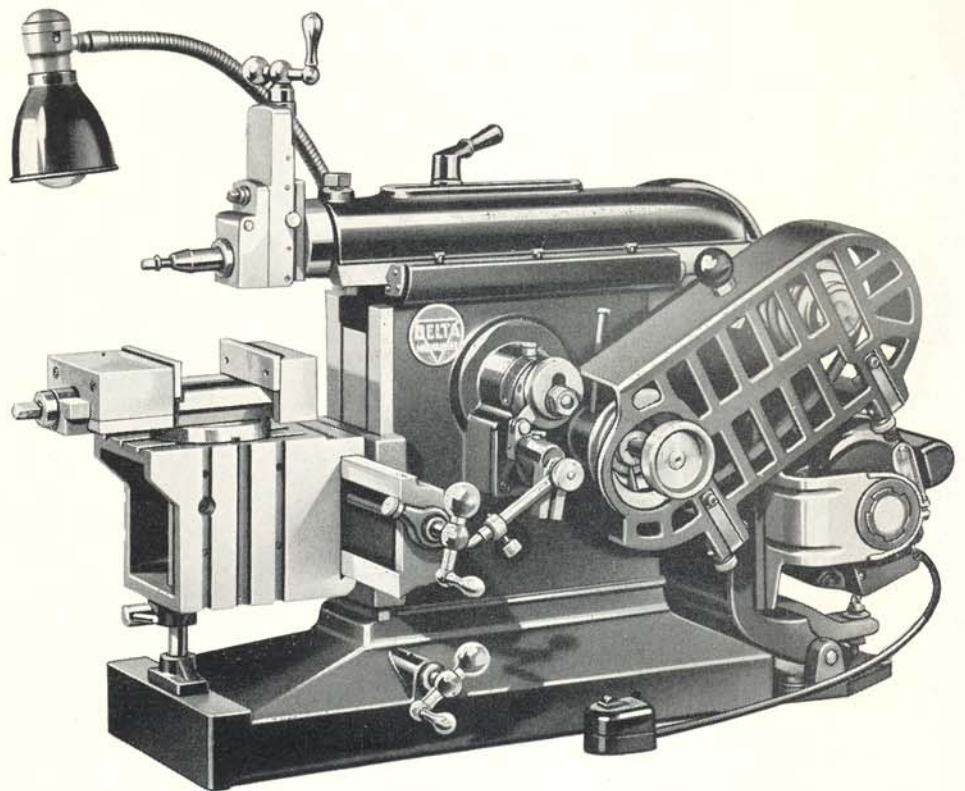
Shaper and countershaft

Length	32"
Width	18"
Height	24"
Shipping Weight	225 lbs.

*Tool holder not supplied by Delta.



When you mount the shaper on Cabinet Base No. 27860 it becomes a portable unit . . . you save space, time, and money.



CATALOG LISTING

No. 27-100 Bench Model, 7" Precision Metal Shaper complete with swivel vise and wrenches, including two 4 step V-pulleys, adjustable countershaft, two motor drive V-pulleys, two V-belts, adjustable lamp and switch. Less belt guards and motor. 225 lbs.

No. 27-850 Belt Guard 11 lbs.

No. 27-860 Portable Cabinet Base for 7" Precision Shaper made of selected seasoned maple, natural varnished finish. Casters and folding handle give convenient portability. Has large drawer and 2 cabinets for storage of tools and accessories. Length 36", width 22", height 32". 135 lbs.

No. 27-880 Index centers. 5" capacity between centers, three-inch swing. Two index plates provide almost any division between 2 and 48. Includes a dog for holding work. 6 lbs.

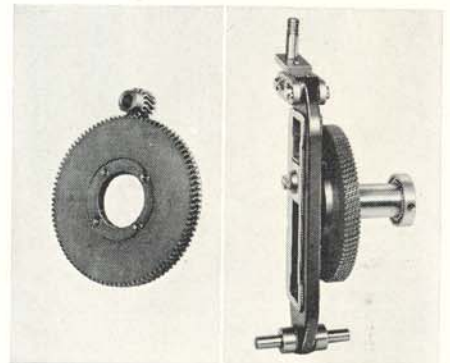
No. 27-890 4" Rotary table, with work surface of 4" diameter. Has three "T" slots on the face for clamping and holding a variety of parts that require slotting, etc. 5 lbs.

No. 27-895 Angle Plate for holding irregularly shaped work which cannot be held in the vise. Angle plate can be clamped to the top or side of the table for use in either position. 2 lbs.

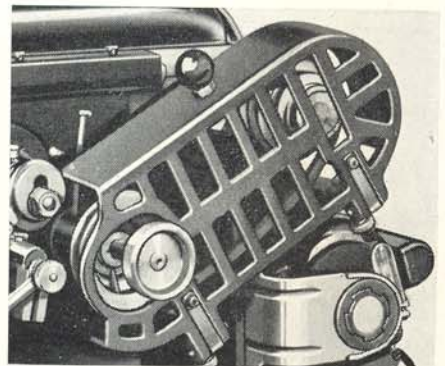
No. 27-900 Round Keyway Tool Holders, 7/16" diameter, for inside work, such as keyways and slotting. 1 lb.

No. 27-901 Round Keyway Tool Holder, 5/8" diameter, for inside work, such as keyways and slotting. 1 lb.

Motor recommended: No. 60510. For complete listing of motors and switches see page 64.



Spiral cut bull gear and pinion give you smooth, quiet operation.



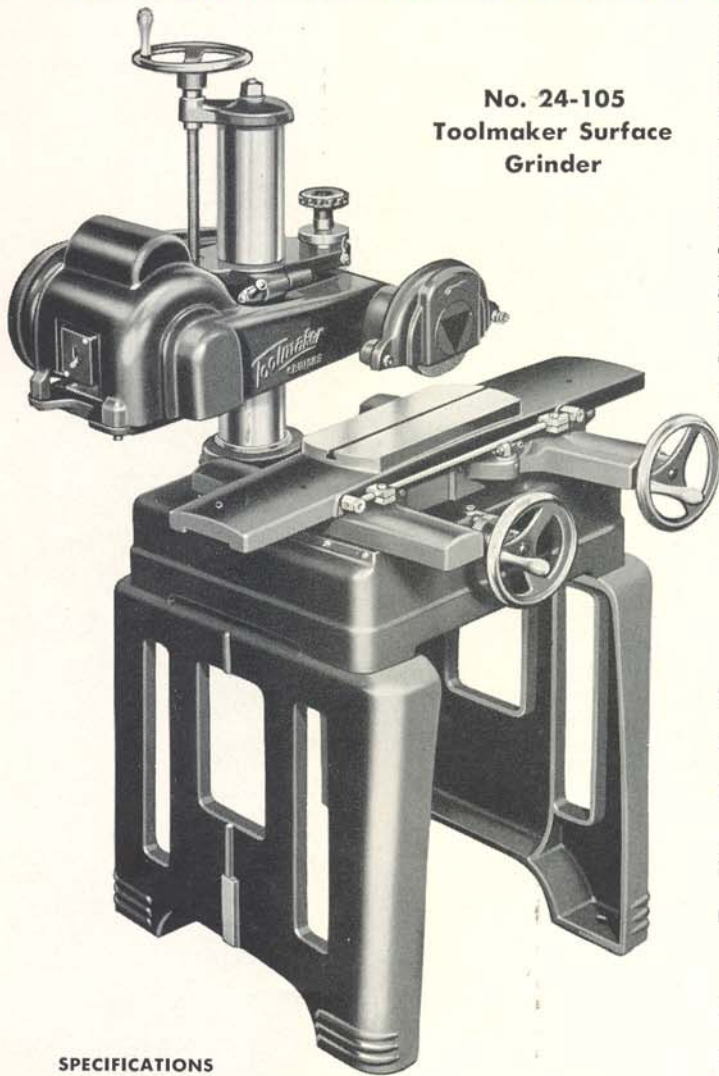
All pulleys and belts are completely guarded.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Toolmaker® Surface Grinder Combines Accuracy with Unusually Low Cost



**No. 24-105
Toolmaker Surface
Grinder**

SPECIFICATIONS

Maximum length can be ground.....	13½"
Maximum width can be ground.....	6"
Maximum space under 7" wheel to table.....	11½"
†Maximum space under 7" wheel to Brown and Sharpe No. 510 Magnetic Chuck.....	8"
Maximum diameter cup wheel with standard guard in place.....	3½"
Maximum diameter of wheel.....	7"
Required diameter wheel hole.....	1¼"
Table surface.....	5¾" x 13"
Traverse feed, one graduation.....	.001"
Maximum vertical adjustment of wheel by means of micrometer.....	¾"
Graduations, vertical adjustment.....	.0005"
Spindle speed with 1725 r.p.m., 60 cy. motor.....	3200 or 4200 r.p.m.
Wheel, diamond wheel dresser and light attachment not furnished with machine.	
†No. 510 Brown & Sharpe Magnetic Chuck not sold by us. Obtain direct from manufacturer or his distributors.	

DUST COLLECTOR PROTECTS TOOLMAKER GRINDER — SAFEGUARDS HEALTH!

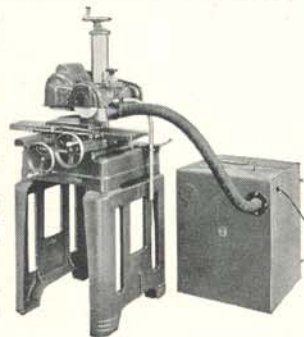
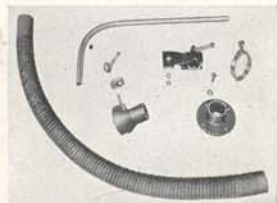
The Dust Collector described on page 29 works exceptionally well on the Toolmaker Grinders because it collects all abrasive metallic dust which otherwise would injure the grinder. It also protects the health of the operator.

For your convenience an Attachment Package has been developed so that the Dust Collector can be easily and quickly attached to the Toolmaker Grinder.

The Attachment Package illustrated is available, containing all the necessary fittings, hose and couplings for a good, efficient hook-up.

Choose the Dust Collector you desire from the listing on page 31 together with this Attachment Package to hook up the Dust Collector to the Toolmaker Grinder.

No. 24-819—Dust Collector Attachment Package for Toolmaker Grinders, complete as illustrated. 19 lbs.



The Toolmaker Surface Grinder is a big machine, standing over 6 feet high and weighing better than 800 lbs. It has the "beef" needed for a machine of this kind, where massiveness and solidity help to produce accurate work.

The spindle shaft is designed to preserve accuracy. The wheel is clamped into the two-piece adapter mounted on the spindle. Rapid vertical adjustments made by means of large handwheel at top of column . . . close adjustments made with micrometer screw. Wheel Adapter saves time on truing-up operations. Complete wheel and adapter can be removed as unit and put back on without further truing-up. Column is husky in construction, cast of high tensile steel. The table is smooth, has long ways for solidity and is provided with gibs to adjust for wear.

For every type of surface grinding, in the tool room or in the production shop, you cannot find a better machine in this price range. Its large capacity, ease of operation, its fine adjustment and micro-settings are a few of its better points.

CATALOG LISTING

No. 24-105 Toolmaker Surface Grinder (for 1425 and 1725 R.P.M. motors) with No. 1399 pair of cast iron legs, No. 24-816 wheel adapter, holder for wheel dresser, one No. 49-115 V-belt and No. 24-817 two-step motor pulley (for 50 or 60 cycle service) with ½" bore. Without Wheel, Motor or Switch. 850 lbs.

Accessories for all three types of Toolmaker Grinders.

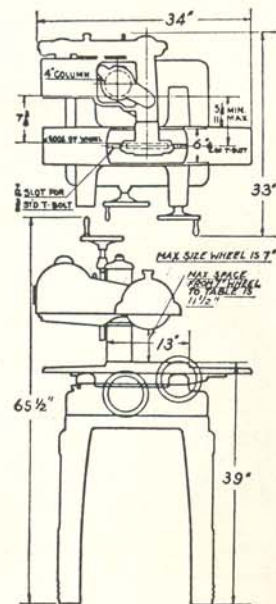
- No. 24-805**—Diamond Wheel Dresser for Toolmaker Grinder. Shipping weight ½ lb.
- No. 24-807**—7" diameter x ½" face wheel for soft material. Bore 1¼". Balanced to within 1/10 inch ounce. Shipping weight 2 lbs.
- No. 24-808**—7" diameter x ½" face wheel for hard material. Bore 1¼". Balanced to within 1/10 inch ounce. Shipping weight 2 lbs.
- No. 24-812**—Velocite-E Spindle Oil. ½ Pt. Can.
- No. 24-815**—Light Attachment complete for attaching to separate 115 V. single phase line. Shipping weight 4 lbs.
- No. 24-816**—Extra Wheel Adapter for 1¼" bore wheels. Arranged to fit on tapered spindle for holding up to ½" wide wheels and arranged with extra washers so a 3½"x1½" cup wheel may be used. Shipping weight 2 lbs.
- No. 24-817**—Two-Step Motor Pulley, ½" bore (5-15/32" and 5-1/16"). 2 lbs.
- No. 49-115**—Replacement V-belt. ½ lb.

MOTORS RECOMMENDED: No. 62-610, 66-320. (Requires special balance.)

For complete Motor and Switch listing see Page 64.

IMPORTANT — All three types of Toolmaker Grinders require a specially balanced motor for most efficient operation. When ordering motors, order motor pulley and V-belt together, all balanced together with the motor. For complete listing of motors and switches see page 64.

(For Prices See Attached Price List)

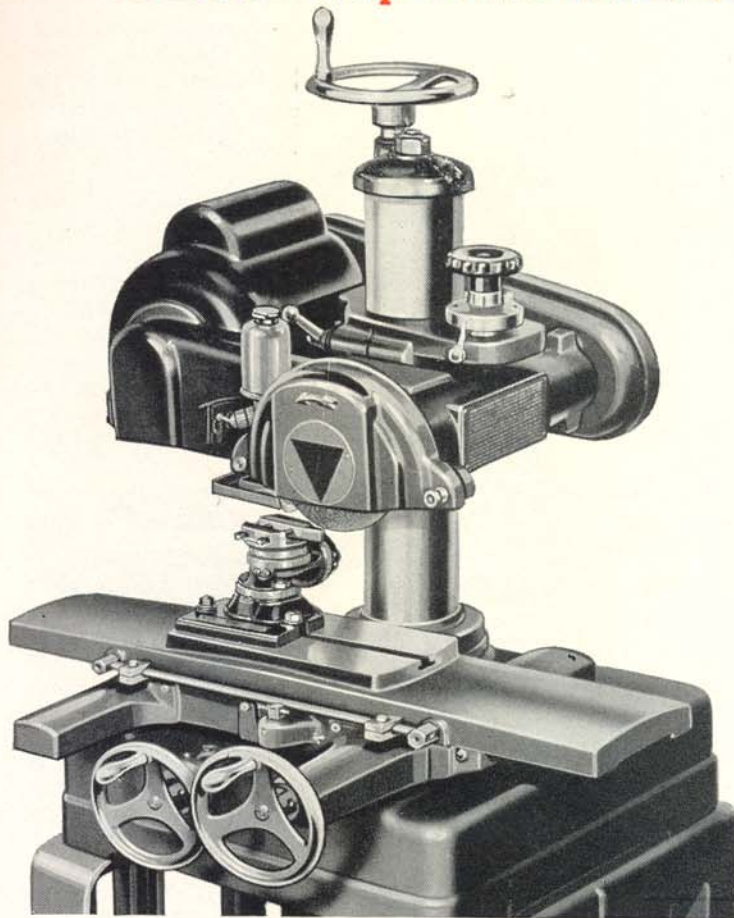


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Toolmaker® Chip-Breaker Grinder Sets New Standards of Performance



THE TOOLMAKER CHIP-BREAKER GRINDER

No. 24-205 Toolmaker Chip-Breaker Grinder (for 1425 and 1725 RPM Motors) with No. 1399 pair of Cast Iron Legs, No. 24-816 wheel adapter, holder for wheel dresser, No. 49-115 V-belt, No. 24-817 two-step motor pulley with 1/2" bore, No. 24-902 Univise and No. 24-906 Coolant Attachment. Without Wheel, Motor or Switch. 866 lbs.
 Wheel, diamond wheel dresser or light attachment not furnished with machine.
Motors Recommended: No. 62-610, 66-320. (Requires Special Balance.)
 For Accessories see page 28. For listing of Motors and Switches see page 64.

THE UNIVISE® — The First Truly Universal Vise for Grinding, Drilling and Milling

The Univise is a heavy, rigid, massive vise completely universal so that it can be set at ANY angle desired. It is composed of four separate parts, each of which can be rotated and independently set so that there are four separate distinct planes of adjustment. This means that ANY angle desired can be easily and readily obtained. It means, also, that for duplicate grinding that the vise can be returned EXACTLY to its original setting. There is no guess-work, no trial and error method of getting the proper angle or setting. You can be sure, even with green help, that the settings are going to be correct.

Each part has a circular scale of 360 degrees. Each station is marked so that by making a record of the setting of each scale it is impossible to make an error. Thus settings can be made direct from the blueprint without fuss or bother. Two of the parts rotate a full 360 degrees. It is 5-13/16" high, 6" wide and 7 1/4" long. Jaws take up to 1 1/2" tools. Fits any surface or tool grinder. Has detachable keys in base which can be removed to permit use on drill press or other machine without table slots, or on a magnetic chuck.

No. 24-902—Complete Univise as illustrated. 17 lbs.

Efficient Coolant Attachment

The Coolant Attachment is an added feature. Resinoid bonded diamond wheels used for chip-breaker grinding must be cool while grinding to prolong wheel life and efficiency. The coolant attachment provides just the proper amount of coolant for this purpose. The drop-feed is adjustable to regulate the amount of coolant which is brought to the wheel by means of a wick. This wick also helps keep the wheel clean. The attachment is easily adjusted to different size wheels and can be easily and quickly removed if necessary.

No. 24-906—Complete Coolant Attachment as center illustration to the right. 3 lbs.

(For Prices See Attached Price List)

ALL of the best features of good grinder design are incorporated in this Chip-Breaker Grinder plus many exclusive, improved features not found in units costing many times as much.

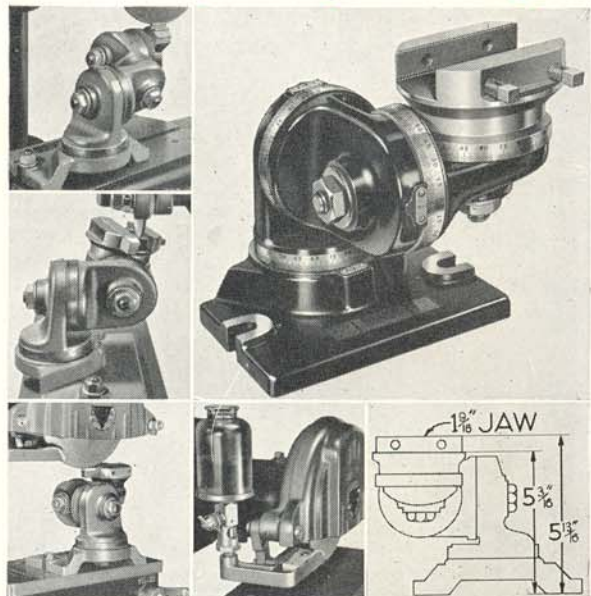
To these have been added the features of the truly universal Univise—a unit of exceptional value. It is described in detail below. A coolant attachment provides just the proper amount of liquid to the wheel at the point of grinding.

The Chip-Breaker Grinder is a precision machine designed for the grinding of the Chip-Breaker groove in carbide tipped tools. It also is used for grinding form tools, thread chasers and other units which must be accurately ground. The Univise holds the tool AT ANY CONCEIVABLE ANGLE and through its unique construction it can be accurately reset at a moment's notice so that the tool or part may be re-ground at precisely the same angles as originally set. This saves time, wheel wear, eliminates bothersome and often inaccurate measurements. By simply removing the Univise and the coolant attachment, the grinder may be used as a regular surface grinder which thus increases the usefulness of this machine in both the large and small shop. This machine also is heavy and big. Its weight of better than 800 pounds gives it solidity which helps in producing accurate work.

Study the features of this remarkable Chip-Breaker Grinder—compare it with any similar machine, and you will be surprised at its performance and remarkably low price.

SPECIFICATIONS

Maximum length can be ground.....	13 1/2"
Maximum width can be ground.....	6"
Maximum space under 7" wheel to table.....	11 1/2"
Maximum diameter cup wheel with standard guard in place.....	3 1/2"
Maximum diameter of wheel.....	7"
Required diameter wheel hole.....	1 1/4"
Table surface.....	5 3/4" x 13"
Traverse feed, one graduation.....	.001"
Maximum vertical adjustment of wheel by means of micrometer.....	3/8"
Graduations, vertical adjustment.....	.0005"
Spindle speed with 1725 r.p.m., 60 cy. motor.....	3200 or 4200 r.p.m.



DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Toolmaker® Tool and Cutter Grinder Has Many Features

It's Easy and Economical to Sharpen Milling Cutters, Reamers, Taps, End Mills and many other cutting tools on the Delta Toolmaker Tool & Cutter Grinder.

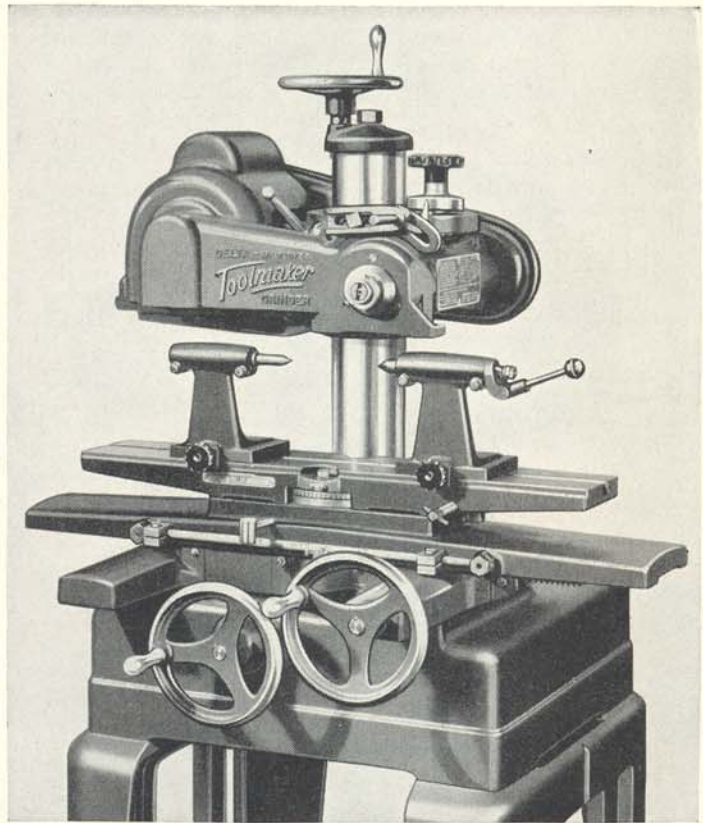
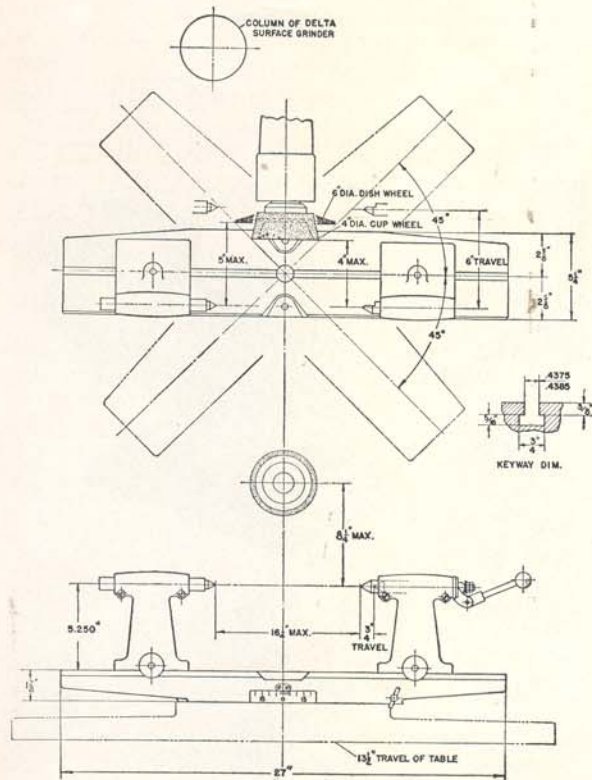
The grinding, that is, sharpening and re-sharpening of tools and cutters used in various metal cutting machines is of major importance for maximum production and accurate results. To make the sharpening operations easy, simple and extremely accurate, this Tool and Cutter Grinder has been developed.

Almost every conceivable angle can be accurately and easily ground. Table swivels a full 90 degrees with a graduated scale and positive lock—the centers have a maximum spacing of 16¼", distance from table to centers is 5.250" (see line sketch below for all dimensions).

By simply removing the Tool and Grinder Attachment, the grinder may be used as a regular surface grinder, which thus increases the usefulness of this machine in both the large and small shop.

Specifications

- Speeds (Spindle has two-step pulley)
- With 60-cycle motor.....3200 or 4200 RPM
 - With 50-cycle motor.....2700 or 3500 RPM
- Surface Speed (1750 RPM motor with 7" wheel)....5600 FPM
- Table Surface5¾"x 13"
- Required diameter wheel hole1¼"
- Traverse feed, one graduation......001"
- Maximum vertical adjustment of wheel by means of micrometer......¾"
- Graduations, vertical adjustment0.0005"
- Spindle speed with 1725 r.p.m., 60 cy. motor . .3200 or 4200 r.p.m.
- For complete listing of motors and switches, see page 64.



CATALOG LISTING

No. 24-305 Toolmaker Tool and Cutter Grinder (for 1425 and 1725 RPM motors). With No. 1399 pair of cast iron legs, No. 24-816 wheel adapter, holder for wheel dresser, No. 49-115 V-belt, No. 24-817 two-step motor pulley, with ½" bore (for 50 and 60 cycle service). No. 24-952 grinding attachment with swivel table, head and tail stocks and No. 24-970 tooth stop unit, 2 wheel guards and support bracket. Without wheels, motor or switch. Shipping weight 928 lbs.

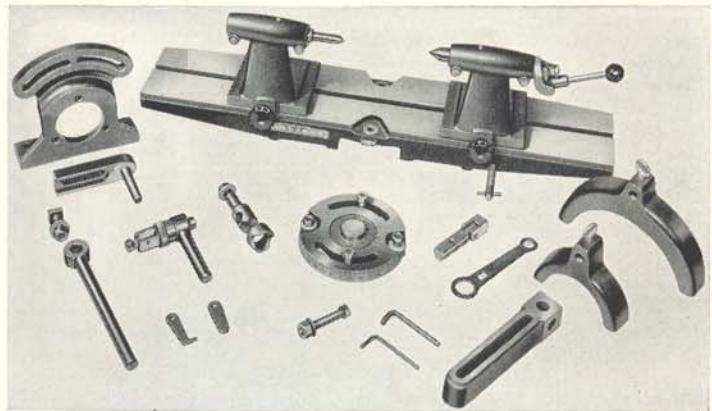
Wheel, diamond wheel dresser and light attachment not furnished.

Motors Recommended: No. 62-610, 66-320. (Requires Special Balance.)

For complete listing of Motors and Switches see Page 64.

ACCESSORIES

- No. 24-973**—Type 12 standard dish wheel, 6" diameter x ½"-⅝" with 1¼" hole. Shipping weight 5 lbs.
- No. 24-974**—Type 11 standard cup wheel 4" diameter x 1½" with 1¼" hole. Shipping weight 5 lbs.
- See page 28 for other accessories.



GRINDER ATTACHMENT

No. 24-952 Toolmaker Tool and Cutter Grinding Attachment consisting of swivel table with head and tail stocks, and tooth stop unit, 2 wheel guards and support bracket. Can be used on No. 24-105 and No. 24-205 Toolmaker-Grinder. Shipping weight 84 lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Unihead® With Indexing Feature Is Universally Adjustable Work Head For Grinder

The Unihead is a universally adjustable work head, designed for use in connection with the Toolmaker Cutter Grinder, and other makes of machines, especially if the No. 24-970 Tooth Stop Unit is used in connection with it.

This Unihead consists of a heat treated sleeve, arranged with a No. 9 Brown & Sharpe taper and accurately mounted in pre-loaded, sealed and lubricated-for-life ball bearings that need no further attention. The adjustable index stop collar and dog can be disengaged or be set in any position which is most convenient to the operator. It is equipped with a 12-tooth index collar with selector plate, which permits the dog to automatically engage either 2, 3, 4, 6, or 12 selected equal spaces. Other plain collars (without selector plate) are available as listed.

Has a push-out nut arranged at the back of the sleeve for pushing out tightly fitted adapters. Swivel bracket with 360 graduations. Base with removable keys that engage the table. Can also be used with tool and cutter grinding attachment No. 24-952.

Catalog Listing

No. 24-955 Unihead arranged with pre-loaded and sealed-for-life ball bearings, and sleeve for No. 9 B & S taper. With one 12-tooth collar with

selector plate to engage 2, 3, 4, 6, or 12 selected equal spaces. 28 lbs.

The No. 24-970 tooth stop unit not furnished. The indexing collars listed cover a varied range of combination spacing and should be ordered separately as required.

INDEXING COLLARS

No. 24-957—One 36-tooth plain collar for 2, 3, 4, 6, 9, 12, 18, and 36 equal spaces. ¾ lb.

No. 24-958—One 34-tooth plain collar for 17 and 34 equal spaces. ¾ lb.

No. 24-959—One 33-tooth plain collar for 3, 11, and 33 equal spaces. ¾ lb.

No. 24-960—One 32-tooth plain collar for 2, 4, 8, 16, and 32 equal spaces. ¾ lb.

No. 24-961—One 30-tooth plain collar for 3, 5, 6, 10, 15, and 30 equal spaces. ¾ lb.

No. 24-962—One 28-tooth plain collar for 4, 7, 14, and 28 equal spaces. ¾ lb.

No. 24-963—One 26-tooth plain collar for 13 and 26 equal spaces. ¾ lb.

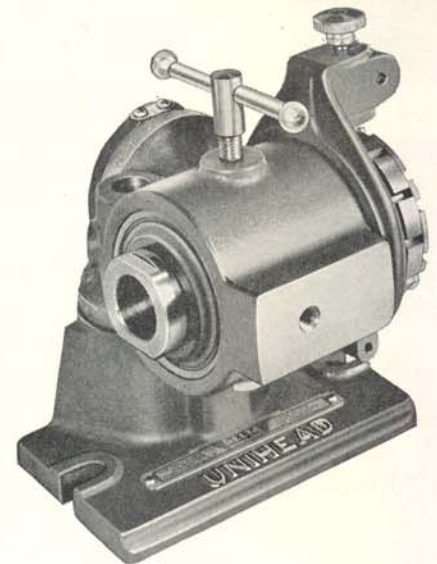
No. 24-964—One 24-tooth plain collar for 2, 3, 4, 6, 8, 12, and 24 equal spaces. ¾ lb.

No. 24-965—One blank collar. ¾ lb.

ADAPTERS

No. 24-967—Adapter for Unihead with No. 9 Brown & Sharpe outside taper arranged with 1"—8 R.H. threaded end to receive 6" Face Plate (Cat. No. 937.) 1¼ lb.

No. 24-968—Adapter for Unihead with No. 9 Brown & Sharpe outside taper arranged with No. 33 Jacobs taper to receive 6A Jacobs Chuck—½" capacity. 1¼ lb.



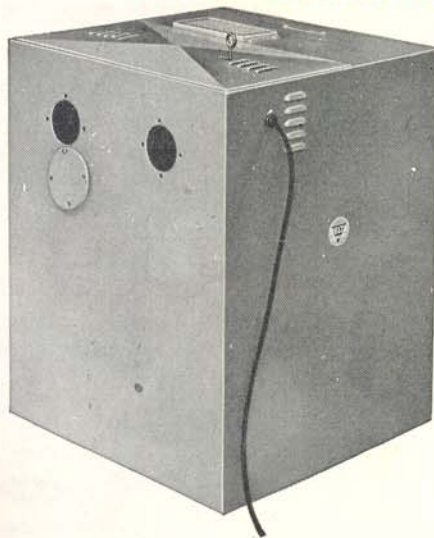
Tool Stop Unit

The Unihead uses the same tooth stop unit regularly furnished with the Tool and Cutter Grinder Attachment. Cat. No. 24-952. If the Unihead is to be used on another make of machine, it may be advisable to obtain the No. 24-970 Tooth Stop Unit.



No. 24-970—Tooth Stop Unit consisting of 1 bracket, 2 bars, 1 clamp and tooth stop with 2 fingers. 5 lbs.

Metal 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. A ½ H.P. lubricated-for-life ball bearing motor is used. Motor is in separate dust-proof compartment away from harmful dust. Fireproof, cleanable filter is readily removed for cleaning. Overall dimensions: Height 28", depth 21", width 22".

Ideal for grinding, 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, and is easily removed for cleaning. It need not be thrown away; when properly cleaned and oiled it will last indefinitely, reducing operating costs.

Note: This Dust Collector not suitable for collecting shavings and saw dust, etc.

Dust Collectors

49-520—½ H.P. 115/230 V. 60 cy. 1-Ph. 3450 rpm. 120 lbs.

49-521—½ H.P. 220/440 V. 50/60 cy. 3-Ph. 2850/3450 rpm. 120 lbs.

49-522—½ H.P. 115 V., D.C. 3450 rpm. 120 lbs.

49-523—½ H.P. 230 V., D.C. 3450 rpm. 120 lbs.

49-524—½ 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—Flex. Rub. Hose, 2-5/16" I.D.x22" long. 2 lbs.

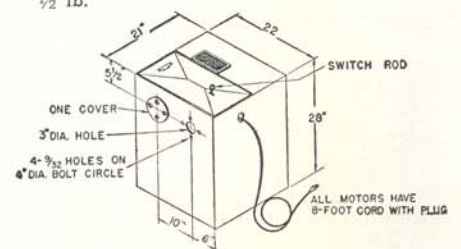
No. 49-534—Flex. Rub. Hose, 3" I.D.x22" long. 2 lbs.

No. 49-535—Flex. Rub. Hose, 3" I.D.x48" long. 5 lbs.

No. 49-538—Cast Iron Flanges with Screw and Nozzle for 2-5/16" hose. 2½ lbs.

No. 49-539—Cast Iron Flanges with Screw and Nozzle for 3" hose. 2¾ lbs.

No. 49-541—Hose Clamps adjustable to hose. ½ lb.



(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

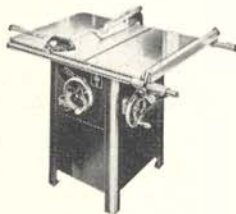
600 E. VIENNA AVE. MILWAUKEE 1, WIS.



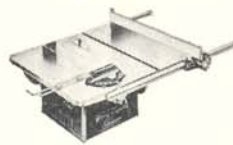
12" Tilting Arbor Saw



10" Tilting Arbor Saw



8" Tilting Arbor Saw



8" Tilting Table Saw



10" Tilting Table Saw



24" Scroll Saw



12" Disk Abrasive Finisher



6" Belt Abrasive Finisher

DELTA

MILWAUKEE



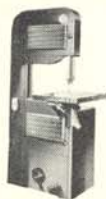
The most



11" and 12" Wood Lathe



36" Band Saw



20" Band Saw



14" Band Saw



Cabinet Shaper



Spindle Shaper



24" Planer



18" Planer



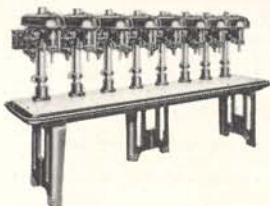
13" Planer



10" Saw — 6" Jointer Combination



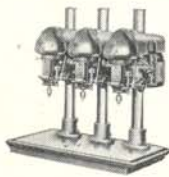
8" Saw — 4" Jointer Combination



17" Drill Press (Multiple Spindle)



14" Super-Hi Drill Press (Bench Model)



14" Super-Hi Drill Press (Multiple Spindle)



14" Drill Press (Bench Model)



14" Drill Press (Floor Model)



Abrasive Cut-Off Machine



Non-Ferrous Cut-Off Machine



Wood Cut-Off Machine



Surface Grinder



Chip-Breaker Grinder

DELTA

MULTIPLEX

CRESCENT

DELTA

MULTIPLEX

SAFETY PLUS! 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, 5/8" hole. Absolutely true and vibrationless to permit accurate tool grinding.

TOOL RESTS: Fully machined—not rough castings. Are fully 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 wear 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 New Departure ball bearings. No oiling required for entire life of bearing. No trouble due to entrance of abrasive dust.

BENCH TYPE MOTOR DRIVEN GRINDERS

Mach. No.	Motor Description	Speed R.P.M.	H.P.	Motor Switch	Ship. Wt. Lbs.
23-104	115 V. 60 Cy. Sgl. Ph.	1725	1/2	Toggle	95
23-105	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	95
23-109	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	95
23-111	230 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	95
23-112	230 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	95
23-115	220 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	None	95
23-118	440 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	None*	95
23-120	115 V. D. C.	3450	1/2	Toggle	95
23-121	230 V. D. C.	3450	1/2	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 V. 60 Cy. Sgl. Ph.	1725	1/2	Toggle	166
23-405	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	166
23-407	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Relay	182
23-409	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	166
23-410	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Relay	182
23-411	230 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	166
23-412	230 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	166
23-415	220 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	Relay	181
23-418	440 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	Relay*	181
23-420	115 V. D. C.	3450	1/2	Toggle	166
23-421	230 V. D. C.	3450	1/2	Toggle	166

1725 R.P.M. Grinders available on special order, supplied at same price as corresponding 3450 R.P.M. Models.

* Separate Toggle Switch for Twin Lites is furnished.

MOTOR DRIVEN BUFFING MACHINES

No. 23-255—Bench Type, 115 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. 23-475—Pedestal Type, 115 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.

3450 R.P.M. = 6322 Feet per Minute Using 7" Wheel

2850 R.P.M. = 5223 Feet per Minute Using 7" Wheel

ACCESSORIES

Cat. No.	Description	Wt. Lbs.
*1245	3/4" x 7" Aluminum Oxide Wheel, 60 Grit, Grade N, 5/8" Hole	2
*1247	3/4" x 7" Aluminum Oxide Wheel, 46 Grit, Grade M, 5/8" Hole	2
1267	5/8" x 7" Vit. Al. Oxide Wh., 46 Grit, Grade N, 5/8" Hole	2
1250	Special friable wheel for drill and plane blade grinding	3
1236	Twin-Lite Shield (One Only) No Bulbs	1
1237	Fine-knotted Wire Brush, 5/8" Hole, 6" Dia.	3
1238	Medium-knotted Wire Brush, 5/8" Hole, 6" Dia.	1
1280	Coarse-knotted Wire Brush, 5/8" Hole, 6" Dia.	1
23-805	Bayonet Type Lamp Bulb	1
*23-815	Pedestal for Standard Grinders	80
*23-816	1" x 7" Al. Oxide Wheel, 60 Grit, Grade N, 5/8" Hole	4
*23-816	1" x 7" Al. Oxide Wheel, 46 Grit, Grade M, 5/8" Hole	4

*Grinders prior to Serial No. 18-1403 take No. 1245 and No. 1247 grinding wheels. Subsequent grinders take No. 23-815 and No. 23-816. When ordering replacement wheels, be sure to specify correct catalog numbers

(For Prices See Attached Price List)



SPECIFICATIONS

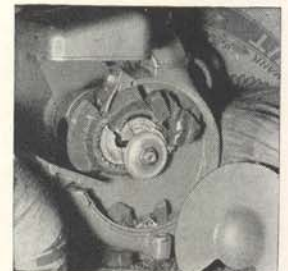
	Ped. Type
Base	14 1/4" x 16"
Width	23 1/4"
Depth	15"
Height	47 1/2"
Tool Rest from base	40"
Wheels	7" Dia., 1" Face, 5/8" Hole
	Bench Type
Base	8 1/2" x 8 1/2"
Width	23 1/4"
Depth	11"
Height	13 3/4"
Tool Rest from Base	6 5/8"
Wheels	7" Dia., 1" Face, 5/8" Hole

Pedestal Type

Bench Type

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?

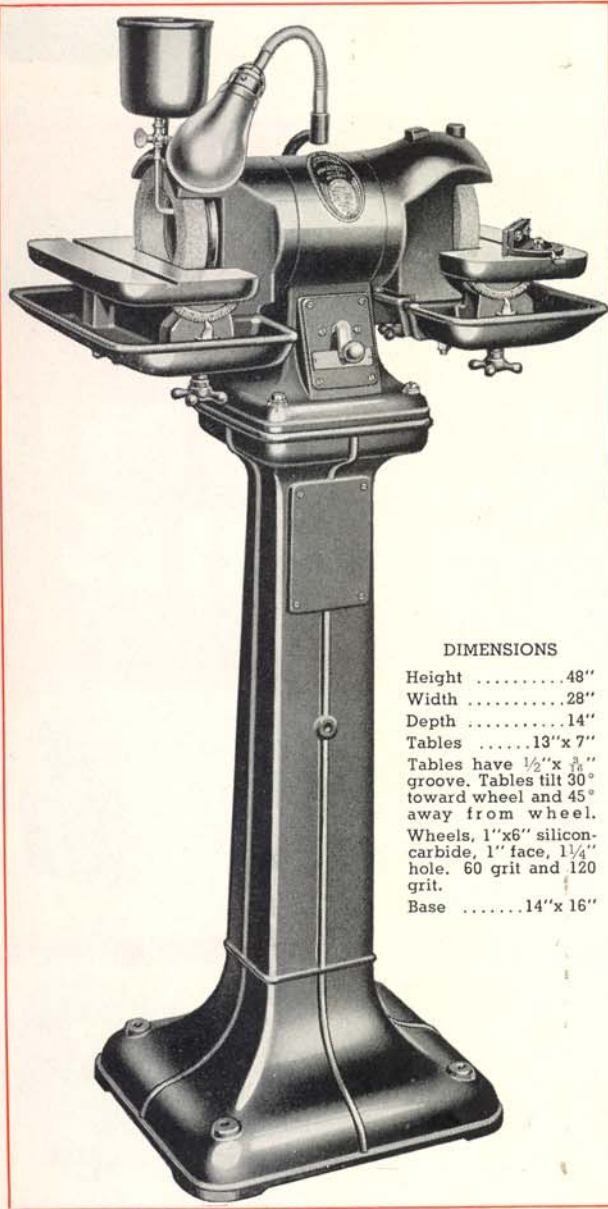


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Carbide Tool Grinder Unequaled for Accuracy and Long Life



DIMENSIONS

Height48"
 Width28"
 Depth14"
 Tables13"x 7"
 Tables have 1/2"x 3/8"
 groove. Tables tilt 30°
 toward wheel and 45°
 away from wheel.
 Wheels, 1"x6" silicon-
 carbide, 1" face, 1 1/4"
 hole. 60 grit and 120
 grit.
 Base14"x 16"

Because the use of tungsten-carbide tools is spreading so rapidly in machine shops, this carbide tool grinder has been developed. For accuracy, sturdiness, adaptability, general convenience and low cost, it cannot be duplicated by any other unit available.

It is another outstanding Delta achievement—incorporating the best principles of design which insure accuracy and long life. Manufactured by modern precision methods in a modern plant, its cost is so low that it can be used in any shop, large or small. This grinder together with the regular tool grinders shown on page 33 make a perfect set-up because on most carbide tools a coarse grit vitrified wheel is used for hogging down the shank steel of the tools which can be done on the regular grinder whereas the carbide grinder is used for sharpening the carbide tips of tools.

It is made in two styles—a bench and pedestal model with a wide range of motors as listed.

The motor with self-sealed ball bearings, which require no lubrication for their entire life, is contained in the head and is of the reversing type because the rotation of the wheels must be down against the cutting edge. The reversing switch is built into the base and is convenient. Manually operated brakes on each wheel permit the grinder to be slowed down and stopped immediately for reversing.

Two 1"x6" steel backed silicon-carbide wheels with a 1" face, and a 1 1/4" hole, are furnished—one of 60 grit and one 120 grit. These are mounted directly onto the motor shaft. The speed is 3450 R.P.M. which gives an average surface speed of the wheel of 5200 feet per minute. The grinder will take standard diamond wheels which we suggest should be obtained from your regular wheel source.

A heavy cast iron water pot with stop cock and copper tube is furnished for bringing water to the grinding surface on diamond wheels.

The heavy, accurately ground tables are 13" wide and 7" deep and tilt 30 degrees toward the wheel and 45 degrees away from the wheel as illustrated—accurate indicators and scale plates show the angle of the tables. The tables have a 1/2"x 3/8" groove for fixtures and jigs. A sliding gage with a tilting head is furnished with grinder.

The grinding of the carbide tool and the use of water results in a large amount of rusty sludge which collects in the water tray in the sub-base. With other grinders this is difficult to remove. With this new grinder this is a simple procedure. By simply loosening two bolts the entire sub-base can be removed from the grinder and the sludge scraped out and washed clean—thus you have a clean machine for accurate grinding at all times.

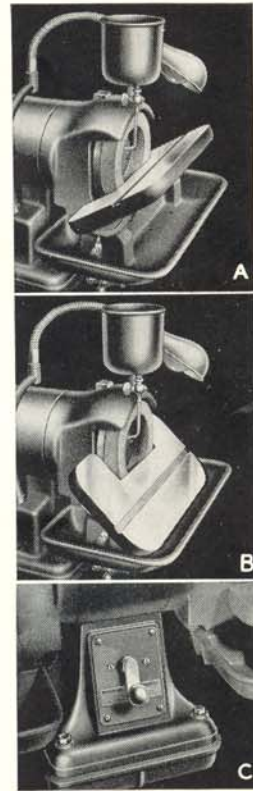
The adjustable light is another feature built into this grinder for your convenience. It swings from one side to the other but has a definite stop so that the wires cannot become twisted in the conduit. It provides light when you need it, where you need it, independent of general shop lighting.

So well is this machine built—so accurate is the machining that it runs absolutely true and free from vibration so that accurate, delicate grinding can be done.

(A) This photo shows detail of table tilted 30 degrees towards the wheel. Note indicator and accurate scale plate below table which shows table angle. Note also convenient arrangement of water pot and copper tube so that water can be brought to the wheel just where it is needed.

(B) This shows detail of table tilted 45 degrees away from wheel. Note hand brake block protruding from top of wheel housing. Note also how light can be swung around to give perfect illumination for accurate grinding.

(C) This shows detail of reversing switch conveniently located at front of grinder. It is of the six pole type and completely wired into the unit. This switch opens both sides of line.



Mach. No.	Motor Description	Speed R.P.M.	Ship. Wt. Lbs.
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BENCH TYPE MACHINES MOTOR IS 1/2 HORSE POWER

23-505	115 V. 60 Cy. Single Phase	3450	140
23-506	115 V. 50 Cy. Single Phase	2850	140
23-507	230 V. 60 Cy. Single Phase	3450	140
23-508	230 V. 50 Cy. Single Phase	2850	140
23-510	220/440 V. 50/60 Cy. 3 Phase	2850/3450	140
23-515	115 V. D. C.	3450	140
23-516	230 V. D. C.	3450	140

PEDESTAL TYPE MACHINES MOTOR IS 1/2 HORSE POWER

23-555	115 V. 60 Cy. Single Phase	3450	211
23-556	115 V. 50 Cy. Single Phase	2850	211
23-557	230 V. 60 Cy. Single Phase	3450	211
23-558	230 V. 50 Cy. Single Phase	2850	211
23-560	220/440 V. 50/60 Cy. 3 Phase	2850/3450	211
23-565	115 V. D. C.	3450	211
23-566	230 V. D. C.	3450	211

All models have 1 lamp attachment, 1 water pot, 1 miter gauge and 2 wheels. When manual starter with overload protection is desired, use No. 1320 manual starter.

(For Prices See Attached Price List)

Accessories for Carbide Tool Grinder

Cat. No.	Description	Ship. Wt. Lbs.
1661	1"x6" Sil. Carb. Wh. 60 G., 1" Face, 1 1/4" Hole	10
1662	1"x6" Sil. Carb. Wh. 120 G., 1" Face, 1 1/4" Hole	10
1663	One Water Pot with Faucet	5
1664	Holder for Diamond Wheel Dresser	1
3121	Dressing Tool	1
23-805	Pedestal for Carbide Grinder	80

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

SAFETY PLUS! 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, 5/8" hole. Absolutely true and vibrationless to permit accurate tool grinding.

TOOL RESTS: Fully machined—not rough castings. Are fully 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 wear 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 New Departure ball bearings. No oiling required for entire life of bearing. No trouble due to entrance of abrasive dust.

BENCH TYPE MOTOR DRIVEN GRINDERS

Mach. No.	Motor Description	Speed R.P.M.	H.P.	Motor Switch	Ship. Wt. Lbs.
23-104	115 V. 60 Cy. Sgl. Ph.	1725	1/2	Toggle	95
23-105	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	95
23-109	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	95
23-111	230 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	95
23-112	230 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	95
23-115	220 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	None	95
23-118	440 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	None*	95
23-120	115 V. D. C.	3450	1/2	Toggle	95
23-121	230 V. D. C.	3450	1/2	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 V. 60 Cy. Sgl. Ph.	1725	1/2	Toggle	166
23-405	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	166
23-407	115 V. 60 Cy. Sgl. Ph.	3450	1/2	Relay	182
23-409	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	166
23-410	115 V. 50 Cy. Sgl. Ph.	2850	1/2	Relay	182
23-411	230 V. 60 Cy. Sgl. Ph.	3450	1/2	Toggle	166
23-412	230 V. 50 Cy. Sgl. Ph.	2850	1/2	Toggle	166
23-415	220 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	Relay	181
23-418	440 V. 50/60 Cy. 3 Ph.	2850/3450	1/2	Relay*	181
23-420	115 V. D. C.	3450	1/2	Toggle	166
23-421	230 V. D. C.	3450	1/2	Toggle	166

1725 R.P.M. Grinders available on special order, supplied at same price as corresponding 3450 R.P.M. Models.

* Separate Toggle Switch for Twin Lites is furnished.

MOTOR DRIVEN BUFFING MACHINES

No. 23-255—Bench Type, 115 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. 23-475—Pedestal Type, 115 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.

3450 R.P.M. = 6322 Feet per Minute Using 7" Wheel

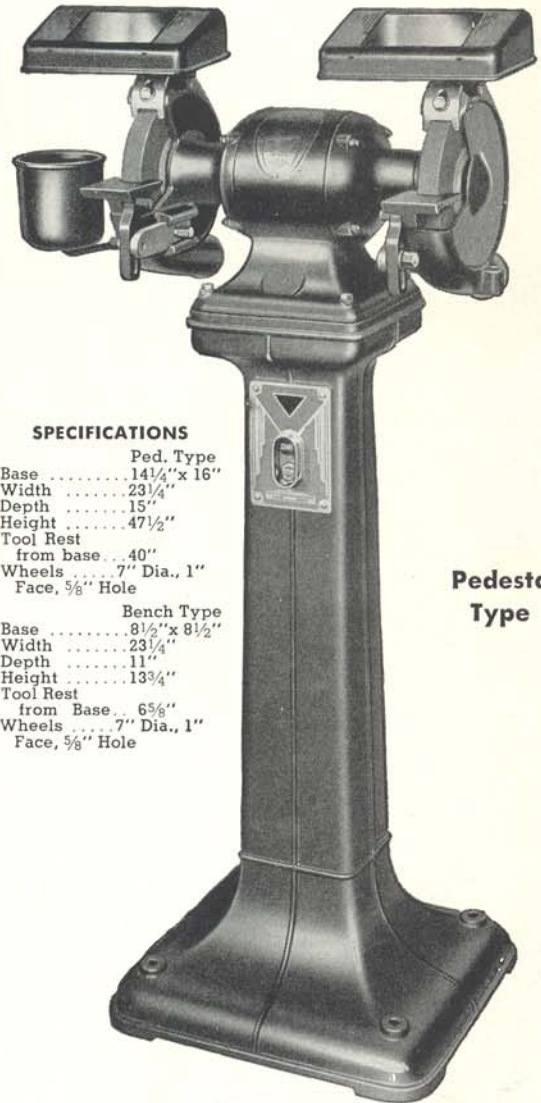
2850 R.P.M. = 5223 Feet per Minute Using 7" Wheel

ACCESSORIES

Cat. No.	Description	Wt. Lbs.
*1245	3/4" x 7" Aluminum Oxide Wheel, 60 Grit, Grade N, 5/8" Hole	2
*1247	3/4" x 7" Aluminum Oxide Wheel, 46 Grit, Grade M, 5/8" Hole	2
1267	5/8" x 7" Vit. Al. Oxide Wh., 46 Grit, Grade N, 5/8" Hole. Special friable wheel for drill and plane blade grinding	2
1250	Twin-Lite Shield (One Only) No Bulbs	3
1236	Fine-knotted Wire Brush, 5/8" Hole, 6" Dia.	1
1237	Medium-knotted Wire Brush, 5/8" Hole, 6" Dia.	1
1238	Coarse-knotted Wire Brush, 5/8" Hole, 6" Dia.	1
1280	Bayonet Type Lamp Bulb	1
23-805	Pedestal for Standard Grinders	80
*23-815	1" x 7" Al. Oxide Wheel, 60 Grit, Grade N, 5/8" Hole	4
*23-816	1" x 7" Al. Oxide Wheel, 46 Grit, Grade M, 5/8" Hole	4

*Grinders prior to Serial No. 18-1403 take No. 1245 and No. 1247 grinding wheels. Subsequent grinders take No. 23-815 and No. 23-816. When ordering replacement wheels, be sure to specify correct catalog numbers

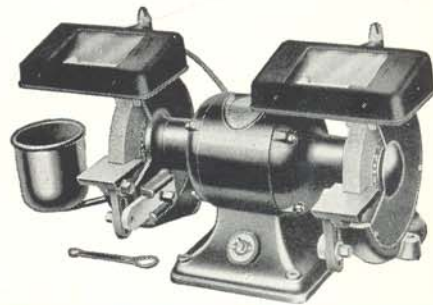
(For Prices See Attached Price List)



Pedestal Type

SPECIFICATIONS

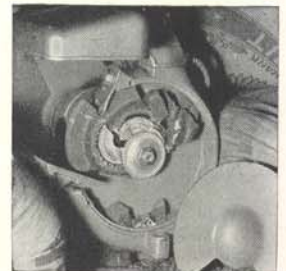
Base	Ped. Type
Width	14 1/4" x 16"
Depth	23 1/4"
Height	15"
Tool Rest	47 1/2"
from base	40"
Wheels	7" Dia., 1"
Face,	5/8" Hole
Base	Bench Type
Width	8 1/2" x 8 1/2"
Depth	23 1/4"
Height	11"
Tool Rest	13 3/4"
from Base	6 5/8"
Wheels	7" Dia., 1"
Face,	5/8" Hole



Bench Type

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 POWER TOOL DIVISION

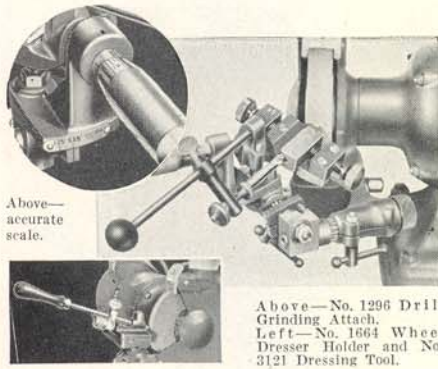
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Attachments and Accessories That Increase The Use Of Your Grinder

DRILL GRINDING ATTACHMENT

Grinds with the face of the wheel—the natural way—is a precision built unit so accurately made—so easy and simple to operate that anyone can do a perfect drill sharpening job. Micrometer settings insure evenly ground lips. Amount of lip clearance on drill is just right, with enough of the heel



Above—accurate scale.

Above—No. 1296 Drill Grinding Attach. Left—No. 1664 Wheel Dresser Holder and No. 3121 Dressing Tool.

cut away to provide clearance without weakening the cutting edge. You can grind the drill to fit your own job—with lip clearance and angles at any degree you need. Capacity $\frac{1}{8}$ " to $\frac{3}{8}$ " drills.

No. 1296—Drill Grinding Attachment with No. 1664 holder for wheel dresser. 9 lbs.

Diamond Pointed Wheel Dresser

For dressing all types of general grinding wheels. The diamond is securely held—the tool is sturdy— $9\frac{1}{4}$ " long and has a comfortable handle.

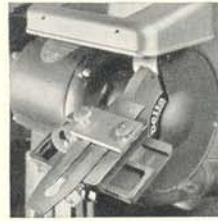
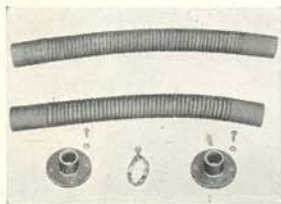
No. 3121—Diamond Pointed Wheel Dressing Tool, 1 lb.

No. 1664—Wheel Dressing Tool Holder, 1 lb.

Motor Driven Dust Collector for Grinder

The Dust Collector 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 outside the building by this Dust Collector during cold weather, but instead is circulated after being thoroughly cleaned. A special Attachment Package is available (illustrated below) to hook up the Dust Collector to the Grinder. See page 31 for Dust Collector desired.

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



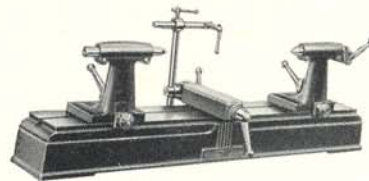
Plane Blade Grinding Attachment

Carriage table is clamped to adjustable arm on the grinder. Fully machined table tilts so that the desired angle is obtained. Plane blade is clamped onto carriage as shown—adjustable quadrant is located on left side which permits accurate grinding of angle knives as well as assuring an accurate right angle position for straight knives. Knurled nut below gives hair-line adjustment for the

amount of "Cut" when grinding. Entire carriage and clamp may be lifted off the table. Distance between clamp screws is $3\frac{3}{16}$ ", ample space for wide knives and scrapers. Diamond pointed wheel dresser may also be clamped into holder for wheel dressing.

No. 1294—Plane Blade Grinding Attachment, 6 lbs.

Bench Center Ideal for Inspection Departments Offers Convenience, Accuracy



Specifications: Maximum distance between centers $19\frac{1}{2}$ "; maximum dia. of work over bed $10\frac{1}{2}$ "; maximum dia. of work over support bracket base $7\frac{5}{8}$ "; overall length of bed 32"; width of bed $5\frac{1}{2}$ "; size of ground bed $4\frac{1}{2}$ "x30"; travel of center in tailstock $\frac{3}{4}$ ".

Heavy cast bed, fully normalized. Head and tailstocks identical castings and completely interchangeable. Knurled knob at front of each, locates stock against side of the milled T-slot in base. Stocks clamped in place by large handles at rear. Both stocks have hardened and ground 60° angle centers.

Tailstock has a spring loaded sliding center operated by lever at right. Universal indicator support bracket can be locked in any position on bed. Indicator Holder adjustable to any position. All parts lock in position with positive hand clamps. No wrenches or pliers needed.



No. 49-505—Bench Center without indicator support bracket. 87 lbs.

No. 49-506—Indicator Support Bracket with clamp screw. 7 lbs.

Motorless, Gravity Type Dust Collector For Grinder

Self contained. Needn't be connected to blower system. No additional power required. Completely portable. Efficient filters.

No. 1292—Dust Collector with filter brackets, screws, 28 lbs.

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



PORTABLE ELECTRIC BUTT WELDER FOR WOOD AND METAL CUTTING BAND SAW BLADES



Here is an electric welding unit for butt welding, either wood or metal cutting band saw blades.

Anyone with a few simple instructions can make a clean, perfect weld. The saw clamps are designed to grip the saw blade firmly and give positive and accurate alignment of the blade so that full electrical contact is obtained for a good weld. Only the flat portion of the blade is clamped. By turning the Tension Indicator handle to the "Weld" position and then turning on the electrical switch, the weld is automatically made. It then can be properly annealed—the heat being accurately controlled by means of a convenient trigger switch. The built-in bakelite grinding wheel allows the operator to remove all welding flash so that the blade makes a clean, smooth cut.

These operations are simple and direct. There is no "guess-work"—even the most inexperienced operator can do a perfect job.

Being entirely portable, the Butt Welder can be used

for several machines; thus it will take care of an entire battery of band saws.

Dimensions—Unit is 12" high, 8" wide and $8\frac{1}{4}$ " deep. On the steel stand it is 42" high. Available for 115 or 230 V., single-phase service only. Snap acting switch. Grinder built-in with ball-bearing motor. One Bakelite 46-grit grinding wheel furnished.

No. 28-905—Butt Welder as illustrated for $\frac{1}{8}$ " to $\frac{1}{2}$ " blades, with grinding wheel. For 115 V., 50 or 60 cycles, A.C., single-phase service. 101 lbs.

No. 28-907—Butt Welder as illustrated for $\frac{1}{8}$ " to $\frac{1}{2}$ " blades, with grinding wheel. For 230 V., 50 or 60 cycles, A.C., single-phase service. 101 lbs.

No. 28-908—Butt Welder as illustrated for $\frac{1}{8}$ " to $\frac{3}{4}$ " blades, with grinding wheel. For 230 V., 50 or 60 cycles, A.C., single-phase service. 131 lbs.

No. 28-910—Extra grinding wheel for Butt Welder; 46-grit. $2\frac{1}{2}$ "x $3\frac{3}{8}$ " with $\frac{5}{16}$ " hole. 4 lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

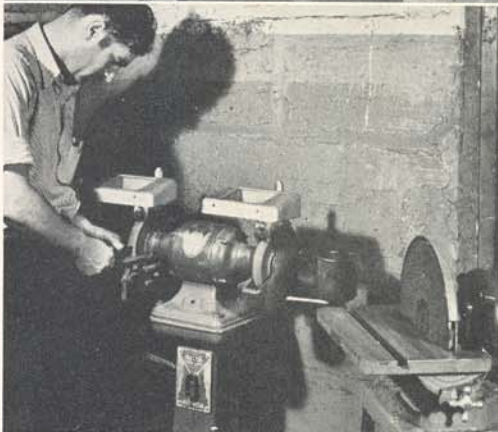
600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Delta Tools At Work — For Higher Production With Less Effort



Production dado work on the Delta Unisaw using a stop block and extension wood facing on the miter gage.

The 8" jointer has longer tables, efficiently handles larger stock.



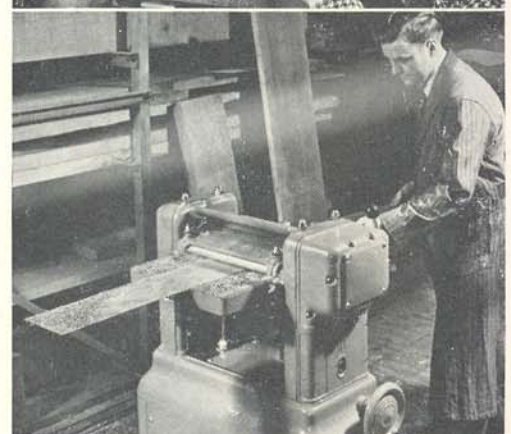
The standard tool grinder and the disk finishing machine . . . a perfect team for grinding, deburring, polishing.

No effort required to turn out high production . . . the Delta drill press makes friends among operators and foremen alike.



Vibrationless, accurate . . . for fine cutting — all materials—the Delta-Milwaukee scroll saw.

Thin veneer presents no problem to the Delta planer. Smooth, true surfaces are the end result of top quality construction throughout.



Outboard turning on the Delta lathe . . . Pattern shops value sturdy construction and large capacity.

The belt finishing machine set at an angle gives this operator a better working position. This means more production for the same amount of effort.

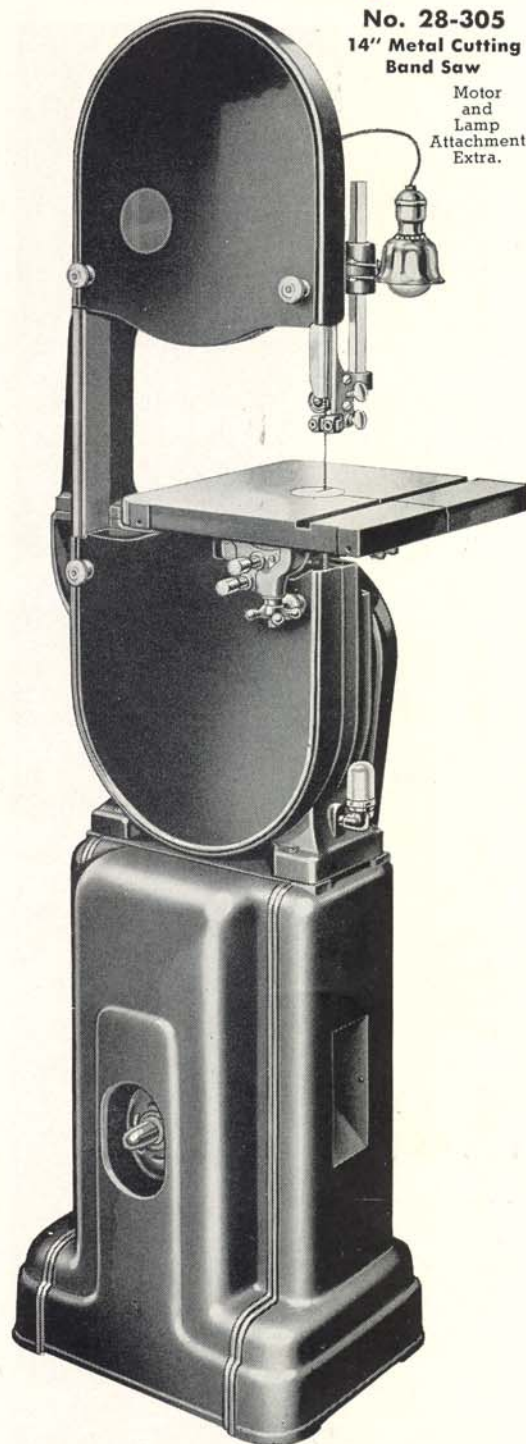


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

14-inch Metal Cutting Band Saw Is Ideal for Cutting Wide Range of Materials



No. 28-305
14" Metal Cutting
Band Saw

Motor
and
Lamp
Attachment
Extra.

This Delta-Milwaukee 14" Band Saw is used for cutting everything from carbon tool steel to asbestos with hundreds of other applications. It has four metal cutting speeds and one wood-cutting speed which makes it ideal for the pattern shop.

BEARINGS: Upper and lower wheels are carried on sealed, lubricated-for-life ball bearings. The use of these bearings insures trouble-free performance for the entire life of the bearings.

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. 3/8" x 3/4" 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 3/4" 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.....	13 3/4"
Under guide	6 1/4"
Under guide (with No. 894 Height Attachment).....	12 1/4"
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)	65 1/2"
Width	18 1/2"
Front to back	24 3/4"
Table size	14"x 14"
Table height from floor	42 3/4"
Table tilt to right	45°
Table tilt to left	10°
Blade length	93 1/2"

CATALOG LISTING

No. 28-305 Complete 14" Metal Cutting Band Saw with No. 886 Cast Iron 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, 440 lbs.

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. 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. 387—V-Belt 39 7/8" Out. Cir. (Metal Drive). 3/4 lb.

No. 718—4-step Motor Pulley (specify bore). 1 1/8 lbs.

No. 864—Auto-set Miter Gage, 4 lbs.

No. 882—Lamp Attachment with cord and plug. Less lamp bulb. 1 1/2 lbs.

No. 883—Belt Guard for use with stand. 12 lbs.

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

No. 1334—Switch Rod for use with No. 28-307.

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, 1/2" wide, 91" long. 1 lb.

No. 28-837—Five Garnet Sanding Belts, No. 40 Grit, Medium, 1/2" 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: 86-720, 82-710, 88-510. For complete listing of motors and switches see page 64.

METAL CUTTING BAND SAW BLADES

93 1/2 Inches Long

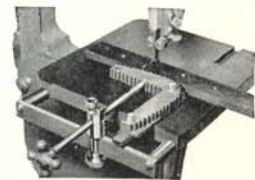
Made of high grade electric furnace steel, accurately set, spaced and jointed. These blades will stand up under hard work. These are hard-edge blades for cutting all metals.

Cat. No.	Width	Teeth Per Inch	Ship. Wt., Lbs.
1060	1/2"	14	1
1062	1/2"	18	1
1064	1/2"	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.



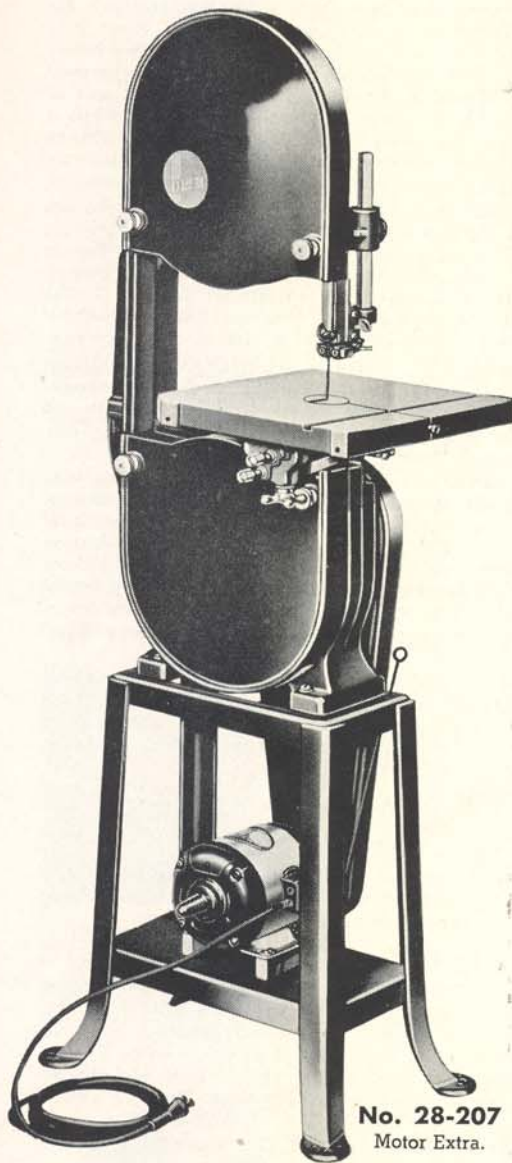
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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



No. 28-207
Motor Extra.

SPECIFICATIONS

Capacity: Blade to Frame	13 3/4"
Capacity: Under Guide	6 1/4"
Capacity: Under Guide (with height attach.)	12 1/4"
Speed with 1725 r.p.m. motor	2200 FPM.
Overall height	65 1/2"
Width	16 1/4"
Front to back	24 3/4"
Table size	14" x 14"
Table height from floor	42 3/4"
Table tilt to right	45°
Table tilt to left	10°
Blade length	93 1/2"

STANDARD BAND SAW BLADES

Width	Cut. Rad.	Teeth Per Inch	93 1/2" long	
			No. 1032	No. 1045
1/8"	1/4"	7	No. 1032	No. 1045
3/16"	1/2"	7	No. 1033	No. 1046
1/4"	3/4"	7	No. 1034	No. 1047
3/8"	1"	6	No. 1036	No. 1048
1/2"	1 1/4"	6	No. 1038	No. 1050
3/4"	1 3/4"	6	No. 1040	No. 1052

*Used with No. 894 Height Attachment.

Note: These blades can be used with Metal Cutting Band Saw listed on page 38.

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

TABLE: Massive 14"x14" table with a 3/8"x3/4" 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. 28-205 Complete 14" Wood Cutting Band Saw with No. 886 Cast Iron 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, 440 lbs.

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. 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. 1 1/2 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—2 3/4" Motor Pulley. Specify bore. 1/2 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, 1/2" wide, 91" long. 1 lb.

No. 28-837—Five Garnet Sanding Belts No. 40 Grit, Medium, 1/2" 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—(Old No. 891)—Steel Stand, top 8" x 16", height 24". 30 lbs.

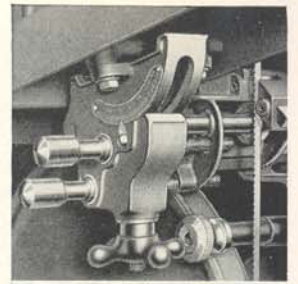
Motors Recommended: Heavy Duty 62-610, 62-650, 66-320. Medium Duty 62-110, 66-110. Light Duty 60-310, 66-110. For complete motor and switch listing see page 64.

SKIP TOOTH BAND SAW BLADES

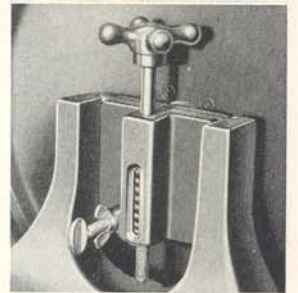
Ideal for Plastics, Wood, Aluminum, Magnesium, etc.

Width	Cut. Rad.	Teeth per Inch	93 1/2" Long	
			No. 28-884	No. 28-887
1/4"	3/4"	6	No. 28-884	No. 28-887
3/8"	1"	4	No. 28-885	No. 28-886
1/2"	1 1/4"	4	No. 28-886	No. 28-887
3/4"	1 3/4"	3	No. 28-887	No. 28-887

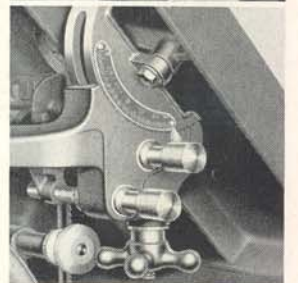
Notice the strong and accurate construction of the lower guide control and front table trunnion. All guide control adjustments at front of table for safety.



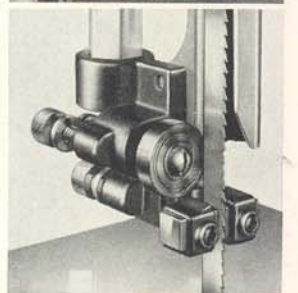
For added convenience and increased efficiency, upper wheel has blade tension adjustment. Quick index shows correct tension for various widths of blades.



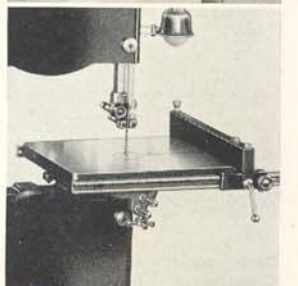
Two widely spaced trunnions 9 inches apart give maximum table rigidity, insures better clamping and greater accuracy. Table tilts 45° right and 10° left.



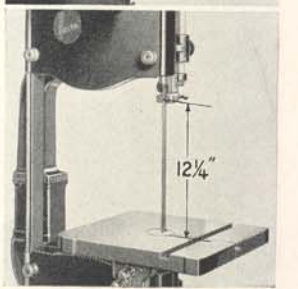
Micrometer adjustments of blade guides insure proper blade support for accurate work yet allow blade to run free. Guides and blade supports adjust independently.



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 6 1/4" under the guide to 12 1/4". Can be added at any time—105" blades are used.



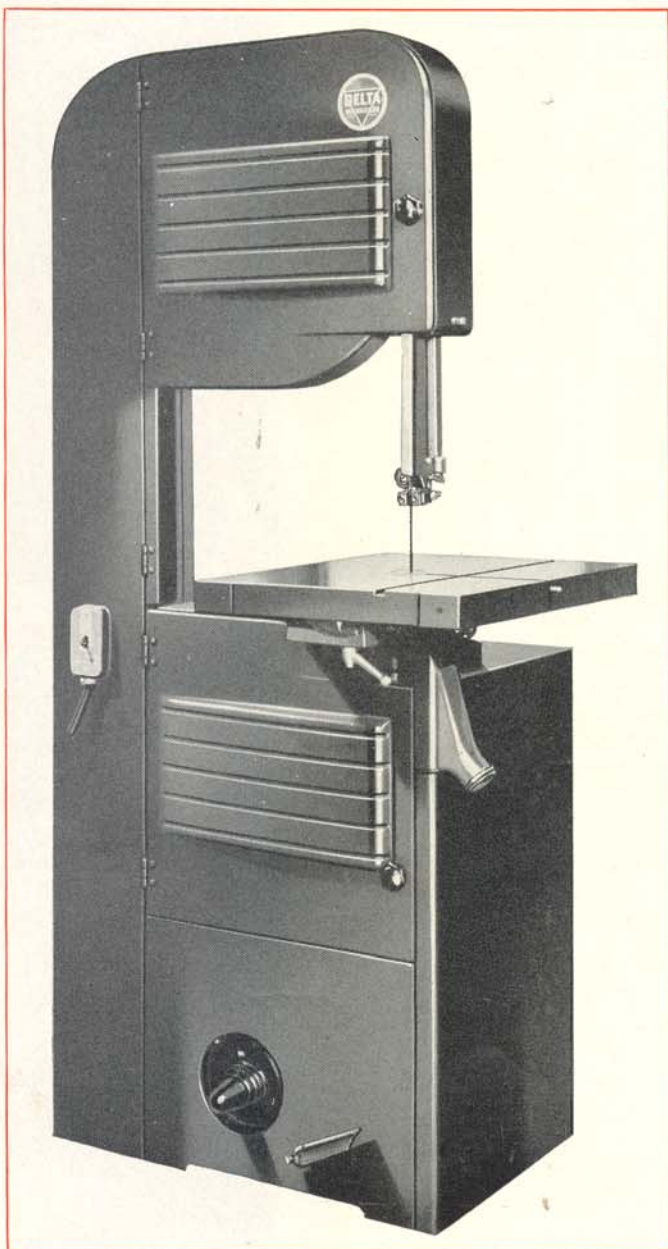
(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

20" Band Saw Offers More Convenience . . . Greater Capacity . . . Added Safety



HERE is a Ball Bearing Band Saw that's a Big Machine with Big Capacity . . . The table is 20 $\frac{3}{8}$ " wide and 24 $\frac{1}{4}$ " long. It is finish ground and has a $\frac{3}{8}$ " x $\frac{3}{4}$ " slot for the miter gage. Two heavy trunnions 17" apart on either side of the saw blade give table unusual support and rigidity. The table tilts 45 degrees to the right and 12 degrees to the left. It locks quickly in place at any angle, while a handy tilt scale shows the exact angle of cut. Adjustable "three point mountings" between working parts and welded steel frame are used throughout . . . You can always maintain exact alignment.

Ball Bearing blade guides both above and below the table provide accuracy and reduce blade breakage. Upper guide can be brought down against work . . . lower guide comes within 1 inch of bottom of work. Guides are "fully adjustable." Adjustments to finest degree can be made quickly with micrometer adjustment screws. Guides and blade supports set independently . . . you can adjust one without affecting the other. All adjustments easy to get at, safe, accurate. You get complete safety . . . a single unit, welded steel cabinet completely encloses all working parts . . . upper and lower wheels, saw blade, motor, etc. Doors provide quick access to wheels and motor. Front saw blade guard is adjustable up and down. Only actual working surface of blade is exposed.

Balanced aluminum wheels are 20 $\frac{1}{4}$ " in diameter, 1 $\frac{5}{8}$ " wide with 1 $\frac{3}{8}$ " wide tire. Wheels mounted in sealed-for-life ball bearings. Each wheel has a rubber tire providing cushion seat for saw blade. Blade tension control on upper wheel maintains proper blade tension . . . handy tension scale enables adjustment to particular job. Motor is mounted in base on pivot bracket which automatically provides for correct amount of belt tension. Convenient foot brake on lower wheel. Dust Chute carries away dust and chips . . . can be attached to dust collector.

You will find this new Delta-Milwaukee 20" Band Saw highly flexible in use . . . ideal for the pattern shop, school, cabinet maker and practically all wood shop operations. In addition, its metal cutting uses are many. It will cut plastics and soft metal such as brass, aluminum, copper, etc. with ease.

Two different types available:

1. The V-Belt Drive
2. The Direct Drive with Motor Installed

See your dealer today—check for yourself the many features found only in this Big, Rugged Band Saw. And the price—the lowest possible for its careful engineering and fine construction.

Catalog Listing V-Belt Drive

No. 28-350—20" Wood-Cutting Band Saw with Welded Steel Cabinet, sealed-for-life ball bearings, foot brake, dust chute, fully adjustable upper and lower blade guides, saw tension indicator, tilt table, pivoted motor bracket, two No. 49-140 A-section V-belts, 7" O.D. Machine pulley, 3 $\frac{1}{2}$ " O.D. Motor pulley (specify bore) and one No. 28-877 $\frac{3}{8}$ " wide saw blade. Without Miter gage, Motor or Switch. 670 lbs.

No. 49-140—Replacement A-section V-belt (2 required). 1 lb.

No. 864—Auto-Set Miter Gage. 4 lbs.

No. 882—Lamp attachment complete with cord and plug for 115-volt connection without bulb. 1 $\frac{1}{2}$ lbs.

Motors Recommended: 84-910, 86-920, 87-120. For complete listing of motors and switches see page 64.

Note: Three phase switch mounting parts not required.

Catalog Listing Direct Drive with Motor Installed

No. 28-351—20" Wood-Cutting Band Saw with Welded Steel Cabinet, sealed-for-life ball bearings, foot brake, dust chute, fully adjustable upper and lower blade guides, saw tension indicator, tilt table, and one No. 28-877 $\frac{3}{8}$ " wide saw blade. Lower wheel directly connected to a 1 H.P. 220/440 or 550 volt, 2 or 3 phase 50 or 60 cycle, 720/990 r.p.m., Frame P-225 motor, with No. 1320 overload push button starter. Complete with motor and switch, but without miter gage. (Be sure to specify operating current used.) 780 lbs.

No. 28-352—20" Wood-Cutting Band Saw with Welded Steel Cabinet, sealed-for-life ball bearings, foot brake, dust chute, fully adjustable upper and lower blade guides, saw tension indicator, tilt table, and one No. 28-877 $\frac{3}{8}$ " wide saw blade. Lower wheel directly connected to a ball bearing 1 H.P. single phase, 115/230 volt, 50 or 60 cycle, 720/900 r.p.m. motor with No. 1320 overload push button starter. Complete with motor and switch, but without miter gage. (Be sure to specify operating current used.) 780 lbs.

Note: For 115/230 volt, direct current or any single phase or poly-phase 25 cycle motor, or for other speeds apply to the factory.

(For Prices See Attached Price List)

SPECIFICATIONS

Blade to inside of column	19 $\frac{3}{4}$ "
Maximum Height under top Guide	13 $\frac{3}{8}$ "
Maximum Height under top wheel Frame	12 $\frac{1}{8}$ "
Saw Blade Speed with 3 $\frac{1}{2}$ " O.D. Motor Pulley	
With 1725 r.p.m. Motors	4500 f.p.m.
With 1425 r.p.m. Motors	3800 f.p.m.
Table size overall	20-3/16"x24 $\frac{1}{4}$ "
Table Height from floor	42 $\frac{3}{8}$ "
Table Tilt to Right	45 degrees
Table Tilt to Left	12 degrees
Distance table trunnions	.17" apart
Distance from front of table to center of saw	10 $\frac{1}{2}$ "
Distance from center of saw to rear edge of table	13 $\frac{1}{2}$ "
Miter Gage groove in table	$\frac{3}{8}$ " x $\frac{3}{4}$ "
Rubber Faced Wheel Diameters	20 $\frac{1}{4}$ " x 1 $\frac{3}{8}$ "
Maximum Width of Blade	1"
Blade Length	
Standard	141"
Maximum	142 $\frac{1}{2}$ "
Minimum	139"
Dust Chute connection diameter	2 $\frac{1}{4}$ " O.D.
Overall Height	78 $\frac{1}{2}$ "
Overall Width, including table	29 $\frac{1}{2}$ "
Overall Distance from front of table to back of frame	39 $\frac{1}{2}$ "
Total approximate weight without motor	550 lbs.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The Most Economical Band Saw You Can Buy

SAW BLADES FOR 20" WOOD-CUTTING BAND SAW

141" long. Blades that can be file sharpened. 3 lbs.

Cat. No.	Width	Birm. Ga.	Thick.	Teeth Per Inch	Min. Radius
28-875	3/16"	24	.022	5	1/2"
28-876	1/4"	24	.022	5	3/4"
28-877	3/8"	24	.022	5	1"
28-878	1/2"	24	.022	4	1 1/2"
28-879	3/4"	24	.022	4	2"
28-880	1"	24	.022	4	4"
28-881	3/4"	24	.022	3	For Resawing
28-882	1"	24	.022	2	For Resawing

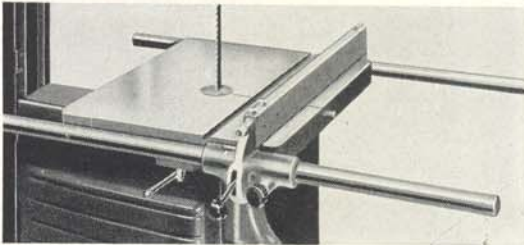
SKIP TOOTH SAW BLADES

141" Long — Economical to Use. 3 lbs.

Skip Tooth Hard-edge regular set band saw blades for materials such as plastics, wood, aluminum and magnesium or materials requiring extra gullet capacity for large chips. Also excellent for heavy cutting of wood. Teeth are hard, insuring extremely long life, cannot be filed but can be reground at a cost of about 1/2 the cost of a new blade. All blades are 141" long.

Cat. No.	Width	Birm. Ga.	Thick	Teeth Per Inch	Min. Radius
28-890	1/4"	23	.025	4	3/4"
28-892	1/2"	23	.025	4	1 1/2"
28-894	3/4"	21	.032	3	2"
28-896	1"	20	.035	2	For Resawing

RIP FENCE FOR 20" WOOD-CUTTING BAND SAW

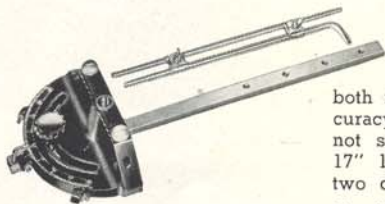


The rip fence on the 20" Band Saw extends from the front clear over the rear edge of the table. The fence locks to both front and rear guide bars. A quick acting cam lever locks it to the front guide bar while the rear lock is operated from the front with a knurled knob. . . . The rip fence bar itself is of strong, welded construction while the guide bars are heavy steel tubes. The guide bars extend to

left of the table and provide added capacity for use of fence on either side of the saw. Capacity 25" right of blade and 15 1/2" left of blade. All 20" Band Saw tables are drilled to accommodate rip fence.

No. 28-862—Rip Fence attachment with front and rear guide bars, micro-set fence, and screws for attaching guide bars. 29 lbs.

Auto-Set Miter Gage



An added convenience for saws and other machines. Has individual adjustable index stops—swings 60°

both right and left—tapered pivot insures accuracy—massive body gives full support, will not spring—heavy 3/8"x 3/4", miter gage bar 17" long—full 3/16" diameter stop rods with two clamps.

No. 864—Auto-Set Miter Gage. 4 lbs.

DELTA Ball bearing Motors Available for V-Belt Drive Machine

3/4" Shaft with 3/16"x3/32" Key-way. Double Shaft

Cat. No.	Type	H.P.	Cur.	Voltage	Cycles	R.P.M.
84-910	R.I.	1	A.C.	115/230	60	1725
86-920	3 Ph.	1	A.C.	220/440	50/60	1425/1725
87-120	3 Ph.	1 1/2	A.C.	220/440	50/60	1425/1725

Switch Parts

No. 1320—3-Phase manual starter for A.C. motors up to 2 H.P. and D.C. motors up to 1 H.P. 6 lbs.

No. 1321—3-Phase across-the-line magnetic starter, rating 2 H.P., 440 V., 60 cycle only. 6-lbs.

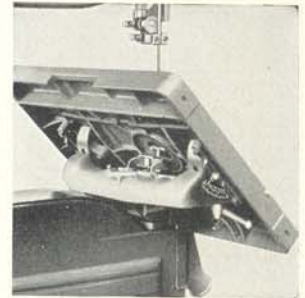
No. 1329—3-Phase across-the-line magnetic starter, rating 2 H.P., 220 V., 60 cycle only. 6-lbs.

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 1 Ph. and D.C. Motors. 3 lbs.

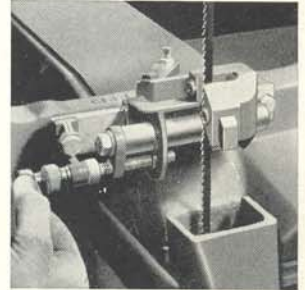
No. 49-315—3-wire Armoured Cable connection from "Motor to Switch" of 3-phase motors. Complete with necessary clamp fittings. (Can also be used for single phase and D.C. power and ground connectors.) 1 lb.

For complete listing of motors and switches see page 64.

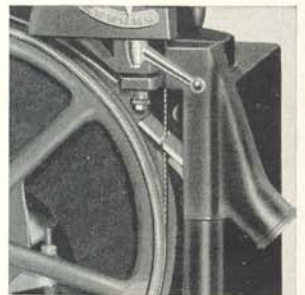
(For Prices See Attached Price List)



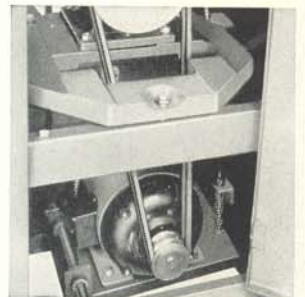
Notice the rugged construction of the table. The two massive trunnions, 17" apart on either side of the saw blade, give firm, solid support to large, heavy pieces. A handy tilt scale provides fast tilting to accurate angles.



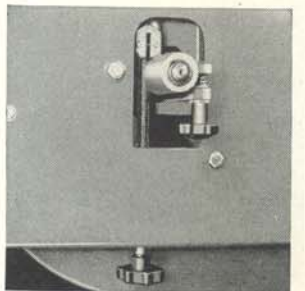
The handy to get at blade guides and blade supports are individually adjustable. You can set one without affecting the other. Notice also the adjustable table stop that enables you to return the table to exact level after tilting.



Wheel rotation provides perfect means of dust collection. Natural draft caused by wheel rotation carries dust over flat aluminum insert into dust spout. Can be attached to Dust Collector or Shop Dust Removal System.



V-belt drive with motor mounted in base on pivot bracket which automatically provides correct amount of belt tension. Notice how large door in lower cabinet provides full access to motor for replacement or repair.



Neat in appearance, yet handy and accurate. The belt tension and blade tracking adjustments on the frame of the upper wheel guard are handy to get at and simple to operate. They offer complete adjustments of wheel and blade.

DELTA POWER TOOL DIVISION

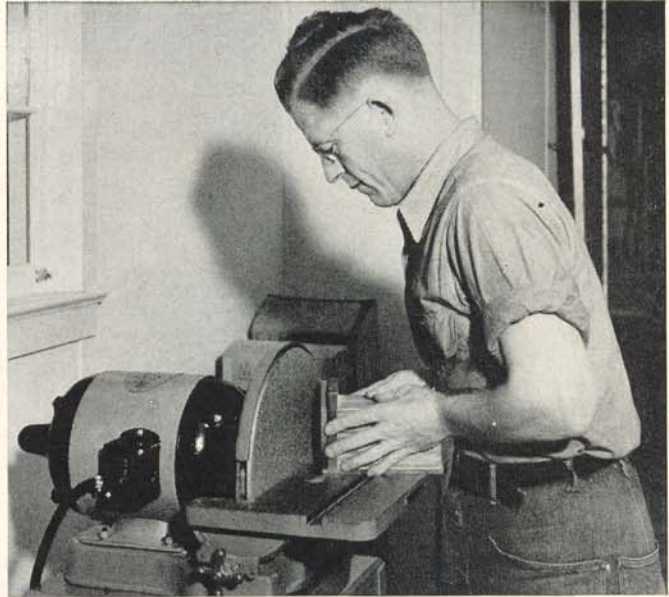
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

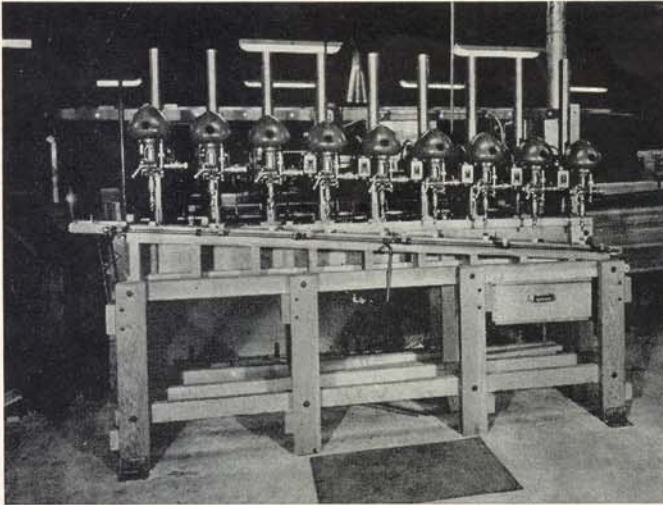
More Uses For More Delta Tools Every Day



SCHOOL MAINTENANCE



PLASTIC COMPANY



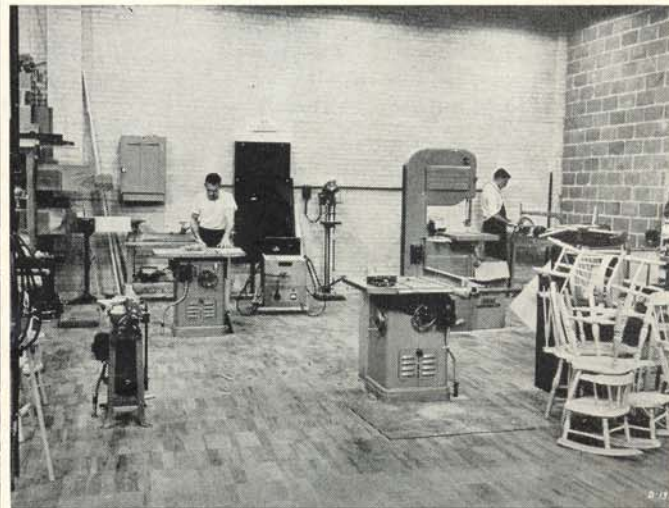
LADDER MANUFACTURER



CHURCH FURNITURE MFGR.



SHOE MANUFACTURER



DEPARTMENT STORE

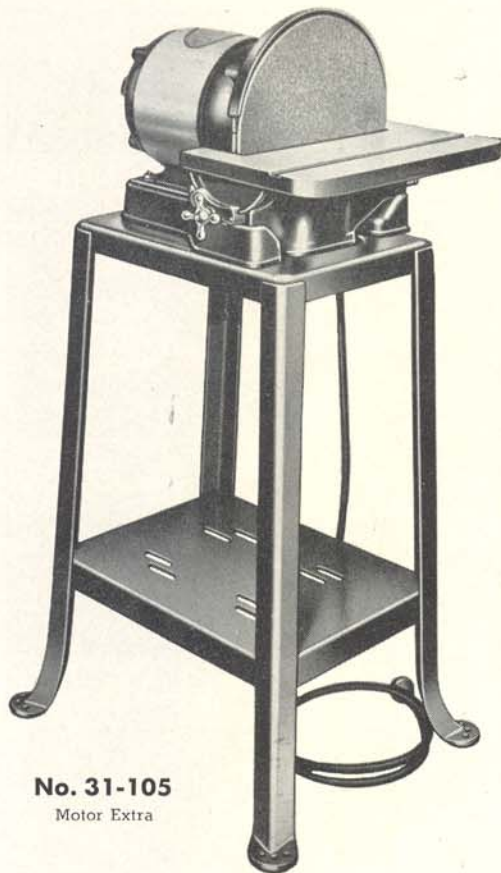
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The Abrasive Disk Finishing Machine For Wood or Metal

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



No. 31-105
Motor Extra

SPECIFICATIONS

Dimensions (Floor model on steel stand):
 Width19"
 Height45"
 Front to rear23"
 Table9 $\frac{3}{4}$ " x 16 $\frac{1}{4}$ "
 Miter gage groove dimensions.... $\frac{3}{8}$ " x $\frac{3}{4}$ "
 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.

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 8 $\frac{1}{2}$ " 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 15½" 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 64 for Motors and Switches.

DUST COLLECTOR ATTACHED TO ABRASIVE DISK FINISHING MACHINE

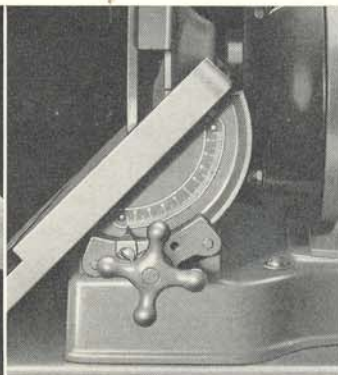


The Dust Collector is especially useful with the Disk Finisher. The powerful suction of the fan pulls the dust and heavy particles into the filter cabinet keeping the shop clean. A special attachment package is available as shown below. See page 31 for dust collector desired.

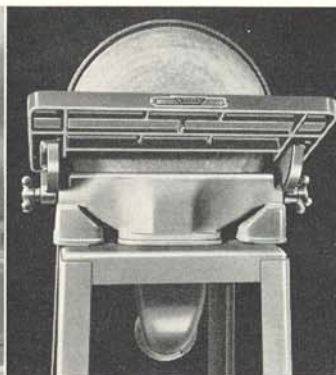
No. 31-803—Abrasive Disk Finishing Machine Attachment Package complete as illustrated to connect Dust Collector to Finishing Machine. 12 lbs.



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.



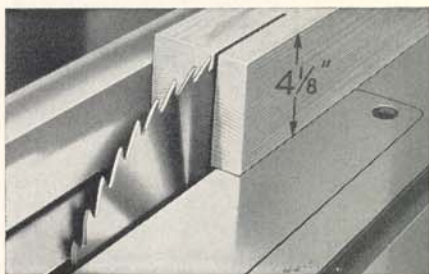
All kinds of sanding can be done quickly and easily—free hand curved sanding, sanding with jigs, angle sanding, miter sanding, etc.

DELTA POWER TOOL DIVISION

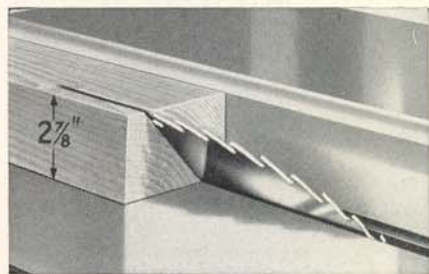
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

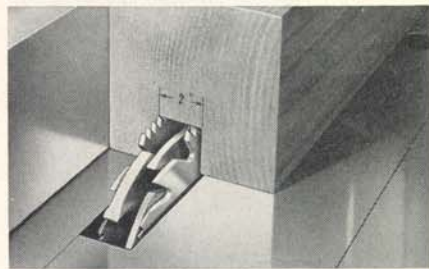
No Other Saw Gives You So Much At Such A Reasonable Price



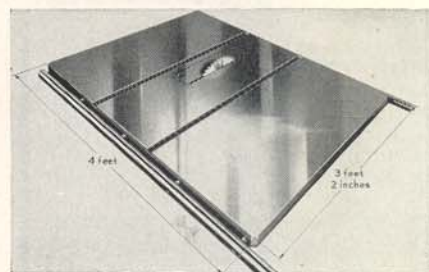
BIG 4 1/8" Thick Rip and Cross Cut



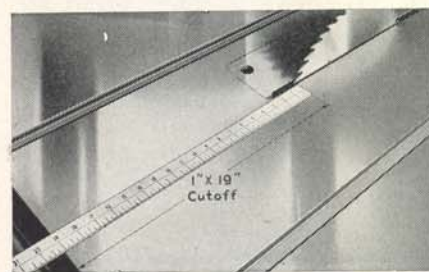
BIG 2 7/8" Thick Cut at a 45° Tilt



BIG 2" Wide Dado Cut



BIG 3 feet 2 inch x 4 feet Table Top



BIG 19" Table Support on 1" Thick Cut

Features You Get With The Delta-Milwaukee 12" Tilting Arbor Saw

Big Capacity . . . will cut a 4-foot panel into two 24" parallel sections. Cuts 4 1/8" thick with 12" Dia. Saw.

Highly efficient 4-belt drive.

Massive swinging trunnions widely spaced, very rigid.

Welded steel cabinet, enclosing all work mechanisms.

Cast iron table 3'2"x 4' (38"x 48") with accurately ground surface.

1 1/8" diameter saw arbor.

Sealed, Lubricated-for-life Ball Bearings.

Removable arbor extension with longer optional extension for moulding cutter and dado head.

Pressed steel sawdust deflector; removable clean-out panel in base with 4" spout for connection to dust collecting system.

Cast iron "Auto-set" Miter Gage.

Massive aluminum rip fence with Micro Set Pinion, simultaneous front and rear clamp.

Scale magnifier lens for easy, quick accurate setting of fence.

Both faces of rip fence milled for ripping.

"Super-Safe" blade guard with splitter, anti-kickback fingers . . . dust deflecting feature permits view of blade at all times.

Splitter and blade guard tilt with the blade.

Motor plate to take Standard Delta or No. 225 NEMA frame motors.

Cast Aluminum motor cover.

Perfect Alignment.

Ample space in front of blade . . . full 16" at max. cutting capacity.

Beautiful modern appearance.

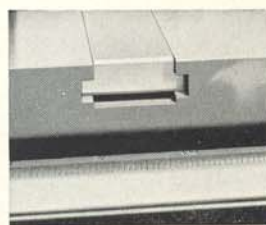
Large, easily operated handwheels for tilting, raising and lowering of blade. Positive lock knob in center of each hand wheel.

No useless weight.

Convenient controls for safe, accurate operation.

Totally enclosed fan cooled motor—keeps cool, maintains its efficiency.

T-Slot on either side of saw blade . . . holds miter gage securely, even beyond front of saw table . . . gives accurate support to work. Miter gage will not twist or fall out.



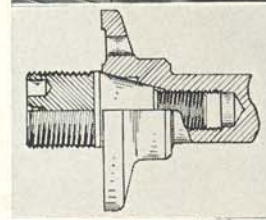
Scale Magnifier lens . . . provides for easy, quick, accurate setting of rip fence.



Single clamp handle at front locks fence to both front and rear guide rails — Quick, Accurate, Safe.



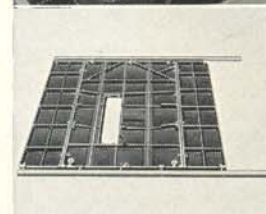
Interchangeable Arbor Extensions provide for wide range of accessories. Note how taper mounting of Arbor Extension assures accuracy.



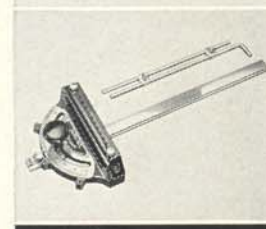
Motor mounting . . . takes either Standard Delta or NEMA frame motors; motor swings smoothly and easily.



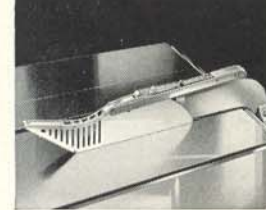
Large saw table and wings scientifically ribbed to prevent warping. You always have a true, flat surface for accurate work.



Auto-Set Miter Gage—has individually adjustable index stops — T-bar holds securely in T-slots of table — Tapered pivot increase accuracy. Massive heavy body gives full support, will not spring.



Super-Safe Guard and Splitter—really protects the user. Basket pivots with work so that blade remains covered while view is unimpaired. Tilts with blade.

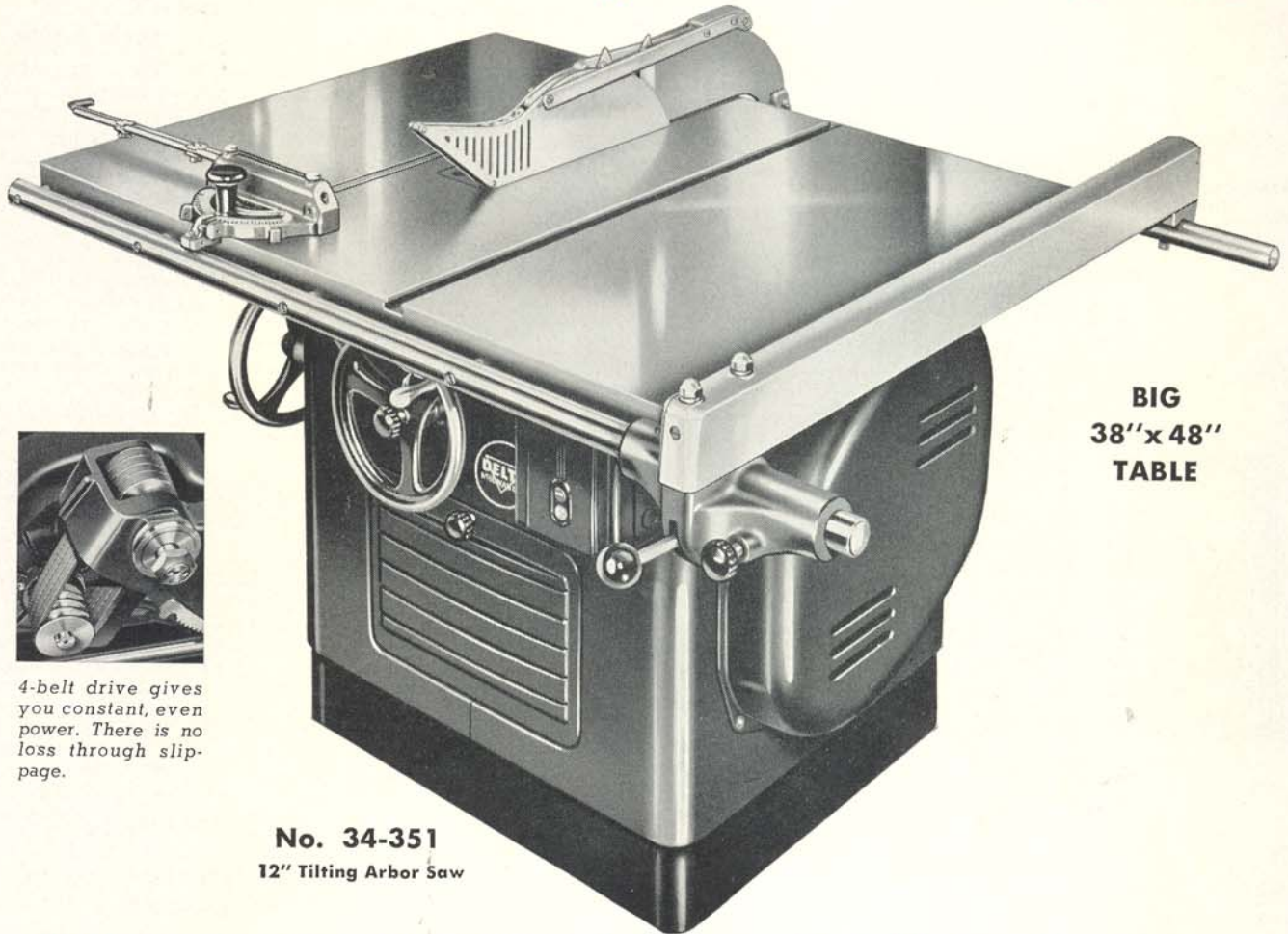


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The Delta-Milwaukee 12" Tilting Arbor Saw Cuts Stock 4 1/8" Thick



**BIG
38"x 48"
TABLE**

No. 34-351
12" Tilting Arbor Saw

4-belt drive gives you constant, even power. There is no loss through slippage.

Each Delta-Milwaukee 12" Tilting Arbor Saw is tested under its own power with actual board cuts before final shipment.

CATALOG LISTING

Cat. No.	Operating Conditions	H.P.	Motor Description
34-350	Unit complete, but without motor or magnetic starter		
34-351	With motor & mag. starter.... For 220 V. operation	5	220/440 V., 60 cy., 3 ph.
34-352	With motor & mag. starter.... For 440 V. operation	5	220/440 V., 60 cy., 3 ph.
34-363	With motor & mag. starter.... For 220 V. operation	5	220/440 V., 50 cy., 3 ph.
34-364	With motor & mag. starter.... For 440 V. operation	5	220/440 V., 50 cy., 3 ph.
34-370	With motor & mag. starter.... For 115 V. operation	3	115/230 V., 60 cy., 1 ph.
34-371	With motor & mag. starter.... For 230 V. operation	3	115/230 V., 60 cy., 1 ph.

Above 12" Tilting Arbor Saws consist of Welded Steel Cabinet, 38"x48" Table, Motor Mounting Plate, Motor Cover, No. 34-925 Miter Gage, Rip Fence, Guide Rails, Blade Guard, Splitter with Antikickback Fingers, No. 34-930 Combination Blade, No. 49-150 set of 4 matched V-belts, Motor Pulley 1" bore, Magnetic Starter and Motor installed and wired complete. 975 lbs.

ACCESSORIES

- 1521—Allen Key wrench for use with No. 34-941 Moulding Cutter Head.
- 34-925—Auto-Set Miter Gage complete with stop rods. 15 lbs.
- 34-930—12" Comb. Blade, 14 gage, 44 teeth, 1 1/8" arbor hole. 4 lbs.
- 34-931—12" Rip Saw Blade, 14 gage, 36 teeth, 1 1/8" arbor hole. 3 lbs.
- 34-932—12" Cross Cut Blade, 14 gage, 100 teeth, 1 1/8" arbor hole. 3 lbs.
- 34-933—12" Hollow Ground Blade, 12-14-12 gage, 1 1/8" arbor hole with 3 1/2" collar. 3 lbs.
- 34-940—8" Dado Head, 1 1/8" hole, cap. 1/8" to 1-1/16" cut. 8 lbs.
- 34-941—6" Dia. Moulding Cutter Head only, 1 1/8" bore, less wrench. (Uses cutter knives listed on page 47.)
- 34-942—Arbor Extension 1 1/8" dia. for use with Dado Head 1-1/16" wide and Moulding Cutter Head. 2 lbs.
- 34-943—Arbor Extensions 1 1/8" dia. to accommodate 2" wide Dado or Moulding Cutter Head. 2 lbs.
- 34-945—Table Insert for Dado and Moulding Cutter Head. Made of hardwood or plywood. Shaped and fitted, with screws for fastening to table. 2 lbs.
- 34-947—Arbor Extension 1" dia., with collar, to accommodate saws with 1" arbor hole. 3 lbs.
- 34-948—Arbor Extension 1 1/4" dia., with collar, to accommodate saws with 1 1/4" arbor hole. 3 lbs.
- 34-949—Arbor Extension 1" dia. to accommodate 2" wide Dado Head 1" bore. 4 lbs.
- 34-950—Arbor Extension 1 1/4" dia. to accommodate 2" wide Dado Head 1 1/4" bore. 4 lbs.
- 49-150—Set of 4 matched V-belts, 28 1/4" out. Cir. (per set). 2 lbs.
- 49-324—Magnetic Starter for 5 H.P. 220/440 volt 3 Ph. 60 Cycle 12" Tilting Arbor Saw Motor. 12 lbs.
- 49-325—Magnetic Starter for 3 H.P. 115/230 volt 3 Ph. 60 Cycle 12" Tilting Arbor Saw Motor. 12 lbs.

Motors Recommended: For No. 34-350—No. 98-111 or No. 98-321.
For complete listing of motors and switches see page 64.

SPECIFICATIONS

Diameter of Arbor	1 1/8"
Diameter of Saw	12"
Maximum Thickness of Cut	4 1/8"
Maximum Thickness of Cut at 45° tilt	2 7/8"
Maximum Width of Dado Cut	2"
Maximum Width of Cut-off (1" stock)	19"
Maximum Rip to left of blade	15"
Maximum Rip to right of blade	30"
Distance, front of table to center of blade	22"
Table, front of blade at maximum cut	16"
Table Height	34"
Table Size (38"x 48")	3'2"x 4'
Cabinet Size	26 1/2"x 30"
Miter Gage T-Slot on either side of Saw Blade.	
Rip Fence locks front and back simultaneously with single operating handle at front of machine.	
Removable Table Inserts.	
Speed with 12" blade and 3450 r.p.m. motor, 3750 r.p.m.	
Shipping Weight	975 lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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

**Cuts to Center of 50" Panel
Rips Stock 3 1/8 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 3 1/8 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.



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

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.

- True-Running Arbor of forged alloy steel.
- 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 3 1/8" 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.
- Ample space in front of blade—a full 12".
- Beautiful streamlined appearance.

SPECIFICATIONS

Diameter of arbor	5/8"
Diameter of saw blade	10"
Maximum depth of cut	3 1/8"
Cuts to center of panel (max. width)	50"
Distance front of table to center of saw blade	16 3/4"
Table size	20" x 27"
Table size with wings	36" x 27"
Distance front of table to center of blade	16 7/8"
Fence moves:	
To right of blade	25"
To left of blade	15"
Tilt of Blade to right	45°
Miter Gage groove in table	3 3/8" x 3/4"
Table Height	34"
Overall dimensions with Wings and Guide Bars	30 1/4" x 45 3/8"
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.

No. 34-407 Complete 10" Tilting Arbor Unisaw for 25 and 50 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. 281 V belts and No. 1471 Super-Safe Guard. Without Motor or Switch. 334 lbs.

No. 281—V-Belt for 25 and 50 cycle motors (3 req.). 3/4 lb.

No. 291—V-Belt for 60 cycle motors (3 req.). 3/4 lb.

No. 1448—10" Tilting Arbor Unisaw for 25 and 50 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. 281 V-belts. Without Guard, Splitter, Extension Wings, Motor or Switch. 304 lbs.

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.

No. 1451—Standard Table Insert. 1 3/4 lbs.

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

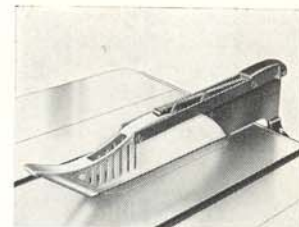
No. 1455—Side Extension Wings to make table 36"x27" per pair. 49 lbs.

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

Motors Recommended: 85-010, 87-010, 87-210. For complete motor and switches see page 64.

(For Prices See Attached Price List)

SUPER-SAFE GUARD PROVIDES PROTECTION

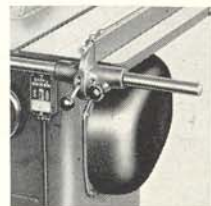


The No. 1471 "Super-Safe" splitter-mounted guard is anchored directly to the arbor bracket so that when the saw is tilted the guard follows the saw—thus complete protection is always assured no matter at what angle the saw is set. Provides maximum protection because it combines basket, splitter and anti-kickback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



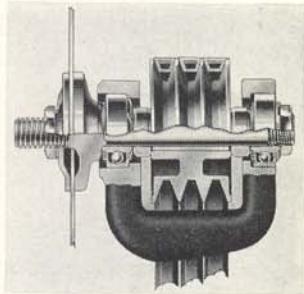
No. 1454—Motor cover with screws. 25 lbs.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Unisaw Features Give You More For Your Money



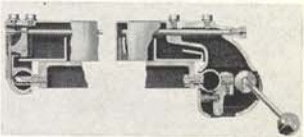
Massive True-Running Arbor

The Unisaw arbor is an accurately ground shaft with a large flange. Even the arbor thread is specially designed being a modified Acme thread having a large flat surface so that it will accurately center the saw blade, cutterheads, etc. Runs in sealed, lubricated-for-life ball bearings accurately pre-loaded.



Heavy Trunnions Insure Perfect Alignment

Mounted carefully on the heavy gusset plates of the cabinet, in such a way as to provide complete adjustment, the trunnions that carry the saw carriage are of exceptionally heavy construction, and are completely machined from fine grained cast iron.



Rigid, Double-Lock Rip Fence

Rip fence extends from the front clear over rear edge of table. Quick-acting cam and lever lock at front locks fence both front and back. Rip fence bar of welded construction and equipped with micrometer adjustment. Used on both sides of blade.

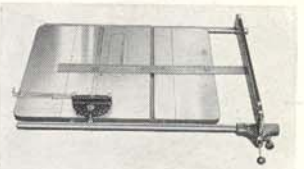


Table is True and Flat

Large saw table and extensions are scientifically ribbed to prevent warping and springing. Clearance for saw mechanisms is provided without cutting away essential ribbing. This means you get a true, flat saw table on which to produce accurate work.



Controls are Convenient and Safe

Controls on this saw make operation fast, safe and easy. Big sturdy handwheels located at convenient height for easy access to operator. No interference between controls... no close quarters... no skinned knuckles. Large knobs in center of wheels lock mechanism securely.

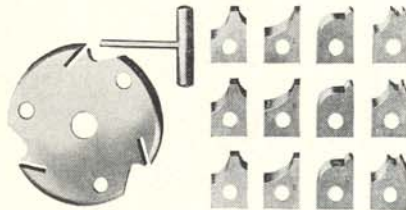
You Can Make Many Different Mouldings On Your Circular Saw With These Twenty-Seven Sets of Knives

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 double-face fence and $\frac{5}{8}$ " arbor.

A perfect moulding may be produced with one pass over the knives, or, if the cut is a deep one, in two or more passes.

There is nothing to get out of order in this tool, and it is extremely safe in operation because only the actual cutting edges of the knives are exposed and even these are covered when the work is being run.

MOULDING CUTTER SETS AND PARTS



No. 34-813—Heavy duty moulding cutter set for all circular saws with a $\frac{5}{8}$ " arbor. With heavy duty steel cutter head, 4 sets of high speed knives Nos. 35-102, 35-103, 35-221 and 35-222 and wrench. Order proper table insert as listed below. 8 lbs.

No. 265—Heavy duty solid steel moulding cutter-head only, to fit $\frac{5}{8}$ " arbor. Without wrench or cutters. 3 lbs.

No. 1162—Moulding cutter table insert for 34-305, 34-307 saws. $1\frac{1}{2}$ lbs.

No. 1453—Moulding cutter table insert for 34-405, 34-407 saws. $1\frac{1}{2}$ lbs.

No. 1521—Wrench. $\frac{1}{8}$ lb.

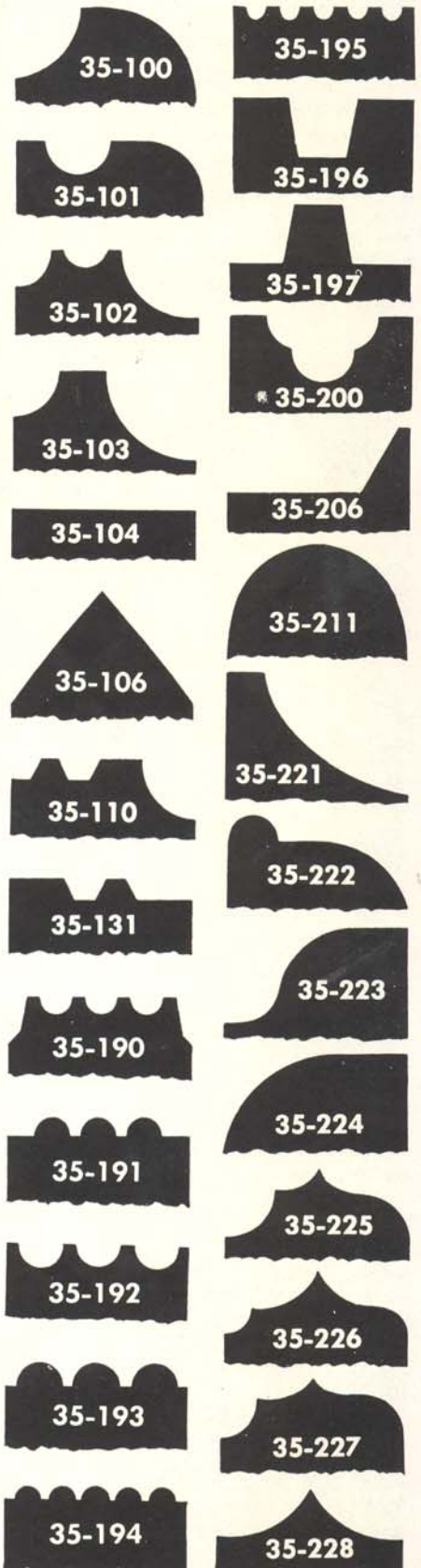
Wood facings may be used on standard saw fence when moulding cutter is used.

EXTRA SETS OF CUTTER KNIVES

See Full Size Drawings to right.

Cutters come in sets of three matched knives. Made of high-speed steel they will cut thousands of feet of moulding before dulling. All of these knives may also be used with shaper cutter-head No. 1343. $\frac{1}{4}$ lb. each.

New No.	Old No.	Description
35-100	...	$\frac{1}{2}$ " Cove, $\frac{5}{16}$ " Quarter Round
35-101	254	$\frac{5}{16}$ " Cove, $\frac{3}{8}$ " Bead
35-102	253	$\frac{1}{8}$ " and $\frac{3}{8}$ " Quarter Round and $\frac{1}{4}$ " Bead
35-103	250	$\frac{1}{4}$ " and $\frac{1}{2}$ " Quarter Round
35-104	259	Straight
35-106	...	90° Flute
35-110	256	Drawer Joint
35-131	257	Glue Joint
35-190	...	3 Bead ($\frac{3}{16}$ " Bead)
35-191	...	3 Flute ($\frac{3}{16}$ " Flute)
35-192	...	3 Bead ($\frac{1}{4}$ " Bead)
35-193	...	3 Flute ($\frac{1}{4}$ " Flute)
35-194	...	5 Flute ($\frac{1}{8}$ " Flute)
35-195	...	5 Bead ($\frac{1}{8}$ " Bead)
35-196	...	Wedge Tongue
35-197	...	Wedge Groove
35-200	255	Clover Leaf Screen Moulding ($\frac{9}{32}$ " x $\frac{9}{16}$ ")
35-206	...	Pgee R. H.
35-211	...	1" Flute
35-221	251	Thumb Moulding
35-222	252	$\frac{1}{2}$ " Cove and $\frac{1}{4}$ " Flute
35-223	258	Ogee
35-224	247	$\frac{5}{8}$ " Cove
35-225	263	Flute Bead, Quarter Round and Ogee Comb.
35-226	264	Flute Bead, Quarter Round and Ogee Comb.
35-227	269	Flute Bead, Quarter Round and Ogee Comb.
35-228	261	Flute Bead



DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Accessories For Your Circular Saw



CIRCULAR SAW BLADES

No. 1017—10" Rip Blade with $\frac{5}{8}$ " Arbor Hole. 2 lbs.

No. 1018—10" Cross Cut Blade with $\frac{5}{8}$ " 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.

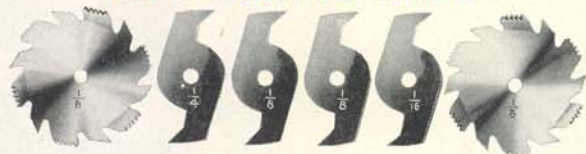
No. 1015—10" Combination Rip and Cross Cut Blade with $\frac{5}{8}$ " Arbor Hole, 2 lbs.

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 $\frac{5}{8}$ " Arbor Hole. 2 lbs.

DADO HEAD AND INSERTS



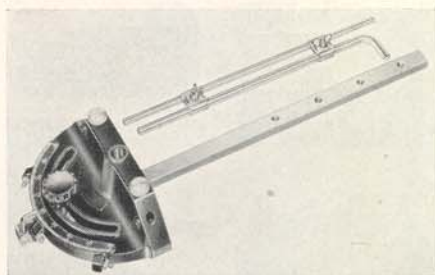
For cutting grooves varying in width from $\frac{1}{8}$ " to $\frac{13}{16}$ " and up to $\frac{1}{4}$ " deep, on tilting table saw ($\frac{1}{8}$ " deep on tilting arbor saw) either with or across grain. Made of the finest steel, carefully hardened and tempered. Includes $\frac{1}{16}$ " inside cutter. Fits all circle saws with a $\frac{5}{8}$ " arbor.

No. 333—6" Dado Head, consisting of two outer blades, $\frac{1}{8}$ " thick, two inside cutters $\frac{1}{8}$ " thick, one inside cutter $\frac{1}{4}$ " thick, and one inside cutter $\frac{1}{16}$ " thick. To cut grooves from $\frac{1}{8}$ " to $\frac{13}{16}$ ". With $\frac{5}{8}$ " arbor hole. $3\frac{1}{2}$ lbs.

No. 1161—Dado Head Table Insert for 10" Tilting Table Saw, $1\frac{1}{2}$ lbs.

No. 1452—Dado Head Table Insert for 10" Tilting Arbor Saw, $1\frac{3}{4}$ lbs.

MITER GAGE FOR SAW AND OTHER MACHINES



An added convenience for saws and other machines. Swings full 60° both right and left—has individually adjustable index stops—tapered pivot insures accuracy—massive heavy body gives full support, will not spring—heavy $\frac{3}{4} \times \frac{3}{4}$ inch, miter gage bar $17\frac{1}{2}$ " long—full $\frac{5}{16}$ " dia. stop rods with two clamps.

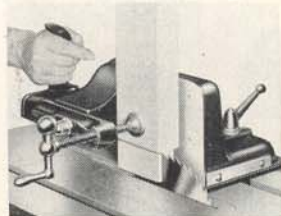
No. 864—Auto-Set Miter Gage. 4 lbs.

No. 865—Clamp Attachment for Miter Gage with Clamp Bar, two Sliding Clamp Screws and Front and Rear Posts. $2\frac{1}{4}$ lb.

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 $2\frac{3}{4}$ " 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, $\frac{1}{4}$ " or $\frac{3}{8}$ " tenons can be cut at one pass.



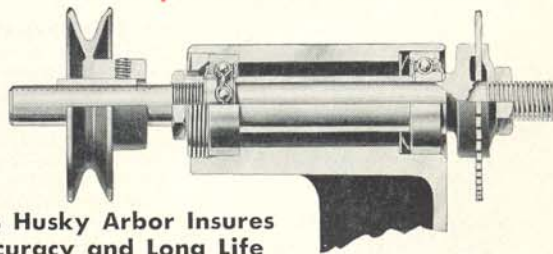
No. 1172—Tenoner complete with base plate. 31 lbs.

No. 1171—Spacing collar set (one $\frac{1}{4}$ " and $\frac{3}{8}$ " collar). $\frac{1}{2}$ 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

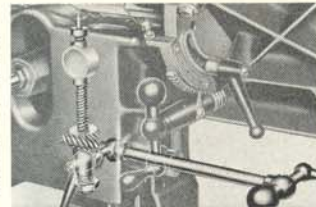


This Husky Arbor Insures Accuracy and Long Life

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 $\frac{5}{8}$ " Acme threads. Flanges grip blade firmly.

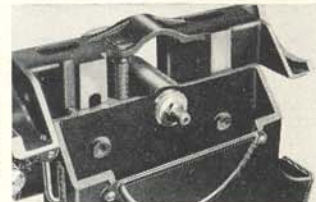
RAISING MECHANISM

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.



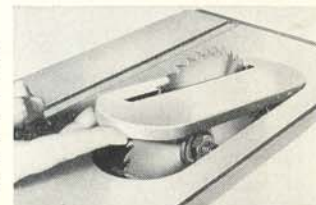
WORM-GEAR TILTING

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.



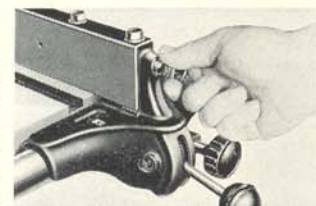
QUICK-ACTING INSERTS

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.



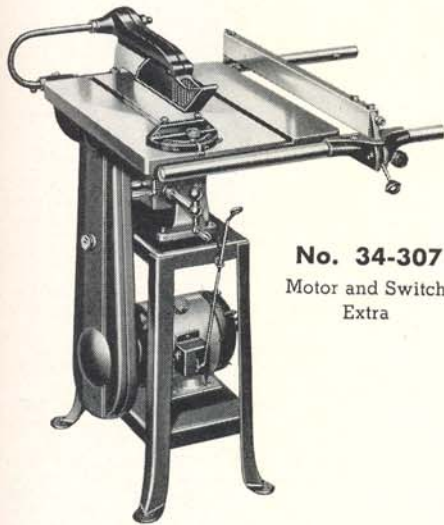
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

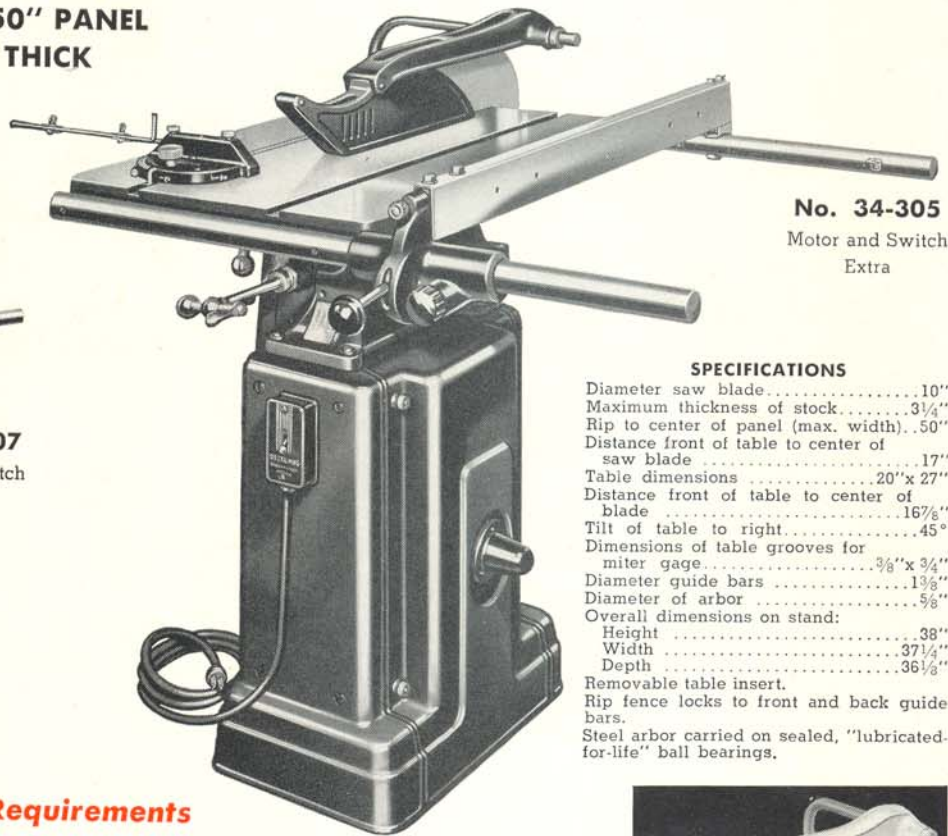
600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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

**RIPS TO CENTER OF 50" PANEL
CUTS STOCK 3 1/4" THICK**



No. 34-307
Motor and Switch
Extra



No. 34-305
Motor and Switch
Extra

SPECIFICATIONS

Diameter saw blade.....	10"
Maximum thickness of stock.....	3 1/4"
Rip to center of panel (max. width).....	50"
Distance front of table to center of saw blade.....	17"
Table dimensions.....	20" x 27"
Distance front of table to center of blade.....	16 7/8"
Tilt of table to right.....	45°
Dimensions of table grooves for miter gage.....	3/8" x 3/4"
Diameter guide bars.....	1 3/8"
Diameter of arbor.....	5/8"
Overall dimensions on stand:	
Height.....	38"
Width.....	37 1/4"
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.	

Here Is A Saw That Will Meet Your Most Exacting Requirements

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, rigidity, power and ease of operation.

Its rigid, husky arbor is of special design to give complete accuracy. Extra large capacity—will rip through a 3 1/4" 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 3 1/4" 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. 34-305—10" Tilting Table Circular Saw with No. 886 Cast Iron 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. 350 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. 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. 530—V-Belt. Out. Cir. 55". 1/2 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. 1 1/2 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.

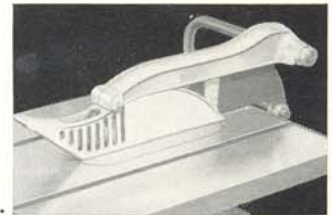
No. 1330—Switch Rod for use with No. 34-307.

No. 5500—5" Motor Pulley. Specify 1/2", 3/8" or 3/4" bore. 1 1/4 lbs.

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

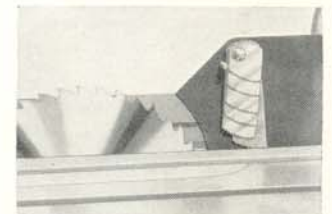
Note: For heavy duty service 2 belts are recommended. Order extra: one No. 5300 arbor pulley 5/8" bore, one No. 5500 motor pulley (specify bore), and one No. 530 V-belt.

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 64.



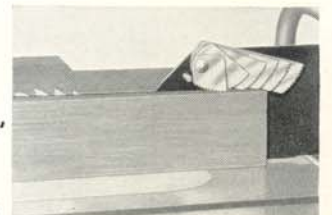
**SWING
GUARD . . .**

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)

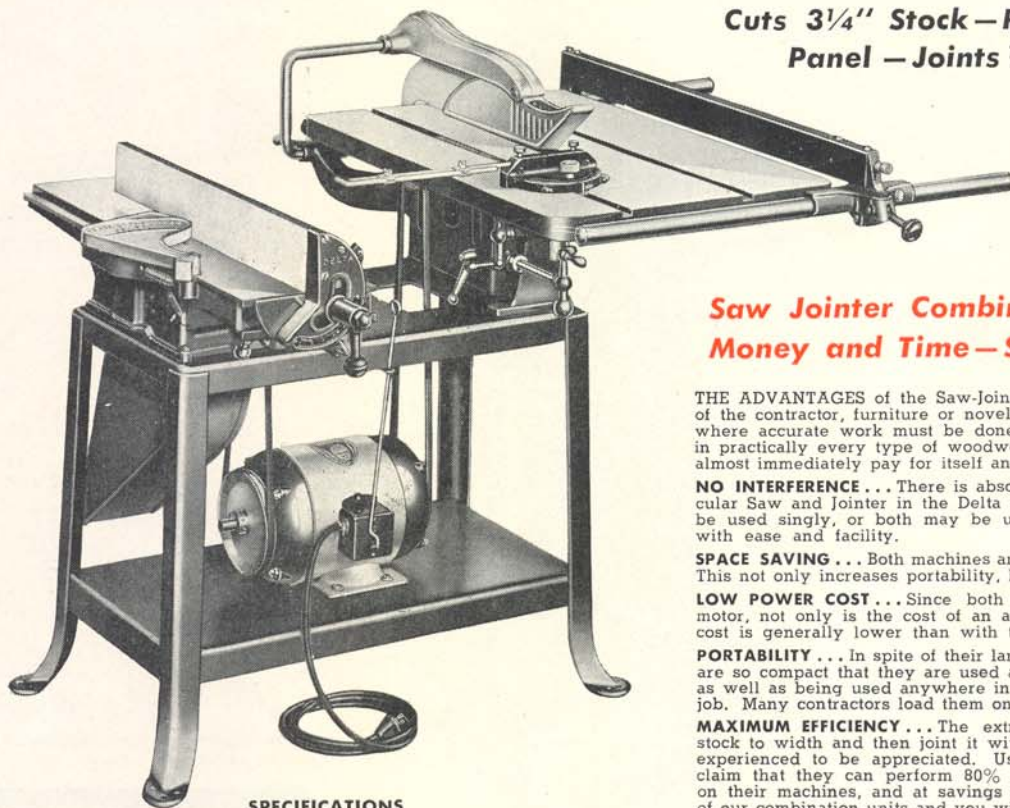
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Saw Jointer Unit Ideal For Contractors and Cabinet Makers

Cuts 3 1/4" Stock—Rips to Center of 50" Panel—Joints 1/2" 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 than 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
Rabbit 1/2" 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.
Overall Dimensions . . . 37 1/2" deep x 60" wide x 38" high

Saw:

Blade 10" diameter
Rips stock 3 1/4" 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.

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.....	196 lbs.
No. 1165 —Swing Guard for Saw.....	19 lbs.
No. 1166 —Splitter Attachment for Saw.....	5 lbs.
No. 5500 —5" Motor Pulley for Saw, 3/4" bore.....	1 1/4 lbs.
No. 560 —V-belt for Saw, O.C. 58-5/16".....	1 lb.
No. 654 —6" Ball Bearing Jointer.....	124 lbs.
No. 5700 —7" Motor Pulley for Jointer, 3/4" bore.....	2 lbs.
No. 510 —V-Belt for Jointer, O.C. 52 7/8".....	1/2 lb.
No. 50-168 —(Old No. 1168)—Steel Stand.....	76 lbs.

ACCESSORIES

No. 662 —Rear knife guard for jointer.....	2 lbs.
No. 1334 —Switch rod for single phase motors.....	1 1/2 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 3/4" 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 64.)

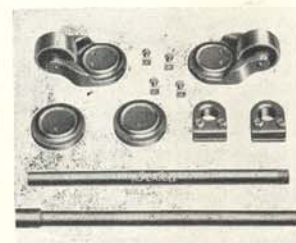
CASTERS FOR PORTABLE UNITS

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.



NEW, BETTER, RUST REMOVER

A non-inflammable liquid that removes rust and cuts grease and oil from iron and steel. Delta-craft 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 quart bottle. 5 lbs.
- No. 49-320**—1/2 pint bottle. 1 1/2 lbs.
- No. 49-321**—1/2 gallon bottle. 7 lbs.
- No. 49-322**—1 gallon bottle. 15 lbs.

Note: Paint, Rust Remover and Stop Rust are not mailable. Shipment must be express or freight.

"STOP RUST" Prevents Rust Formation



When applied to any clean polished metal surface it prevents the formation of rust or oxidation. Is not sticky or oily. Apply Stop-Rust according to directions and it will give you a polished, safely-protected surface without a trace of smearing.

- No. 109**—1 pint can. 1 1/4 lbs.
- No. 110**—Case of 12 pints. 16 lbs.

(For Prices See Attached Price List)

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.



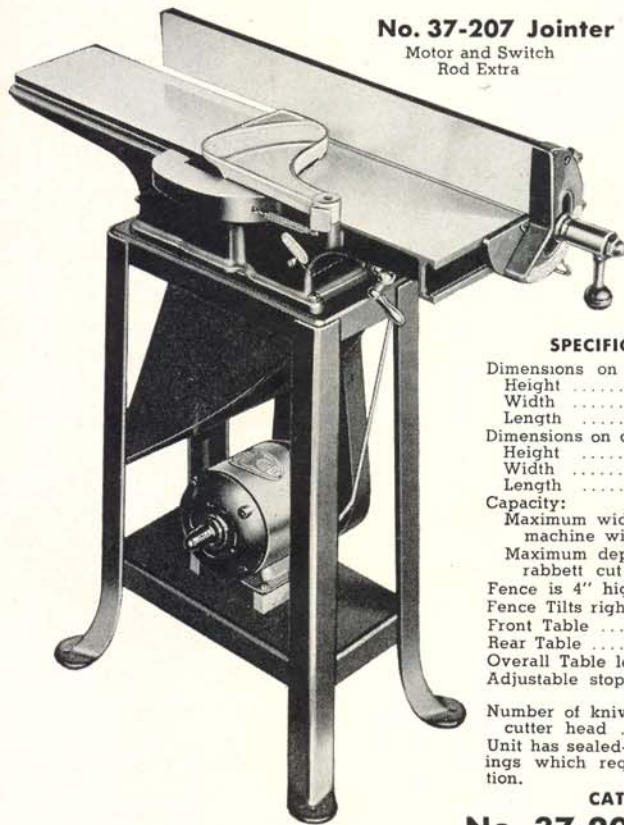
Cat. No.	Size	Shade	Ship. Wt.
49-333	1 qt.	Med.	5 lbs
49-334	1 gal.	Med.	14 lbs.

DELTA POWER TOOL DIVISION

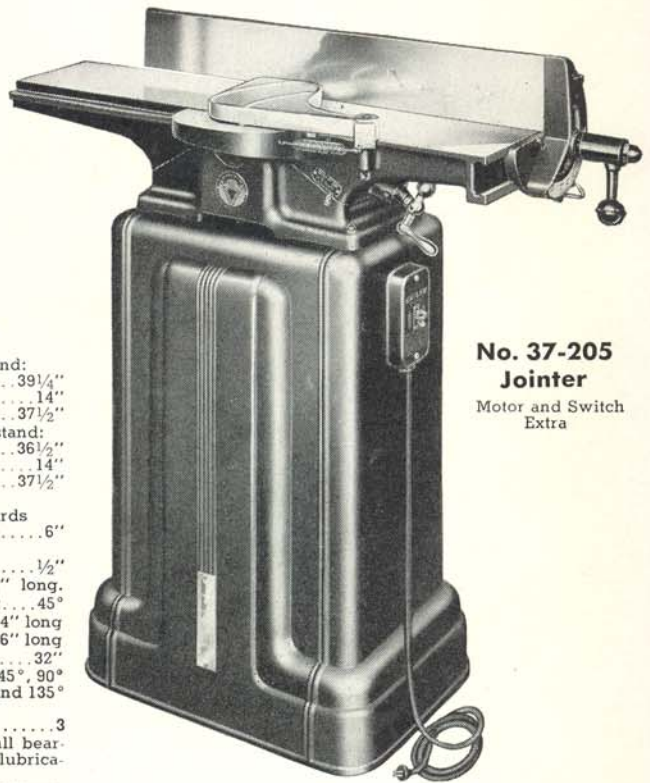
ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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



No. 37-207 Jointer
Motor and Switch
Rod Extra



No. 37-205 Jointer
Motor and Switch
Extra

SPECIFICATIONS

Dimensions on steel stand:
Height 39 1/4"
Width 14"
Length 37 1/2"
Dimensions on cast iron stand:
Height 36 1/2"
Width 14"
Length 37 1/2"
Capacity:
Maximum width of boards
machine will surface.... 6"
Maximum depth
rabbett cut 1/2"
Fence is 4" high x 27 3/4" 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. 37-205 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 rod. 238 lbs.

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. 190 lbs.

No. 560 —V-belt, 58-5/16" out. cir. 1/2 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. 3/8 lb.

No. 661 —Belt guard for use with steel stand. 9 lbs.

No. 662 —Rear knife guard. 2 lbs.

No. 663 —Cutterhead for 6" Jointer complete with Knives and Bearings. 10 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. 1 1/2 lbs.

No. 1522 —Double end 5/16" open wrench for cutterhead knife lock bar screws. 1/4 lb.

No. 5700 —7" motor pulley, specify 1/2", 5/8" or 3/4" bore. 2 lbs.

No. 50-656 —(Old No. 656)—Steel stand, top 8" x 15 7/8"; 29 1/2" high. 33 lbs.

Motors Recommended: Heavy Duty 62-610, 66-320; Medium Duty 62-110; 66-110; Light Duty 60-310, 66-110. For complete listing of motors and switches see page 64.

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.

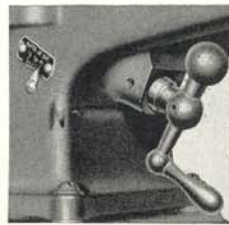
Compare this 6" Jointer with others on the market and you will see why this machine has become the standard for shops of all kinds from novelty factories to the experimental departments of large furniture manufacturers.

(For Prices See Attached Price List)

Rabbett cuts a full 1/2" 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 1/2".



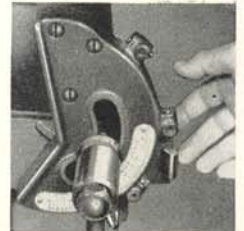
Dual control handle slid out engages bracket lock nut allowing fence to be moved across table to any position. Does not disturb previous angle settings. When tightened it clamps fence firmly and accurately in place.



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 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.

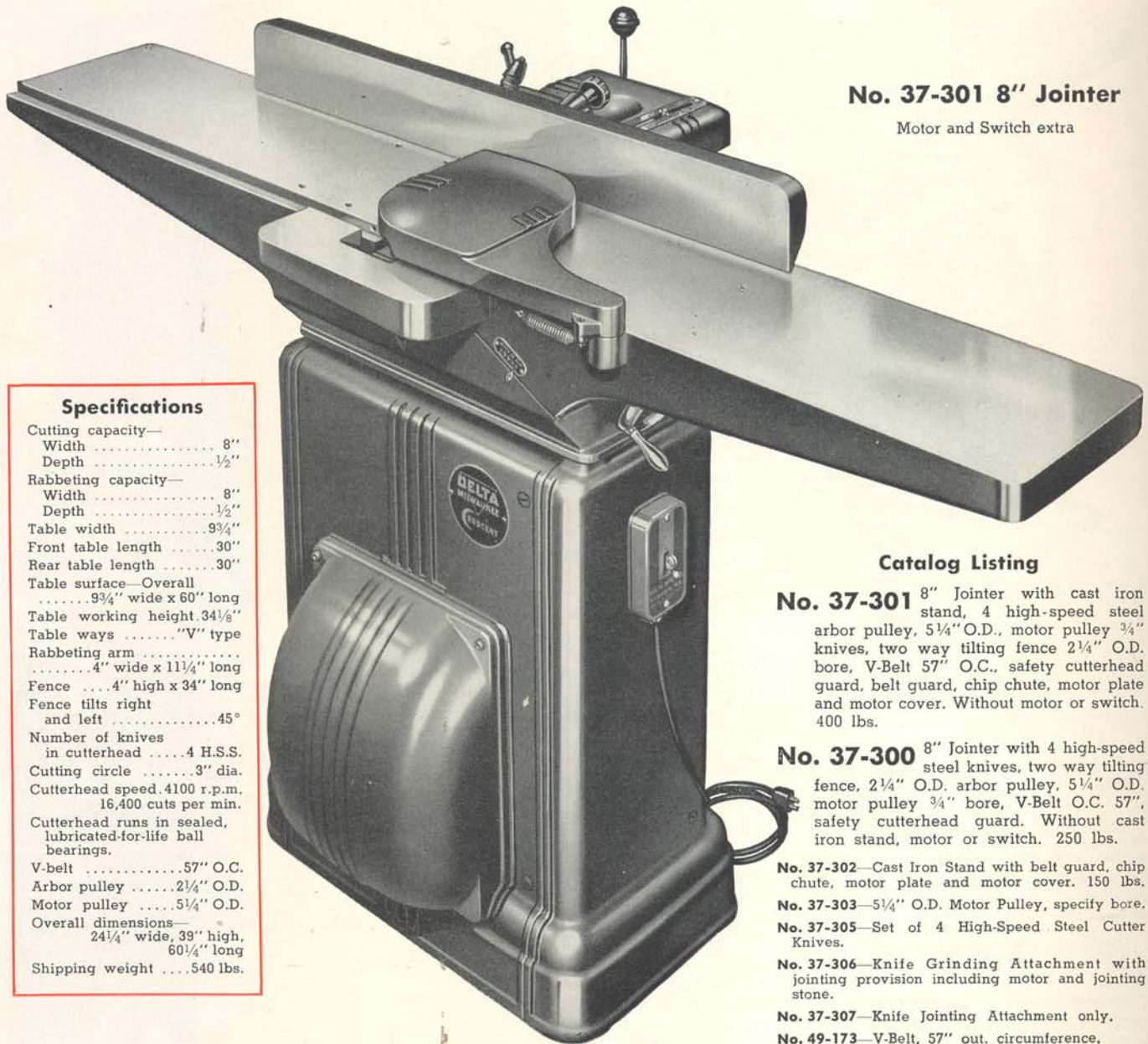


DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

NEW 8" Jointer With Smoother, Faster, Safer Cut



No. 37-301 8" Jointer

Motor and Switch extra

Specifications

Cutting capacity—	
Width	8"
Depth	1/2"
Rabbeting capacity—	
Width	8"
Depth	1/2"
Table width	9 3/4"
Front table length	30"
Rear table length	30"
Table surface—Overall	
.....	9 3/4" wide x 60" long
Table working height 34 1/8"	
Table ways ....."V" type	
Rabbeting arm	
.....	4" wide x 11 1/4" long
Fence 4" high x 34" long	
Fence tilts right	
and left	45°
Number of knives	
in cutterhead	4 H.S.S.
Cutting circle 3" dia.	
Cutterhead speed 4100 r.p.m.	
16,400 cuts per min.	
Cutterhead runs in sealed,	
lubricated-for-life ball	
bearings.	
V-belt	57" O.C.
Arbor pulley	2 1/4" O.D.
Motor pulley	5 1/4" O.D.
Overall dimensions—	
24 1/4" wide, 39" high,	
60 1/4" long	
Shipping weight	540 lbs.

Catalog Listing

No. 37-301 8" Jointer with cast iron stand, 4 high-speed steel arbor pulley, 5 1/4" O.D., motor pulley 3/4" knives, two way tilting fence 2 1/4" O.D. bore, V-Belt 57" O.C., safety cutterhead guard, belt guard, chip chute, motor plate and motor cover. Without motor or switch. 400 lbs.

No. 37-300 8" Jointer with 4 high-speed steel knives, two way tilting fence, 2 1/4" O.D. arbor pulley, 5 1/4" O.D. motor pulley 3/4" bore, V-Belt O.C. 57", safety cutterhead guard. Without cast iron stand, motor or switch. 250 lbs.

No. 37-302—Cast Iron Stand with belt guard, chip chute, motor plate and motor cover. 150 lbs.

No. 37-303—5 1/4" O.D. Motor Pulley, specify bore.

No. 37-305—Set of 4 High-Speed Steel Cutter Knives.

No. 37-306—Knife Grinding Attachment with jointing provision including motor and jointing stone.

No. 37-307—Knife Jointing Attachment only.

No. 49-173—V-Belt, 57" out. circumference.

MOTORS AND SWITCHES

No. 1320—3-Phase Manual Starter for A.C. motors up to 2 H.P. and D.C. motors up to 1 H.P.

No. 1321—3-Phase Across the Line Magnetic Starter, rating up to 2 HP., 440 V., 60 cy. only.

No. 1329—3-Phase Across the Line Magnetic Starter, rating up to 2 HP., 220 V., 60 cy. only.

No. 49-314—On-and-off Toggle Switch for single phase motors. With box, 3-wire ground and power cord, plug and 2-wire motor lead wires.

No. 84-910—1 H.P., 115/230 V., repulsion-induction, A.C., 60 cy., 1725 rpm. motor.

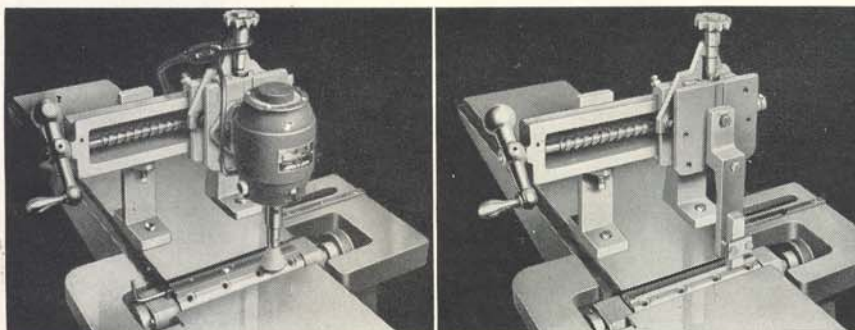
No. 86-920—1 H.P., 220/440 V., 3-phase, A.C., 50/60 cy., 1425/1725 rpm. motor.

No. 87-120—1 1/2 H.P., 220/440 V., 3-phase, A.C., 50/60 cy., 1425/1725 rpm. motor.

Note: Three phase switch mounting parts not required.

For complete listing of motors and switches see page 64.

(For Prices See Attached Price List)



You needn't remove cutterhead in order to sharpen knives. The perfected knife grinding attachment No. 37-306 does an accurate job of sharpening knives quickly and easily.

Replacing the grinder with the jointing stone takes but a few seconds. You can finish the knives with the precision necessary for high quality jointing, keep knives sharp and smooth.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

60" Long Table — 4 Knife Cutterhead — Two Way Tilting Fence ...and Many More Outstanding Features

4-knife cutterhead mounted in sealed, lubricated-for-life ball bearings.

Cutter head rotates at a speed of 4100 r.p.m., you get 16,400 cuts per minute.

Practical cutterhead guard gives you maximum coverage of Cutter Knives at all times.

Big cast iron fence 4" high by 34" long—very rigid, helps to make accurate jointing easy.

Working surface of fence is finish ground.

Fence tilts 45° both right and left. Can be moved to any position across the table.

Rigid cast iron stand, totally encloses motor, belt and pulleys.

Chip chute facilitates controlled collection of chips—easily attached to shop dust collecting system.

Tables are big... with overall length of 60" and width of 9 $\frac{3}{4}$ ".

Tables are mounted on adequately long inclined ways... positively located and held true with a "V" way.

Tables are finish ground after assembly on base, to insure accurate alignment and work.

Rabbets up to $\frac{1}{2}$ " deep and 8" wide.

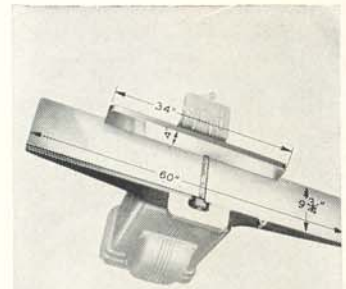
Large, heavy rabbeting arm 4" wide x 11 $\frac{1}{4}$ " long provides support for all rabbet cuts.

Motor mounted in base on plate with 1" range of adjustment for belt tension.

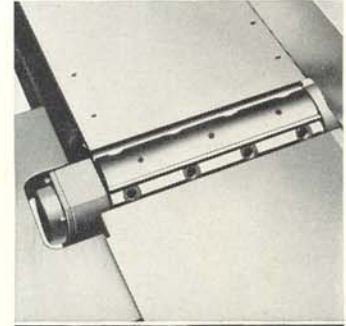
Motor mounting plate slotted to take NEMA frame or Delta 8 $\frac{1}{2}$ " frame motors.

Rear panel of stand removable for easy access to motor and other working parts.

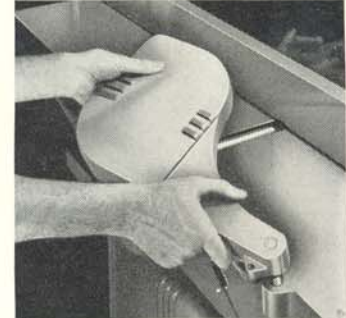
Front and rear tables each 30" long x 9 $\frac{3}{4}$ " wide. Plenty of table in front of cutterhead... plenty of table behind cutterhead. You have table support even for the largest pieces.



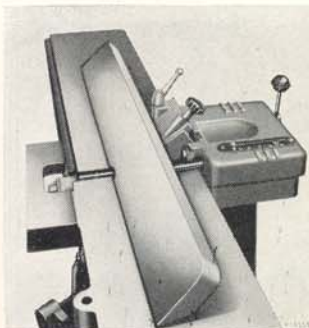
The four-knife cutterhead has a 3" diameter cutting circle and rotates at a speed of 4100 r.p.m. You get 16,400 cuts per minute... this means better quality finish and increased production.



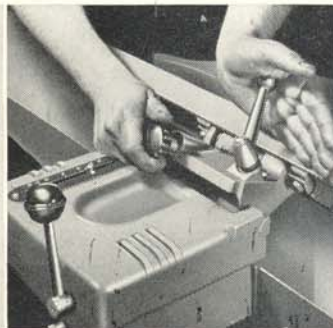
A really practical cutterhead guard gives you maximum coverage of cutter knives at all times. Easily removed for rabbeting. Cutter knives to rear of fence always covered by fence mounting base.



Rabbet cuts up to $\frac{1}{2}$ " deep and 8" wide can be made quickly and accurately. Large, heavy rabbeting arm 4" wide x 11 $\frac{1}{4}$ " long gives ample support for all types of rabbet cuts. Handy scale shows exact depth of rabbet.



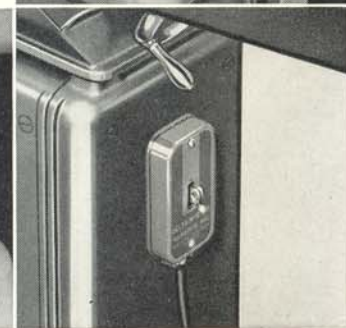
Big fence, 4" high x 34" long, tilts 45° both right and left for accurate bevel jointing. Working surface finish ground. Fence mounting base acts as rear knife guard, gives added safety.



Improved fence mounted with worm gear tilt adjustment and positive lock. Fence locks in position anywhere across the table. Rigid construction prevents twisting or warping.



Tables raise and lower independently up to $\frac{1}{2}$ ". Hand wheel provides easy adjustment of table. Easy to read scale at front of machine shows exact depth of cut.



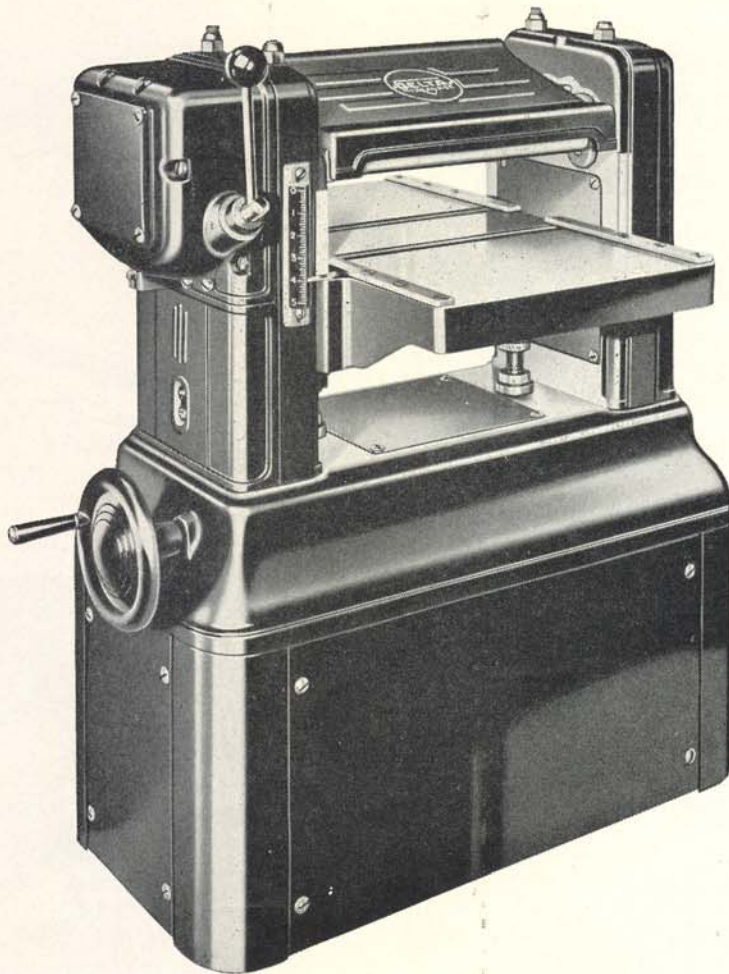
You get added protection with this safety type switch No. 49-314 that can be locked with an ordinary padlock. Reduces shop accidents. Especially good for schools.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The Safest Planer Ever Built



SPECIFICATIONS

CAPACITY:

Maximum Width of Stock—13"
Maximum Thickness of Stock—5"
Minimum Thickness of Stock—1/16"
Maximum Depth of Cut—1/8"
Minimum Length (Without follower, unbutted)—6"

RATE OF FEED:

Linear Feet Per Minute—14
Number of inches of stock cut per minute—168
Number of Cut Per Inch of Feed—75
Number of Cuts Per Minute—12,600

CUTTERHEAD:

Diameter of 3-knife, solid stress-proof steel cutter head—2-23/64"
Diameter of Cutting Circle—2-9/16"
Speed—4200 RPM
Knife Blades, Hi-Speed Steel—13 1/8" Long

CUTTERHEAD DRIVE:

V-Belt (Set of 3 matched V-Belts)

FEED DRIVE MECHANISM:

Fully enclosed within gear box.
The positive, powerful drive consists of a continuous anti-friction roller chain, linking the solid steel sprockets of the out-feed and in-feed rolls. The drive chain is driven by a double worm gear reduction drive, which in turn is driven by the cutterhead.

FEED ROLLERS:

In-feed rollers (serrated), solid stress-proof steel—1 3/4" Dia.
Out-feed rollers (smooth), solid stress-proof steel—1 3/4" Dia.
Speed of feed rollers—approximately 35 RPM.

TABLE ROLLERS (IDLERS):

Two steel rollers, centered 5 1/2" apart, 1 1/2" O.D., 7/8" I.D.

TABLE RAISING AND LOWERING MECHANISM:

One complete turn of hand wheel moves the table 1/16".

THICKNESS SCALE:

Accurately graduated from 0" to 5". Visible from any operating position.

TABLE DIMENSIONS:

13" Wide x 26".

FLOOR SPACE:

30" Wide x 16".

OVERALL DIMENSIONS:

35" Wide x 26", 39 3/4" High

APPROXIMATE SHIPPING WEIGHT:

595 lbs.

CATALOG LISTING

No. 22-101 Delta 13"x5" Thickness Planer (single surfacing), floor model, complete with No. 23-103 ball bearing, 3-knife cutterhead, No. 22-104 set of 3 knives; bearings and bearing housings; No. 49-173 set of 3 matched V-belts; and No. 1604 motor pulley for 1725 RPM motors, or No. 22-105 motor pulley for 1425 RPM motors. 595 lbs.

No. 22-120 Delta 13"x5" Thickness Planer for 50 cycle current. Supplied with No. 49-176 V-belts and No. 22-105 pulley . . . otherwise same as No. 22-101. 595 lbs.

No. 49-386—Magnetic Starter for 220 volt, for either single or 3 phase motors. Open type (without box enclosure). Mounts in base. For 13" Planer only. 12 lbs.

No. 49-387—Magnetic Starter for 440 volt, for either single or 3 phase motors. Open type (without box enclosure). Mounts in base. For 13" Planer only. 12 lbs.

No. 22-103—Planer Cutterhead Assembly complete with 3 high speed steel knives, bearings and bearing housings. 50 lbs.

No. 22-104—Extra Set of 3 High Speed Steel Knives, 13 1/8" long. 8 lbs.

No. 49-173—Set of 3 Matched V-Belts, 68" Long. 6 lbs.

MOTORS RECOMMENDED:

No. 84-977—3 HP Motor, single phase, ball bearings, 115/230 volts, 60 cycle, 1725 RPM, NEMA Frame 225. 133 lbs.

No. 97-320—3 HP Motor, 3 phase, ball bearing, 220/440 volt, 50/60 cycle, 1425/1725 RPM, NEMA Frame 225. 133 lbs.

No. 84-978—3 HP Motor, single phase, ball bearings, 115/230 volts, 50 cycle, 1425 RPM, NEMA Frame 225.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Big Planer Performance At Small Planer Cost

FEATURES OF THIS PLANER

LARGE CAPACITY . . .

13" x 5" stock is planed quickly and easily.

STEADY, POWERFUL FEED . . .

Cuts smoothly and evenly any stock from 1/16" up to 5" thick.

MAXIMUM EFFICIENCY . . .

Dependable performance eliminates waste. Smooth accurate cuts reduce the need for sanding operations. Sturdy construction insures longer operating life.

SMOOTH OPERATION . . .

Fine grey iron castings throughout give maximum rigidity between all working parts and reduce vibration to a minimum. Cutterhead knives are machined and balanced for accurate cuts.

SHIELDED, SEALED, LUBRICATED-FOR-LIFE BALL BEARINGS . . .

They give smooth cutterhead operation . . . trouble-free service . . . longer machine life.

EXCLUSIVE DELTA ADJUSTMENTS . . .

Easily operated collar adjusting screws for making quick, accurate knife adjustment without removing from cutterhead.

PERFECT ALIGNMENT . . .

Steel gibs with adjusting screws and adjusting raising screws keeps table surface parallel to knife blades.

COMPLETE SAFETY . . .

All moving parts are fully enclosed or guarded.

SAFE POSITIVE TABLE STOPS . . .

Blades can never strike the table—an important safety feature.

SAFETY TYPE CHIP BREAKER . . .

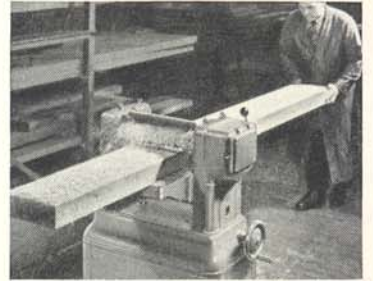
Keeps your fingers away from knives . . . throws chips away from operating side of planer.

SAFETY CLUTCH MECHANISM . . .

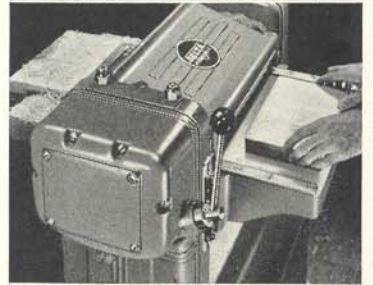
You can stop and start feed mechanism instantly without touching motor switch.

CONVENIENT CONTROLS . . .

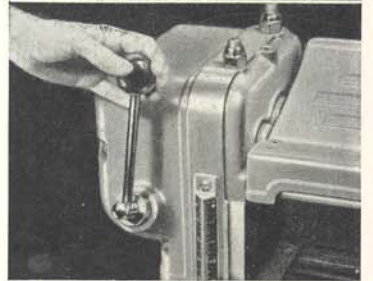
Save time and effort with controls located within your easy reach. You operate at a safe distance from the moving stock. Table control is self-locking in any position.



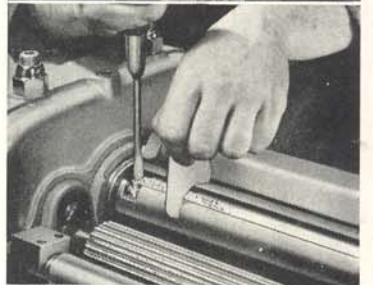
Compare the versatility of this machine. Stock up to 13"x5" is easy to handle on the Delta Planer.



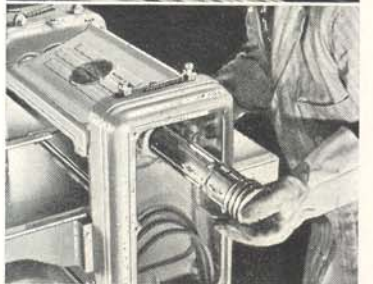
A short piece of stock, only 6" long, can be handled unbutted in the new Delta Planer. Another feature which adds to the versatility of this machine.



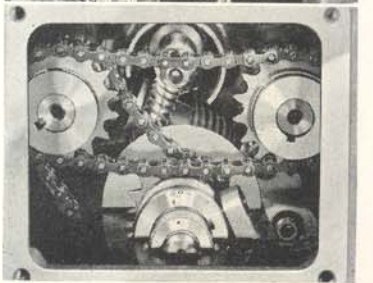
A Delta Exclusive! Finger-tip clutch control allows you to stop and start feed mechanism without touching motor switch. You can read this depth scale from any position.



Another Delta Exclusive! Individual blade adjustment and simplified measuring device for quick, accurate adjustment of knives.



Save Valuable Time with this unique construction feature. Pull the dull cutterhead out—slip the new one in. It's that simple!



The Double-Worm-gear reduction drive is automatically lubricated as it runs. A Delta feature which prolongs the life of your machine.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

The Smoothest Running Scroll Saw You Can Buy



No. 40-305
Motor and Switch Extra

Specifications

Capacity, arm to saw	24"
Thickness of cut	1 3/4"
Table size	14" x 14"
Table tilts	45° right, 15° left, 45° front
Table from floor	42 1/4"
Overall Height	55"
Width	15"
Length	36"
Speeds (Variable Speed Model)	650 to 1700 C.S.M.*
(4-Speed Model)	650, 950, 1325, 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 1/2" 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. 1/2 lb.
- No. 340**—V-belt for 4-Speed scroll saw. 1/2 lb.
- No. 718**—4-step cone pulley for motor, specify 1/2, 5/8 or 3/4 bore. 1 1/8 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. 1 3/4 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 1/2" bore. 2 5/8 lbs.
- No. 1446**—Variable-Speed motor pulley only 1/2" bore. 2 lbs.
- No. 1447**—Motor Base for Variable-Speed scroll saw with bracket, screw and handle. 6 lbs.
- No. 50-716**—(Old No. 716)—Steel Stand 31 1/2" high; top 7" x 33". 55 lbs.

Motors Recommended: Heavy Duty 62-110, 66-110; Medium and Light Duty 60-310. (For complete listing of motors and switches see page 64.)

(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 1/4" 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 sideways 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.

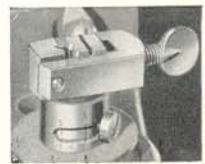
Any Speed From 650 to 1700 Cutting Strokes per Minute With the Variable Speed Model.

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 650-950-1325 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 650, 950, 1325 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 1 3/4" 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.

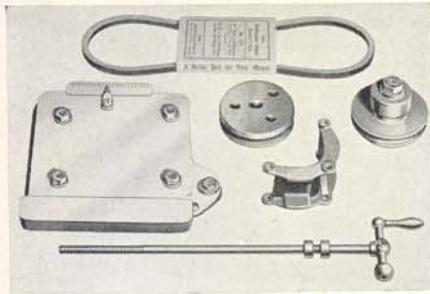
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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.

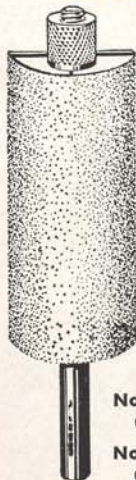
LOWER SABER BLADE GUIDE

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 — Lower Guide for Scroll Saw, with post, nut and thumb screw. 3/8 lb.

SANDING ATTACHMENT



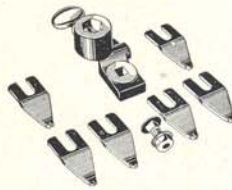
Built to sand concave, convex or flat surfaces, this convenient sanding attachment saves hours of hand labor. It does away with the annoyance of makeshift devices. Knurled knob expands the body of sanding attachment and tightens garnet sleeve securely. 15/16" wide, 1/2" thick and 2 1/2" long. 1/4" diameter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

INDIVIDUAL BLADE GUIDES



These guides supplement the regular guide and hold-down, and are used where close following of a line or pattern is important. Ideal for puzzle and marquetry work. Set consists of six different hardened steel guides and a bracket.

No. 1202—Set of six guides and bracket. 1 lb.

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. 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. Will add much to the accuracy and quality of your work.

No. 882—Lamp attachment with shade, socket, cord, four flat links, bolts, spacer and attachment bracket. 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. ...
- (For Prices See Attached Price List)

SCROLL SAW BLADES

The proper blade for each job. Finest obtainable, 5" long with accurately spaced teeth. Properly heat treated for long life. Have 3/8" blank ends for fastening into chuck. 6 to a package. 1/8 lb.

Cat. No.	Material Cut	Thick In.	Width In.	Teeth Per Inch	Blade Full Size
58	Steel • Iron Lead • Copper	.020	.070	32	
59	Aluminum Pewter • Asbestos Paper • Felt	.020	.070	20	
60	Steel • Iron • Lead Copper • Brass	.020	.070	15	
61	Aluminum Pewter • Asbestos	.020	.085	15	
64	Wood	.020	.110	20	
65	Asbestos • Brake Lining • Mica Steel • Iron • Lead Copper • Brass Aluminum Pewter	.028	.250	20	
77	Wood Panels and Veneers	.010	.048	18	
81	Plastics • Celluloid	.010	.070	14	
82	Hard Rubber	.010	.055	16	
83	Bakelite • Ivory Wood	.010	.045	18	
84	Wood Veneer Plus Plastics • Celluloid Hard Rubber Bakelite • Ivory Extremely Thin Materials	.008	.035	20	
85		.019	.050	15	
86	Plastics • Celluloid	.019	.055	12	
87	Hard Rubber Bakelite • Ivory Wood	.020	.070	7	
88		.020	.110	7	
91	Wall Board Pressed Wood Wood • Lead Bone • Felt • Paper Copper • Ivory Aluminum	.020	.110	15	
92		.020	.110	10	
93	Hard and Soft Wood	.028	.187	10	
94		.028	.250	7	
95	Pearl • Pewter	.016	.054	30	
96	Mica Pressed Wood	.016	.054	20	
97	Sea Shells Jewelry • Metals	.020	.070	15	
98	Hard Leather	.020	.085	12	

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.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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



Shaper Unit Complete

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 3/4"x 3 1/4" 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 3/4" spindle easily and quickly interchanged with 1/2" or 5/16" spindle for 3 lip formed cutters or with 1/2" 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, 3/4" Spindle, Table Inserts, Starting Pin, Wrenches, Spindle Pulley, two No. 1349 Table Extensions, No. 287 V-belt and No. 5710 Motor Pulley (specify bore). Without Motor, Reversing Switch or Cutters. 340 lbs.

No. 1340—Shaper with No. 1354 Fence, 3/4" 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". 1/2 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. 2 1/4 lbs.

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

No. 1345—1/2" stub spindle for cope cutters with 1/2" hole. 1 lb.

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

No. 1347—1/2" spindle for 3 lip cutters with 1/2" hole. 1 lb.

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

No. 5710—7 1/2" motor pulley for 3450 r.p.m. motors. Specify Bore. 2 lbs.

No. 43-826—Solid Shaper Spindle Cartridge Assembly with 3/4"x 10 R.H. Thread for use on No. 1340 or No. 43-205 Shaper when only counterclockwise rotation of spindle is desired. This spindle cannot be reversed for clockwise rotation.

No. 43-827—Solid Shaper Spindle Cartridge Assembly with 3/4"x 10 L.H. Thread for use on No. 1340 or No. 43-205 Shaper where only clockwise rotation of spindle is desired. This spindle cannot be reversed for counterclockwise rotation.

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 64.

(For Prices See Attached Price List)

SPECIFICATIONS

Table Height	34"
Table Size	27"x 28"
Table Size with extensions.....	27"x 36"
Table Opening Diameters.....	6 3/4", 3 1/2", 3" and 1 3/8"
Spindle Diameter Furnished.....	3/4"
Other Spindles Available	1/2" and 5/16"
Capacity, 3/4" Spindle (under nut).....	3 1/4"
1/2" Spindle (under nut).....	2 1/2"
5/16" Spindle (under nut).....	1 1/2"
Spindle Travel	3"
Spindle Speed (r.p.m.)	10,000
Largest table opening	6 1/2"
Fence Size (each side)	3 3/4"x 12 3/8"x 15/16"
Spindles are interchangeable.	

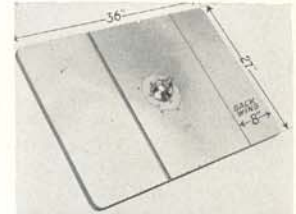
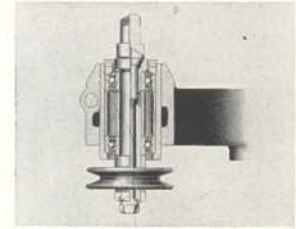


Table is big 27"x 28" with a 3/8" x 3/4" groove for miter gage or jigs. May be increased to 27" x 36" by adding extension table.



Exceptionally long 3/4" diameter spindle. Spindles readily interchangeable for use of wide variety of cutters. Note removable table inserts in 3 opening sizes.



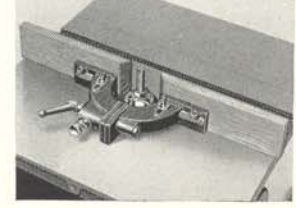
Spindle assembly showing rugged design, short, stiff drive spindle, well spaced bearings . . . produces chatterless work.



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.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

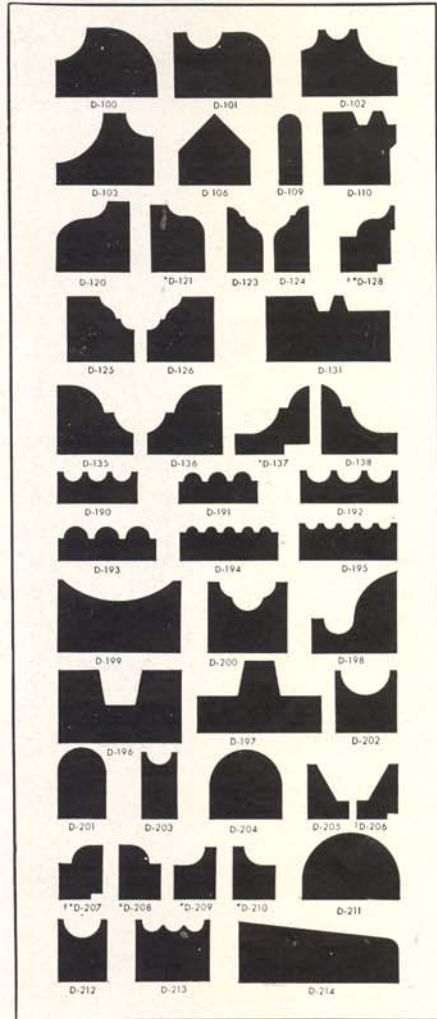
600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Accessories That Add To The Usefulness Of Your Shaper

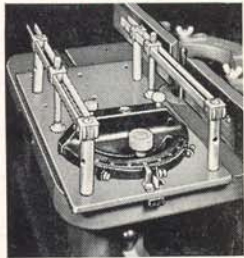
3-LIP CUTTERS AND COLLARS



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. The collars for use with the cutters are ground to size. Cutters below illustrated 1/2 size.



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 3 1/2" thick.

No. 983—Set of Spring Hold Downs. 2 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. 3 1/2 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, D-133 and D-108 collar.
- D-206-S**—Pgee Door Assembly Set includes D-205, D-206 female cutters, D-108 and D-133 collars.
- 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.

SPECIAL NOTE: If you do not have 1/2" Spindle for your Shaper, order, in addition, one No. 1347 1/2" Spindle.

SHAPER COLLAR SETS

- No. 1210**—Set of 7 collars from 3/4" to 1 1/8" diameter, D-142, D-143, D-144, D-145, D-171, D-172 and D-173. 3/4 lb.
- No. 1211**—Set of 6 collars from 1-3/16" to 1 1/2" 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 1 7/8" diameter, D-149, D-176, D-177, D-178, D-179 and D-180. 1 1/2 lbs.
- No. 1191**—Set of 4 collars for sash cutters, D-140, D-141, D-150 and D-151. 1/2 lb.
- No. 1198**—Set of Table Inserts with Guide Shoulders SR-253 2 3/8" dia. and SR-254 1 5/8" dia. 1/3 lb.

3-Lip Cutters with 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 8.)

3-KNIFE SAFETY CUTTER HEAD



Made of alloy steel. Bushing furnished so that cutterhead fits either 1/2" or 3/4" spindles. Uses moulding cutter knives listed below. Furnished without knives.

No. 1343—3 Knife Cutter Head. 1 1/2 lbs.

EXTRA SETS OF CUTTER BLADES

Come in sets of three matched blades.

New	Old	Description
35-100	254	1/2" Cove, 3/8" Quarter Round
35-101	253	3/8" Cove, 3/8" Bead
35-102	253	3/8" and 3/8" Quarter Round and 1/4" Bead
35-103	250	3/4" and 1/2" Quarter Round
35-104	259	Straight
35-106	258	90° Flute
35-110	256	Drawer Joint
35-131	257	Glue Joint
35-190	247	3 Bead (3/8" Bead)
35-191	247	3 Flute (3/8" Flute)
35-192	247	3 Bead (1/4" Bead)
35-193	247	3 Flute (1/4" Flute)
35-194	247	5 Flute (1/4" Flute)
35-195	247	5 Bead (1/4" Bead)
35-196	247	Wedge Tongue
35-197	247	Wedge Groove
35-200	255	Clover Leaf Screen Moulding (9/32"x 3/8")
35-206	248	Pgee R. H.
35-211	251	1" Flute
35-221	251	Thumb Moulding
35-222	252	1/2" Cove and 1/4" Flute
35-223	258	Ogee
35-224	247	3/8" Cove
35-225	263	Flute Bead, Quarter Round and Ogee Comb.
35-226	264	Flute Bead, Quarter Round and Ogee Comb.
35-227	269	Flute Bead, Quarter Round and Ogee Comb.
35-228	261	Flute Bead

See page 47 for actual size and shape of cutters.

SAFETY RING GUARD



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

No. 1348 — Safety Ring Guard. 8 lbs.

SHAPED CUTTERS — 1/2" HOLE

1/2" Spindle No. 1347 needed with these cutters

D-100	1/2" Cove, 3/8" Quarter Round
D-101	3/8" Cove, 3/8" Bead
D-102	3/8" and 3/8" Quarter Round, 1/4" Bead
D-103	1/4" and 1/4" Quarter Round, 3/8" Flute
D-106	3/8" Flute
D-109	1/2" 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 Cone L. H.
D-190	3-Bead (3/8" Bead)
D-191	3-Flute (3/8" Flute)
D-192	3-Bead (1/4" Bead)
D-193	3-Flute (1/4" Flute)
D-194	3-Flute (3/8" Flute)
D-195	5-Bead (1/4" 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 3/8")
D-201	1" Flute
D-202	1/2" Bead
D-203	1/2" Bead
D-204	3/8" 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	3/8" Bead
D-213	Beaded Screen Moulding
D-214	Panel Raising

STRAIGHT CUTTERS — 1/2" HOLE

D-104	1" x 1/2" Diameter
D-105	1 1/4" x 1/2" Diameter
D-106	1 1/2" x 1/2" Diameter
D-108	1 3/4" x 1/2" Diameter
D-127	3/8" x 1 1/2" Diameter
D-129	3/8" x 2-7/32" Diameter
D-130*	3/8" x 1 1/2" Diameter
D-139	3/8" x 2-7/32" Diameter

*For Sash work.

†Counterbored to fit stub spindle No. 1345.

Spacing Collars for Shaper Cutters

No.	Thick	Out. Dia.	Hole
D-132	3/8"	1-5/32"	1/2"
D-133	3/8"	13/16"	1/2"
D-134	3/8"	1-5/32"	1/2"
D-140	3/8"	1 1/8"	1/2"
D-141	3/8"	1 1/8"	1/2"
D-142	3/8"	1 1/8"	1/2"
D-143	3/8"	1 1/8"	1/2"
D-144	3/8"	1 1/8"	1/2"
D-145	3/8"	1 1/8"	1/2"
D-146	3/8"	1 1/8"	1/2"
D-147	3/8"	1 1/8"	1/2"
D-148	3/8"	1 1/8"	1/2"
D-149	3/8"	1 1/8"	1/2"
D-150	3/8"	1 1/8"	1/2"
D-151	3/8"	1 1/8"	1/2"
D-155	3/8"	1 1/8"	1/2"
D-171	3/8"	1 1/8"	1/2"
D-172	3/8"	1 1/8"	1/2"
D-173	3/8"	1 1/8"	1/2"
D-174	3/8"	1 1/8"	1/2"
D-175	3/8"	1 1/8"	1/2"
D-176	3/8"	1 1/8"	1/2"
D-177	3/8"	1 1/8"	1/2"
D-178	3/8"	1 1/8"	1/2"
D-179	3/8"	1 1/8"	1/2"
D-180	3/8"	1 1/8"	1/2"
D-215	3/8"	1-15/32"	1/2"
D-217	3/8"	1-5/32"	1/2"

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 1/8" thick with a 30° clamp angle. Cutter head furnished without knives.

No. 1342—Cutter head, 2 3/4" high, for 3/4" spindle, with tightening block. 1 1/2 lbs.

No. 1192—Cutter head, 2 3/4" high, for 1/2" spindle, with tightening block. 1 1/2 lbs.

No. 1193—Two 1/2" wide x 2 1/2" long knives. 3/8 lb.

No. 1194—Two 3/4" wide x 2 1/2" long knives. 3/8 lb.

No. 1195—Two 1" wide x 2 1/2" long knives. 3/8 lb.

No. 1196—Two 1 1/2" wide x 2 1/2" long knives. 3/8 lb.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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

No. 46-305

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



SPECIFICATIONS

Speeds: 4-Speed Lathe	900, 1400, 2200, 3400 r.p.m.
16-Speed Lathe	340 to 3400 r.p.m.
Swings Over Bed	12"
Between Centers	37"
Overall Length	57"
Width	10 1/2"
Height	14 3/8"
Height on Stand	46"
Tool Rest From Floor	42"
Accurately Ground Ways both front and back	2" wide
Spindle Diameter	1 1/4"
Spindle Hole	5/8"
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. 53 1/2" long, 8 1/2" wide, 4 7/8" 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: 1 1/4" diameter spindle, with 5/8" 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 900, 1400, 2200, and 3400 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.

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. 1/2 lb.

No. 284—V-belt, for Countershaft arrangement, Out. Cir. 30-7/16". 1/2 lb.

No. 644—V-belt, for Lathe. Out. Cir. 66 1/4". 3/4 lb.

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

No. 949—1 1/4" Open End Wrench. 1/2 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 (3/4" bore for shaft), No. 932 pulley (3/4" 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 64.

(For Prices See Attached Price List)



No. 46-310

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

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

Handy Lathe Accessories Add to Use of 12-inch Lathe

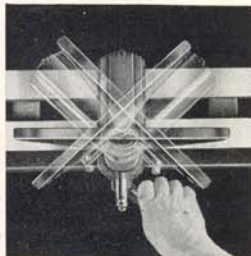
MANY FEATURES . . .



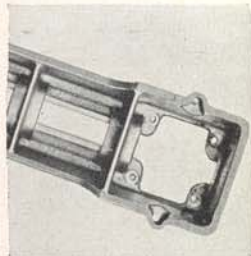
Famous Indexing Mechanism—two rows of holes in headstock pulley, 8 holes and 60 holes, can be engaged at will by the unique indexing pin. You can now obtain the maximum number of index divisions.



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. 53 1/2" long, 8 1/2" wide, 4 7/8" high. Finely machined ways 2" wide front and back.

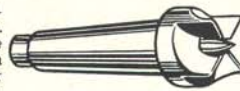


Graduated Tailstock Sleeve operated with large ball crank handle and locked in place with convenient ball end lever. Sleeve machined for No. 2 Morse Taper centers. Centers self-ejecting.



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. 3/8 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. 3/8 lb.

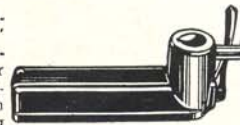


Screw-on arbor with 1/2" shaft for grinding wheels, buffing wheels, wire brushes, etc. Flanges trued for accuracy. For 1" dia. -8 thread shaft. 1 lb.



No. 144—Screw-on Arbor Right Hand.
No. 145—Screw-on Arbor Left Hand.

No. 1461—Tool support Base for 12" Lathe. Has V-shaped hole for 1/2" to 1" diameter shanks, with universal locking mechanism. 5 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. 690—4" Tool Support. Has a 1" diameter shank. Very strong and well made. Made for use where doing small, fine work. 1 3/4 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 2 1/4" diameter. 7 1/2 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. 1 1/2 lbs.



No. 935—Adapter for 12" Lathes. Has No. 2 Morse Taper Shank on one end, other end 1/2" diameter, 1 1/8" long. Enables use of all attachments with 1/2" bore to be used. 3/8 lb.



Wire wheels for scrubbing rust from metals, removing burrs, etc. Two sections. 6" diameter 1/2" hole. 1 lb.

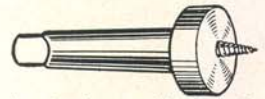


No. 3113—Wire, coarse.
No. 3114—Wire, fine.
No. 3115—Tampico Fibers.

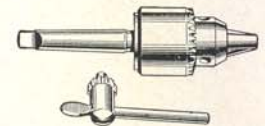
No. 934—Cup Center for 12" Lathe. Fits any tailstock with No. 2 Morse Taper hole. Has replaceable center pin. Hardened and polished. 3/8 lb.



No. 940—Screw Center for 12" Lathe. Fits any lathe headstock with No. 2 Morse Taper hole. Excellent for turning small, delicate work. With 1 3/8" long replaceable screw, 1 1/2" dia. face. 1/2 lb.



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 - 1/2". 2 1/2 lbs.



No. 697—Heavy, rigid Floor Stand for face plate work on the left of the spindle. Tripod legs, pipe support. V-hole for 1/2" to 1" shank. Knocked down. 43 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.



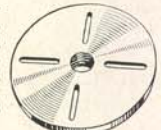
No. 694—24" Tool Support for extra long turnings. Has two 1" diameter shanks. This rest requires an extra tool support base No. 1461 for lathe on which it is used. 7 lbs.



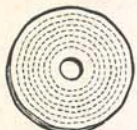
No. 938—5" Hand Wheel for 12" Lathe. Fits left-hand end of lathe spindle with 1"-8 thread. Useful for quick stopping of lathe, for positioning of work, etc. 3 lbs.



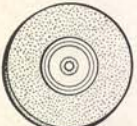
No. 937—6" Face Plate for large face plate work on the 12" Lathe. Has special thread to fit both right and left-hand threaded spindles. Used either end of spindle. For spindle with 1"-8 thread. 3 lbs.



No. 4005—Buffing wheel, for polishing plated parts and cleaning and buffing metal parts of all kinds. 6" diameter, 1/2" wide with 1/2" hole to fit arbor. 1 lb.



6" diameter, high-quality, fast cutting grinding wheel. 1/2" wide with 1/2" hole to fit No. 144 and 145 arbor. Handy to have in any shop. 1 3/4 lbs.



No. 3101—Grinding wheel, 46 grit.
No. 3102—Grinding wheel, 60 grit.

(For Prices See Attached Price List)

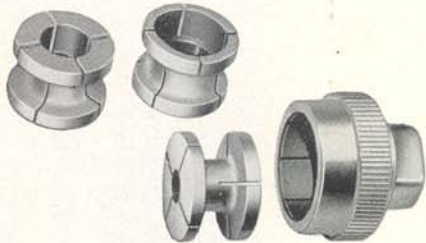
DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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 $\frac{1}{8}$ " 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 $\frac{1}{2}$ " and $\frac{3}{8}$ ", $\frac{3}{4}$ ", and 1", $1\frac{1}{4}$ " and $1\frac{1}{2}$ ". 4 lbs.

No. 46-957—Steel Collet Chuck 2" capacity, 1"-8 thread, with three double-end collets $\frac{1}{2}$ " and $\frac{3}{8}$ ", $\frac{3}{4}$ " and 1", $1\frac{1}{4}$ " and $1\frac{1}{2}$ " and Jacobs Chuck key. 4 lbs.

No. 46-958—Steel Collet Chuck 2" capacity, $1\frac{1}{2}$ "-8 thread, with three double-end collets $\frac{1}{2}$ " and $\frac{3}{8}$ ", $\frac{3}{4}$ " and 1", $1\frac{1}{4}$ " and $1\frac{1}{2}$ ", 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. $1\frac{1}{2}$ lbs.

CAST IRON BENCH LEGS FOR LATHE

No bench twist—strong, solid. Heavy cast iron with all holes $\frac{3}{8}$ ". Bracket for shelf at bottom. Can also be used for other benches and tables.

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



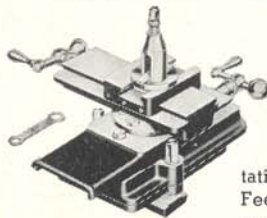
Delta 4-Jaw Independent Chuck for Large, Small and Irregular Shaped Turnings



Made of semi-steel with hardened steel jaws. Each jaw independently adjustable. Capacity is $\frac{1}{16}$ " to 5" in round stock. For 11" and 12" Delta Lathes and other lathes with a 1"-8 threaded headstock spindle. Needs no back plate.

No. 46-951—4-Jaw Independent Chuck. Capacity $\frac{1}{16}$ " to 5" in round stock. For 1"-8 threaded spindles. 5 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.

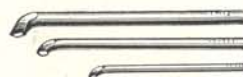
No. 46-961—Compound Slide Rest for 12" Lathe with tool post rocker, washer and wrench. 33 lbs.

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 $\frac{1}{4}$ " 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. $1\frac{1}{2}$ lbs.

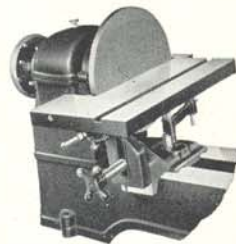


No. 46-966—Set of three Boring Bars, $\frac{1}{8}$ ", $\frac{3}{16}$ ", and $\frac{1}{4}$ ". $\frac{1}{2}$ lb.



No. 46-954—Set of four high-speed steel tool bits $\frac{1}{4}$ " x $\frac{1}{4}$ " x $1\frac{1}{8}$ ", roughing, finishing, right corner and left corner. 1 lb.

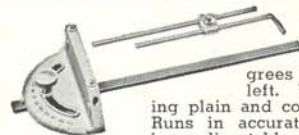
SANDING TABLE FOR LATHE



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 $\frac{3}{16}$ " x $\frac{1}{2}$ " 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.

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. $8\frac{1}{2}$ " diameter and threaded to fit headstock spindle with 1"-8 thread. With one garnet disk. R.H. thread only.

No. 46-934— $8\frac{1}{2}$ " 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, $8\frac{3}{8}$ " dia. (1 doz.) 2 lbs.

No. 46-817—Fine No. 80 Grit Garnet paper disk, $8\frac{3}{8}$ " dia. (1 doz.) 2 lbs.

Disk Adhesive

With disk adhesive you have no messy glueing, no removal of metal disks from machine, no waiting overnight 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. $2\frac{1}{2}$ lbs.

No. 164— $1\frac{3}{4}$ " x 2" Sanding Drum with No. 2 Morse Taper Shank. $1\frac{3}{4}$ lbs.

See page 8 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, $1\frac{1}{4}$ " x $10\frac{1}{2}$ ". Overall length 15". $1\frac{1}{4}$ lbs.

- No. 121**.....1" Skew Chisel
- No. 122**..... $\frac{3}{4}$ " Gouge
- No. 123**..... $\frac{1}{4}$ " Gouge
- No. 124**..... $\frac{1}{2}$ " Skew Chisel
- No. 125**..... $\frac{1}{8}$ " Parting Tool
- No. 126**..... $\frac{1}{2}$ " Gouge
- No. 127**..... $\frac{1}{2}$ " Spear Point
- No. 128**..... $\frac{1}{2}$ " 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— $\frac{1}{8}$ " for fine work and $\frac{1}{4}$ " 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..... $\frac{1}{8}$ " Square Nose. $1\frac{1}{2}$ lbs.

No. 46-802..... $\frac{1}{8}$ " Round Nose. $1\frac{1}{2}$ lbs.

No. 46-803..... $\frac{1}{4}$ " Square Nose. $1\frac{1}{2}$ lbs.

No. 46-804..... $\frac{1}{4}$ " Round Nose. $1\frac{1}{2}$ lbs.

(For Prices See Attached Price List)

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.

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"	1 1/2"	3/16"
272 ..	28"	1 1/2"	3/16"
*281 ..	28"	1 1/2"	3/16"
49-103	28"	1 1/2"	3/16"
*49-150	28 1/4"	1 1/2"	3/16"
30-100	28 1/4"	1 1/2"	3/16"
*291 ..	29"	1 1/2"	3/16"
30-102	29"	1 1/2"	3/16"
49-105	29"	1 1/2"	3/16"
284 ..	30"	1 1/2"	3/16"
287 ..	30"	1 1/2"	3/16"
273 ..	31"	1 1/2"	3/16"
49-106	31"	1 1/2"	3/16"
49-153	31 1/4"	1 1/2"	3/16"
331 ..	35 3/8"	1 1/2"	3/16"
49-152	36"	1 1/2"	3/16"
340 ..	36 1/2"	1 1/2"	3/16"
355 ..	38 1/2"	1 1/2"	3/16"
49-115	39 1/2"	1 1/2"	3/16"
387 ..	39 7/8"	1 1/2"	3/16"
49-154	40"	1 1/2"	3/16"
410 ..	42"	1 1/2"	3/16"
430 ..	44"	1 1/2"	3/16"
*289 ..	46"	1 1/2"	3/16"
453 ..	47"	1 1/2"	3/16"
*294 ..	51"	1 1/2"	3/16"
49-142	51"	1 1/2"	3/16"
501 ..	51 5/8"	1 1/2"	3/16"
510 ..	52 7/8"	1 1/2"	3/16"
520 ..	54 1/8"	1 1/2"	3/16"
530 ..	55"	1 1/2"	3/16"
49-144	56 3/4"	1 1/2"	3/16"
49-173	57"	1 1/2"	3/16"
30-136	57 5/8"	1 1/2"	3/16"
560 ..	58"	1 1/2"	3/16"
*49-140	59 3/8"	1 1/2"	3/16"
49-172	59 3/8"	1 1/2"	3/16"
49-141	60"	1 1/2"	3/16"
583 ..	60"	1 1/2"	3/16"
588 ..	61"	1 1/2"	3/16"
595 ..	61"	1 1/2"	3/16"
521 ..	62 3/4"	1 1/2"	3/16"
618 ..	64"	1 1/2"	3/16"
644 ..	66 1/4"	1 1/2"	3/16"
670 ..	69 1/2"	1 1/2"	3/16"
673 ..	74 3/4"	1 1/2"	3/16"
750 ..	77 1/2"	1 1/2"	3/16"

†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 1/2", 5/8" and 3/4" bores. 5/8" and 3/4" bores have a 3/16" keyway. 1/2" bore furnished unless otherwise ordered.

No. 718—1 1/4 lbs. No. 932—2 lbs.
No. 720—1 3/4 lbs. No. 985—2 lbs.

Driver	Driven	Speeds			
718	718	900	1500	2200	3450
720	720	1200	1545	1980	2575
718	720	650	1000	1300	1725
720	718	1725	2400	3400	5000
932	932	900	1400	2200	3400
985	985	590	1275	2450	5000

BAND SAW BLADES FOR OBSOLETE MACHINES

Width	Min. Cutting Rad.	For 12" Saw 78" long	For No. 785 66" long	For No. 768 74" long
1/8"	1/4"	532	732	770
3/16"	1/2"	533	733	771
1/4"	3/4"	534	734	772
5/16"	1"	536	736	773
3/8"	3/4"	*381	*781	*774

*For cutting soft metals.

(For Prices See Attached Price List)

V-BELT PULLEYS



For A section V-belts. Safety disc type—no spokes. Have 5/16" hollow head set screw, 5/8" and 3/4" bores have a 3/16" keyway. All sizes can be furnished in 1/2", 5/8" and 3/4" bores. 1/2" bore furnished unless otherwise specified. Maximum bore available on Nos. 5200 to 5300 is 3/4".

Catalog No.	Outside Diameter
5200	2"
5225	2 1/4"
5250	2 1/2"
5275	2 3/4"
5300	3"
5350	3 1/2"
5400	4"
5450	4 1/2"
5500	5"
5550	5 1/2"
5600	6"
5650	6 1/2"
5700	7"
*5710	7 1/2"
5800	8"
6100	10"
6200	12"

*3/4" 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. 1 1/2 lbs.

3/4" LINE SHAFTING

Carefully ground to precision limits, this accurate shafting must not be confused with the cheap cold-rolled shafting sometimes offered. Carried in stock in 1', 2', 3', 4', 5', 6', 8', and 10' lengths.

No. 49-372—3/4" dia. Ground Shafting (Specify Length) per foot. 2 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 3/4" shafting only.



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

3/4" SHAFT COLLARS

These shaft collars are of steel, with 3/4" 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—3/4" Shaft collar. 1/4 lb.

FLEXIBLE COUPLINGS

Necessary where motors are connected directly to the end of line shafts or to the shafts of machines. One side bored 3/4" to suit line shafts. Other, bored to 1/2", 5/8" or 3/4". 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.

PRESSED STEEL LEGS

Handy pressed steel bench legs for setting up your own benches or machine stands. Light in weight, strong and rigid.

No. 49-344—Pressed Steel Bench Leg. 23 lbs. each.

No. 49-345—Pair of Pressed Steel Bench Legs. 45 lbs.



STEEL STANDS

No.	For Use With	Top	Height
50-168	Saw-Jointer Combination	16"x30"	26 3/8"
50-406	Belt Sander	8"x16"	29"
50-432	12" Disk Sander	12 1/2"x16 1/2"	31 1/2"
31-441	Deburring Machine	16 1/2"x26 1/4"	31 1/2"
50-656	6" Jointer	8"x16"	29"
50-716	24" Scroll Saw	7"x33"	31 1/2"
50-821	Welders	12 1/2"x16 1/2"	31 1/2"
50-891	14" Band Saw	8"x16"	24"
	10" Circular Saw		

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.



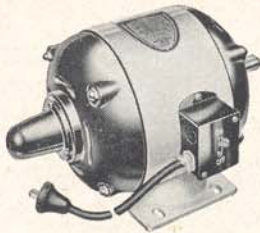
WRENCHES AND ALLEN KEYS

No.	Description
192	Allen Key, W = 5/32" with 4 3/4" metal handle
194	Allen Key, W = 5/32"
942	3/4" C. I. Box Wrench
949	1 1/4" Forged Open End
1520	3/8" Hex. closed, 1-1/16" Stamped Open End, 3/8" and 1/2" Shaper Spindle Holes
1521	Allen Key for Moulding Cutter Heads W = 3/16"
1522	Double end 5/16" Forged open end.
1523	3/8" and 11/16" double end box wrench.
1524	9/16" and 5/8" Stamped double end box
1525	3/8" closed, 3/8" Stamped open end
1526	7/16" and 9/16" Stamped double end box.
1527	3/8" C. I. box wrench
1529	1/2" Hex. Socket Wrench
1530	Allen Key, W = 1/8"
1531	Allen Key, W = 3/8"
1532	Allen Key, W = 1/4"
1533	Allen Key, W = 7/32"
1534	Allen Key, W = 1/8"
1535	Allen Key, W = 3/16"
1536	Allen Key, W = 5/16"
1538	5/8" and 3/4" Stamped double end box.

DELTA POWER TOOL DIVISION

ROCKWELL MANUFACTURING COMPANY

600 E. VIENNA AVE. MILWAUKEE 1, WIS.



You Get Correct Driving Power With Delta-Milwaukee 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.
- 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.

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-and-off toggle switch with box, power cord, plug, motor lead wires and connectors. For use on No. 28-205, 28-305, 31-506, 34-260, 34-265, 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. 28-355.

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.

This two-pole toggle switch breaks both sides of line ... has single hole mounting ... bat-type lever.

No. 49-330—On-and-off toggle switch only for use with No. 34-260 and No. 34-265.

Reversing Switches

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

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.

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 cross-the-line magnetic starter, rating 2 H.P., 440 V., 60-cycle only.

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

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



Mounting Parts

No. 1322—Mounting brackets together with screws, used to mount No. 1320 manual starter on all steel stands and all drill presses except No. 620.

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 starter on No. 34-405 and No. 34-407.



Motor Cords

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 1/2, 3/4 and 1 H.P. single phase and D.C. large frame motors.

No. 49-307—No. 16 gage 2-wire cord for 1/2 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.



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, 1/2" Shaft

Cat. No.	Type	H.P.	Cur.	Voltage	Cycles	R.P.M.	Sh. Wt. Lbs.
460-040	Sp. Ph.	1/2	AC	115	60	1725	26
62-110	Cap.	1/2	AC	115/230	60	1725	35
x462-210	Cap.	1/2	AC	115	60	3450	39
62-610	Cap.	1/2	AC	115/230	60	1725	39
66-320	3 Ph.	1/2	AC	220/440	50/60	1425/1725	31
*66-321	3 Ph.	1/2	AC	220/440	50/60	2850/3450	33
*68-110	D.C.	1/2	DC	115	..	1725	30
*68-120	D.C.	1/2	DC	230	..	1725	30
*68-310	D.C.	1/2	DC	115	..	3450	38
*68-320	D.C.	1/2	DC	230	..	3450	38

6" Frame Motors, 5/8" Shaft

462-250	Cap.	3/4	AC	115/230	60	3450	38
462-650	Cap.	1/2	AC	115/230	60	1725	38

6" Frame, for Metal Shaper, 1/2" Shaft

460-510	Cap.	1/2	AC	115	60	1725	35
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(Includes overload switch)

8 1/2" Frame Motors, 3/4" Shaft

82-710	Cap.	1/2	AC	115/230	60	1725	66
82-910	Cap.	3/4	AC	115/230	60	1725	76
84-910	R. I.	1	AC	115/230	60	1725	84
86-520	3 Ph.	1/2	AC	220/440	50/60	1425/1725	58
86-720	3 Ph.	3/4	AC	220/440	50/60	1425/1725	59
86-920	3 Ph.	1	AC	220/440	50/60	1425/1725	68
86-921	3 Ph.	1	AC	220/440	50/60	2850/3450	74
86-922	3 Ph.	1	AC	220/440	50/60	960/1140	66
87-120	3 Ph.	1 1/2	AC	220/440	50/60	1425/1725	80
*88-510	D.C.	1/2	DC	115	..	1725	70
*88-520	D.C.	1/2	DC	230	..	1725	70
*88-511	D.C.	1/2	DC	115	..	1140	70
*88-521	D.C.	1/2	DC	230	..	1140	70
*88-710	D.C.	3/4	DC	115	..	1725	82
*88-720	D.C.	3/4	DC	230	..	1725	82

No. 225 NEMA Frame Motors, 1" Shaft

497-320	3 Ph.	3	AC	220/440	50/60	1425/1725	133
497-420	3 Ph.	3	AC	220/440	50/60	1425/1725	133

8 1/2" Frame, for Wood Shaper, 3/4" Shaft

485-080	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.	1 1/2	AC	220/440	50/60	2850/3450	85

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

498-111	3 Ph.	3	AC	115/230	60	3450	145
498-321	3 Ph.	5	AC	220/440	60	3450	145

8 1/2" Frame, for 10" Tilting Arbor Saw, 3/4" Shaft

485-010	R. I.	1	AC	115/230	60	1725	85
487-010	3 Ph.	1	AC	220/440	50/60	1425/1725	70
87-210	3 Ph.	1 1/2	AC	220/440	50/60	1425/1725	80

7 1/2" Frame, for 8" Tilting Arbor Saw, 3/4" Shaft

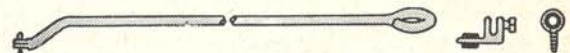
482-750	Cap.	1/2	AC	115/230	60	1725	55
482-950	Cap.	3/4	AC	115/230	60	1725	78

*Motors not carried in stock. †Single shaft motors. ‡Fully enclosed motor. †Special Double Pole, On and Off Switch furnished with motor. x Without switch.

Note: We reserve the right to substitute capacitor motors for Rep. Ind. motors, or vice-versa on orders for these motors.

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	No.	For Use On
1330	... 34-307	1334	... 28-207; 28-307; 31-505; 37-595;
1331	... 11" and 14" Drill Presses		46-305; and wood top benches
1332	... 17" Drill Presses		
1333	... 37-207	31-442	... Deburring machines.



DELTA POWER TOOL DIVISION

Rockwell MANUFACTURING COMPANY

MILWAUKEE 1, WISCONSIN