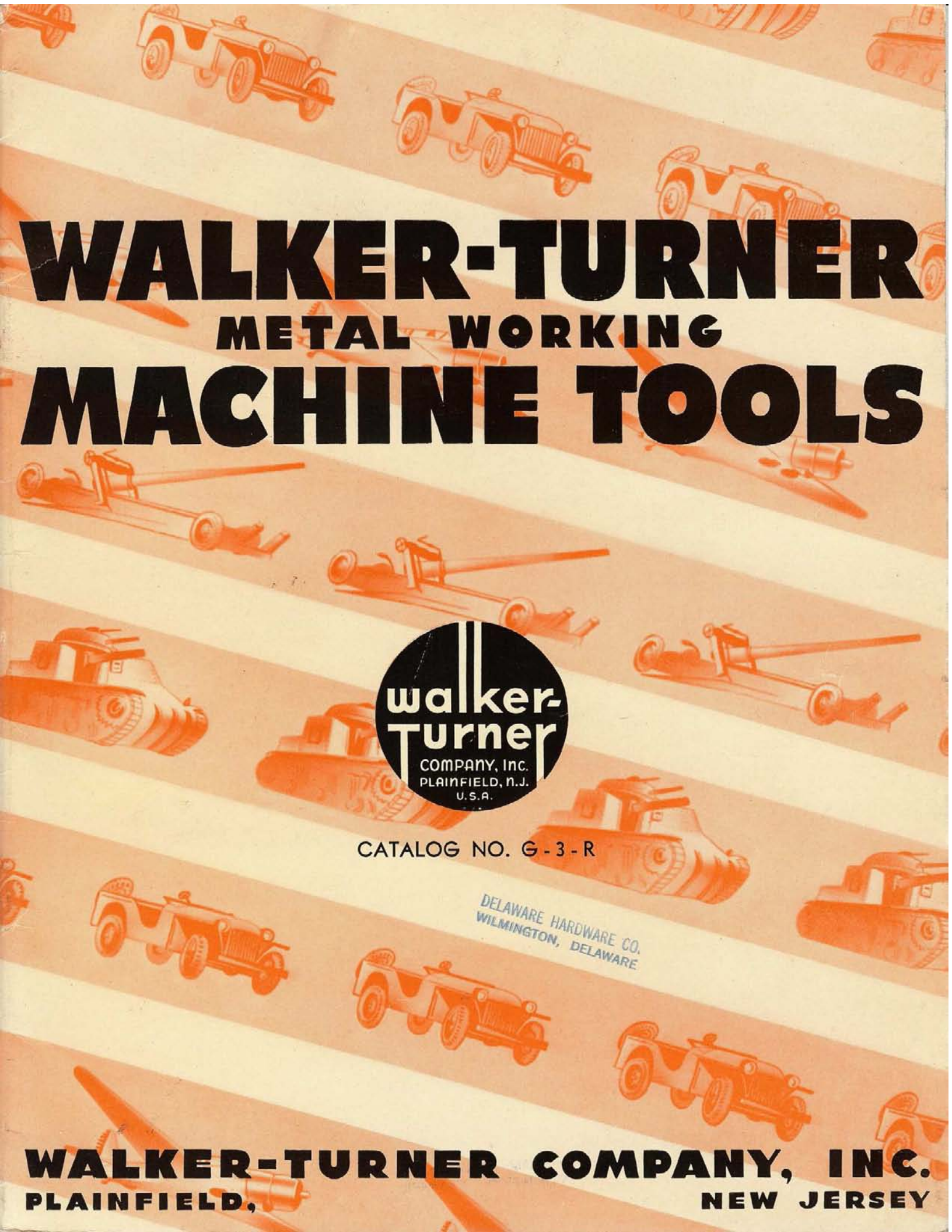




WALKER-TURNER

METAL WORKING

MACHINE TOOLS



CATALOG NO. G-3-R

DELAWARE HARDWARE CO.
WILMINGTON, DELAWARE

WALKER-TURNER COMPANY, INC.
PLAINFIELD, NEW JERSEY

WALKER-TURNER METAL WORKING MACHINE TOOLS
are subject to General Preference Order E-1-b and
can only be shipped on specific Preference Rating Certifi-
cates PD-1a, PD-3a or Preference Rating Order P-19h,
or Preference Rating Certificate of the PD-408 series.

Walker - Turner

METAL WORKING MACHINE TOOLS

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DELAWARE HARDWARE CO.
WILMINGTON, DELAWARE

WALKER - TURNER 20" DRILL PRESSES

POWER FEED HAND FEED

The Walker-Turner 20" Drill Presses are available in 12 models; each one is clearly described in detail below.

Power Feed models are supplied with a compact and smooth operating feed unit. They are powered from the drill spindle and operate through a multiple disc clutch. Cast-iron and steel gears, bronze bushings and ball thrust bearings are a few of many features found in this unit.

D-1100	FLOOR MODEL—HAND FEED—including table raising mechanism and belt guard but less motor	\$195.00
D-1100B	BENCH MODEL—HAND FEED—including head raising mechanism and belt guard but less motor	180.00
D-1100F	FLOOR MODEL—POWER FEED—including table raising mechanism and belt guard but less motor	275.00
D-1100BF	BENCH MODEL—POWER FEED—including head raising mechanism and belt guard but less motor	255.00
D-1102B	BENCH MODEL—2 spindle—hand feed—on 2 spindle table—including head raising mechanism and belt guard but less motor	425.00
D-1102BF	BENCH MODEL—2 spindle—power feed—mounted on 2 spindle table—including head raising mechanism and belt guard but less motor	575.00
D-1103	3 SPINDLE—HAND FEED—mounted on 4 spindle table, belt guard and head raising mechanism included	695.00
D-1103F	3 SPINDLE—POWER FEED—otherwise same as D1103	920.00
D-1104	4 SPINDLE HAND FEED MODEL—belt guard and head raising mechanism included	795.00
D-1104F	4 SPINDLE MODEL—POWER FEED—belt guard and head raising mechanism included	1095.00
D-1106	SIX SPINDLE MODEL—HAND FEED—belt guards and head raising mechanisms included, but less motor	1250.00
D-1106F	SIX SPINDLE MODEL—POWER FEED—belt guards and head raising mechanisms included but less motors	1695.00
11D-45	CAST IRON LEGS for Multiple Spindle Models pr. (D-1106 Requires 1½ pr.) (Not included with machine)	35.00
	No. 3 Morse Taper Spindle available spec. order	\$15.00

Recommended motors—see page 34 for complete specifications and motor dimensions.

MOTORS FOR THE 20" DRILL PRESS

KAB-7	¾ H.P., single phase, 110-220 V., 1740 R.P.M., 60 cycle	35.00
PAB-10	1 H.P., 3 phase, 220 V., 1740 R.P.M., 60 cycle	37.50
PIB-7*	¾ H.P., 3 phase, 220 V., 865 R.P.M., 60 cycle	64.75
PAB-15	1½ H.P., 220 V., 3 phase, 1740 R.P.M.	45.00
PEB-20	2 H.P., 220 V., 3450 R.P.M., 3 phase	50.00
GPOB-10*	1 H.P., 220 Volt, 3 phase, 380 R.P.M. Geared motor	105.00

(Note: This motor was designed primarily for drilling alloys and should not be used for drills larger than the recommended capacity of the machine ¾" in steel—1" in cast iron.)

*Special motor bracket required.

D-1100

PRODUCTION MODELS

The Walker-Turner 20" Drill Press is the culmination of years of engineering development. Its design is soundly based on practical experience with over a hundred thousand smaller units built for and used by industrial plants manufacturing many different kinds of products.

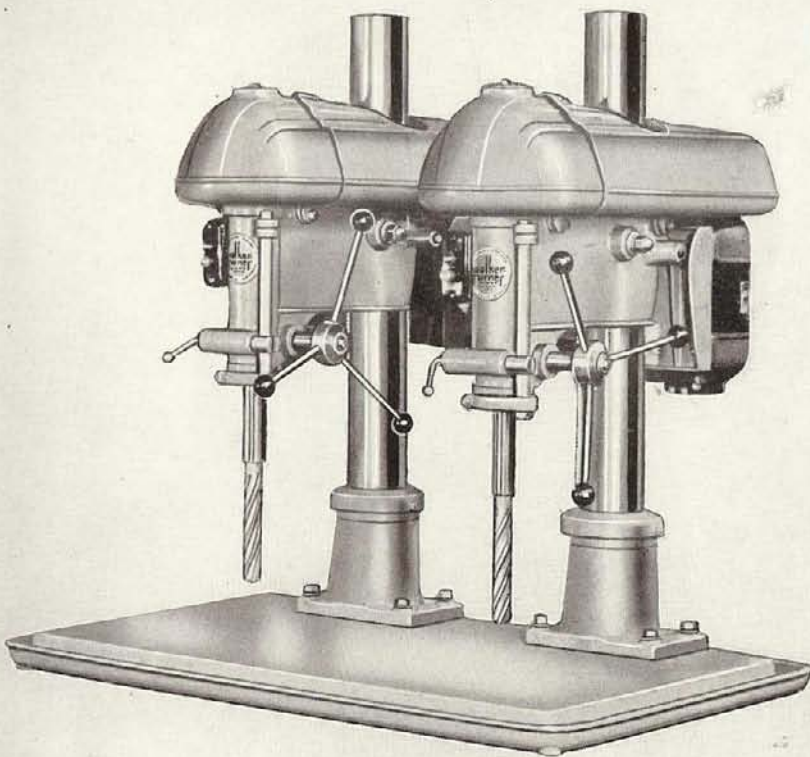
These new 20" models are made primarily for fast production drilling operations. Their unusually wide speed ranges make it practical to drill all varieties of material. They are the largest of the several sizes made by this company.

The high quality of Walker-Turner Drill Presses is due to careful design by engineers who pioneered the principle of weight conservation in machine tools. Compact, yet rugged construction has been made possible by discriminating selection of material. Incorporated in these units are many refinements ordinarily found only in drill presses that sell

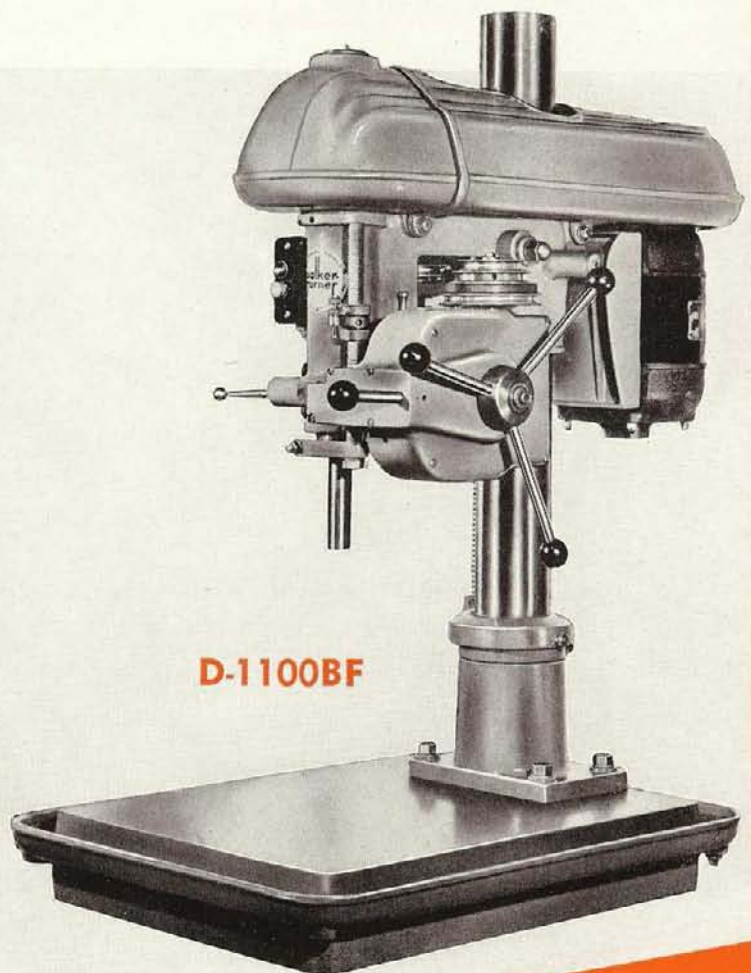
for several times their price. Unusually close tolerances, four ball-bearings, bored in line one-piece solid head castings, spindle pulley mounted between two ball-bearings to eliminate "whip", ten-spline spindles—these are just a few of the features of construction that enable Walker-Turner 20" Drill Presses to do work of greater accuracy than is common to any except the heavier and more expensive machines.

Thoroughly job-tested in large and small plants, they have demonstrated ability to stand up well under the most rigorous production program. Many are operated continuously on 24 hour per day schedules. Their acceptance by industry for the classes of work for which they were designed has been rapid and wide spread.

Illustrated below, at left, Model No. D1102-B at right Model No. D1100BF Power feed. Price on page 4.



D-1102-B



D-1100BF

TURNER FOR INDUSTRY



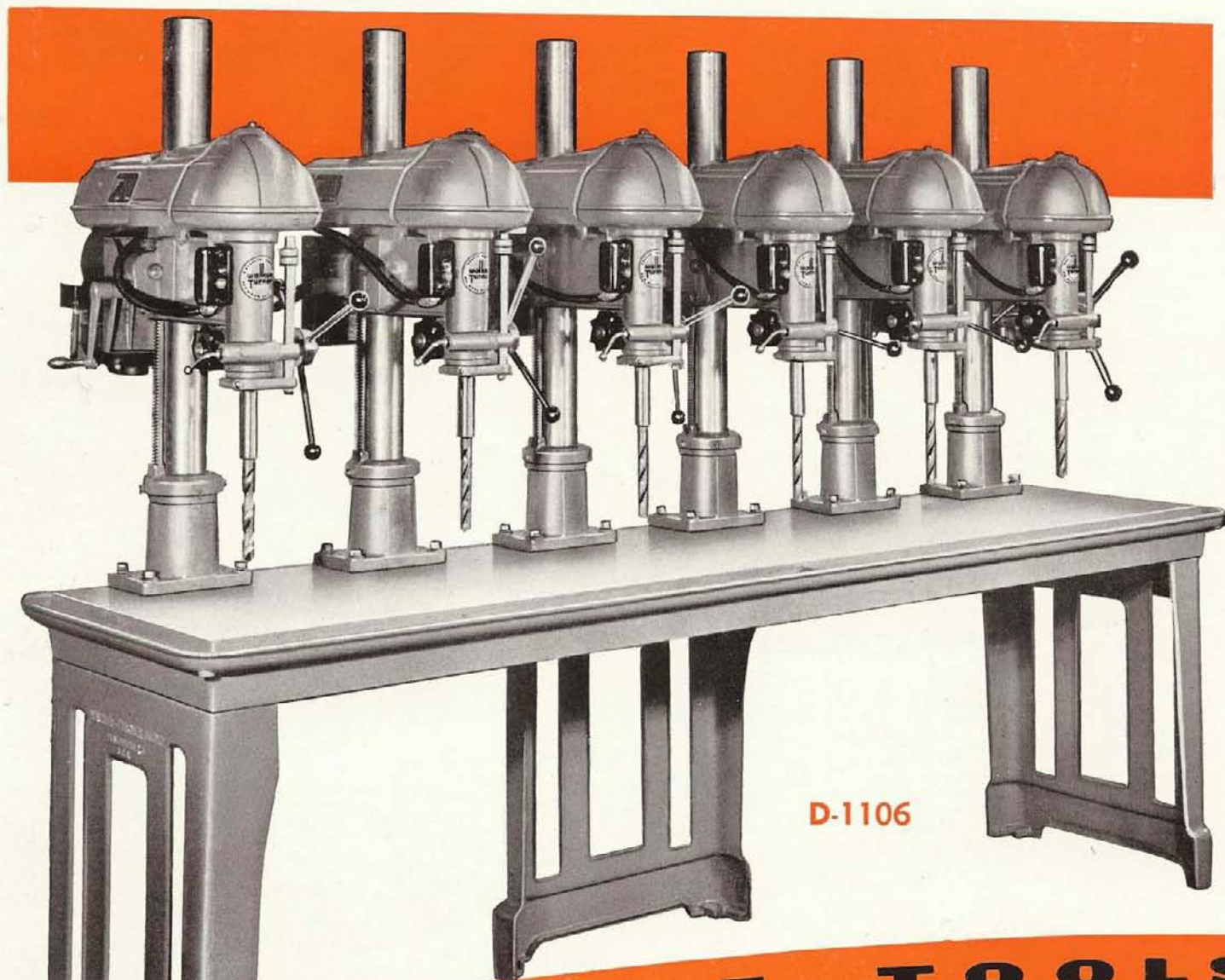
FOUR & SIX SPINDLE MODELS

- POWER FEED
- 1" CAPACITY IN CAST IRON
- BALL BEARINGS THROUGHOUT
- BALANCED PULLEYS
- STRAIGHT LINE "V" BELT DRIVE
- NO. 2 M.T. SPINDLE NOSE #3 AVAILABLE (\$15.00 Extra).
- ONE PIECE HEAD CASTING
- 10 SPLINE SPINDLE

Service tested in hundreds of industrial plants this drill press has set a new standard of value from the standpoint of production, service and first cost. Multiple spindle models—two to six spindles—are particularly effective in increasing production on many jobs where a series of holes are to be drilled, tapped, reamed, or counter-bored in a single piece. The power feed unit

will permit one operator to effectively operate 4 or more spindles. Husky power feed for production drilling or sensitive hand feeding for small drills can be had at the touch of a lever.

THE POWER FEED unit is operated through a multiple disc clutch and has constant mesh worm gear and worm. A power take-off pulley on the drill press spindle operates the unit through a four-speed counter shaft. This makes available feed rates of .003", .006", .009" and .012" per revolution of the spindle. Feed rates are quickly changed, a tension release on the counter shaft belt simplifies making the change. The clutch can be engaged at a touch of a lever at any point of spindle travel, there are no gears to mesh. A micrometric depth gauge releases the feed at any predetermined point and allows the spindle to return to its original position. Model No. D1106, shown below. See page 4, for prices.



D-1106

**MACHINE TOOLS
WALKER-**

HEAD DETAILS

20" DRILL PRESS

CAPACITY in steel is $\frac{3}{4}$ " and 1" cast iron. Distance from spindle to column is 10" permitting drilling to the center of a 20" circle. Table sizes, etc. are listed on page 8. Maximum capacity, spindle nose to table 25" on single and multiple spindle bench models.

STRAIGHT LINE Vee belt drive to drill spindle minimizes power loss, simplifies speed changes and increases belt life.

TEN SPLINE SPINDLE is journalled on two ball-bearings—the lower bearing close to the spindle nose is double row pre-loaded and designed to absorb radial and thrust loads.

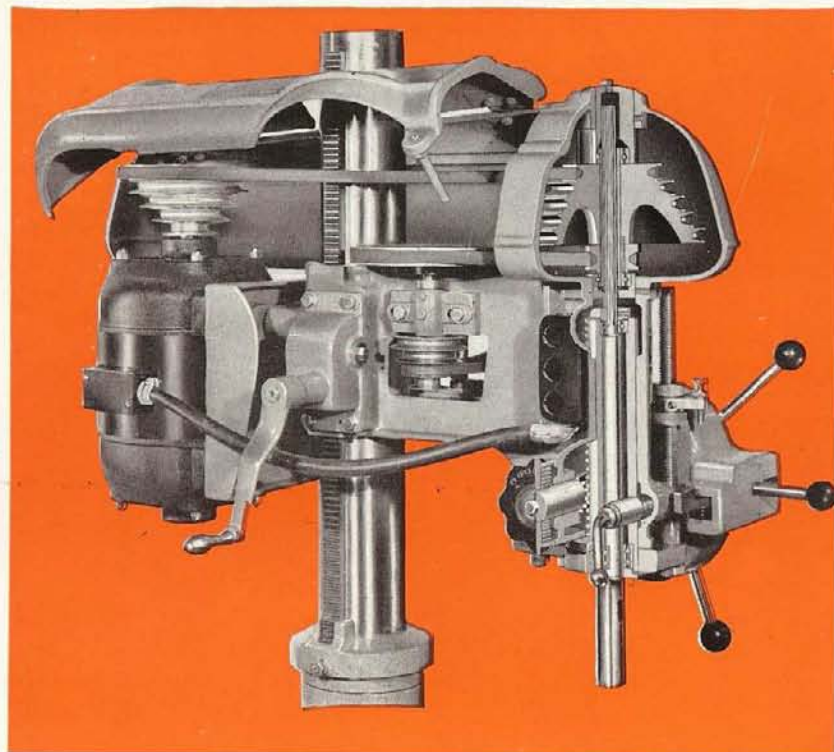
FIVE SPINDLE SPEEDS from 260 to 1740 R.P.M. with an 1140 R.P.M. motor or from 400 to 2600 with a 1740 R.P.M. motor. Balanced pulleys and rugged construction throughout permit spindle speeds in excess of 5000 R.P.M.

TWO BALL BEARINGS on the spindle pulley—one at each end—support it independent of the spindle. Belt strain is completely absorbed by the bearings eliminating spindle friction and distortion.

ONE PIECE HEAD CASTING assures accuracy and parallelism between spindle and column. Wedge type locks prevent distortion of casting. Line boring assures bearing alignment.

RACK AND PINION elevating mechanism can be used on heads of the multi-spindle models or on the table of floor model machines. A Ball-bearing thrust collar carries weight of head when adjustments in height are being made.

ONE POINT LUBRICATION. Pulley and spindle bearings as well as all moving parts of the quill and feed mechanism are lubricated from a single oil hole, conveniently located above the spindle. Power feed unit has ample oil and grease fittings. The illustrations at the right clearly show the details and outstanding features of the "1100" Drill Press head.



TURNER

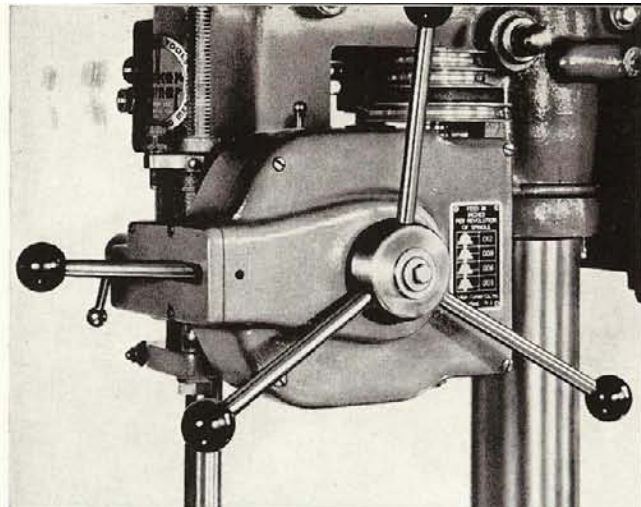
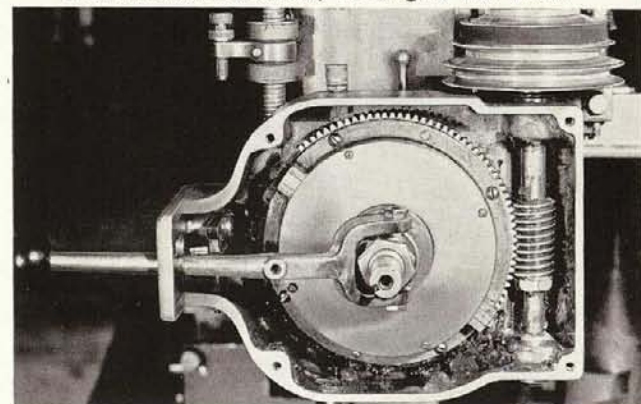
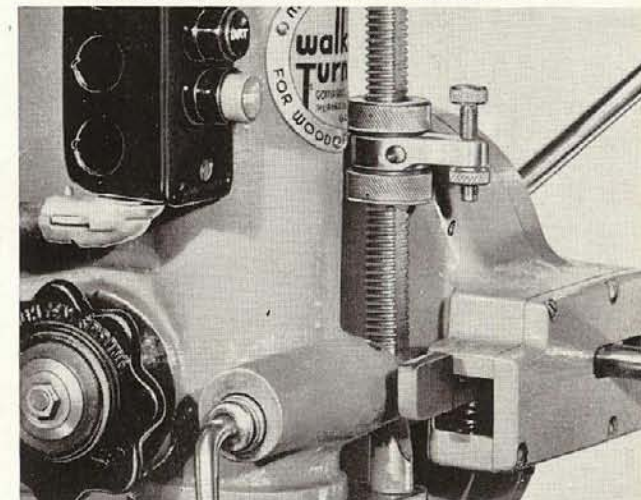


Illustration above shows clutch and worm gear housing.

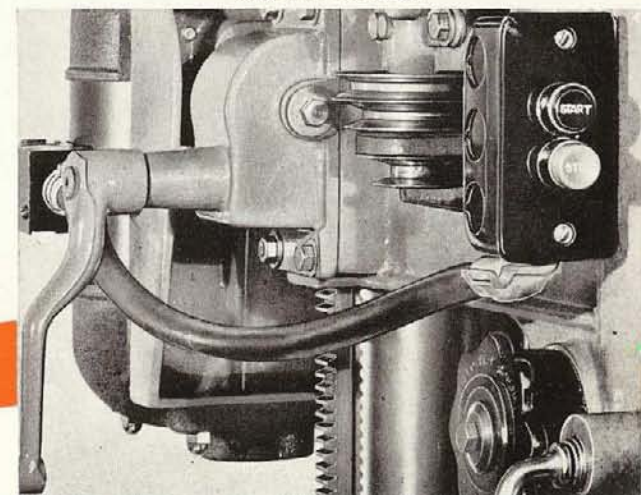
Below: Enclosed clutch, worm gear and worm.

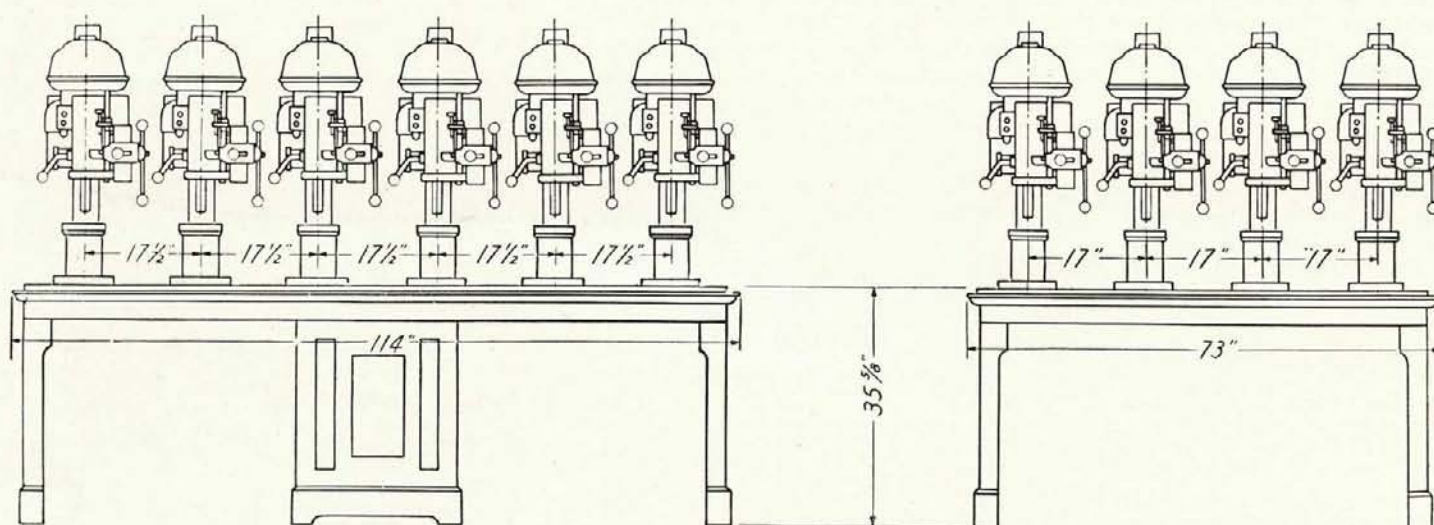
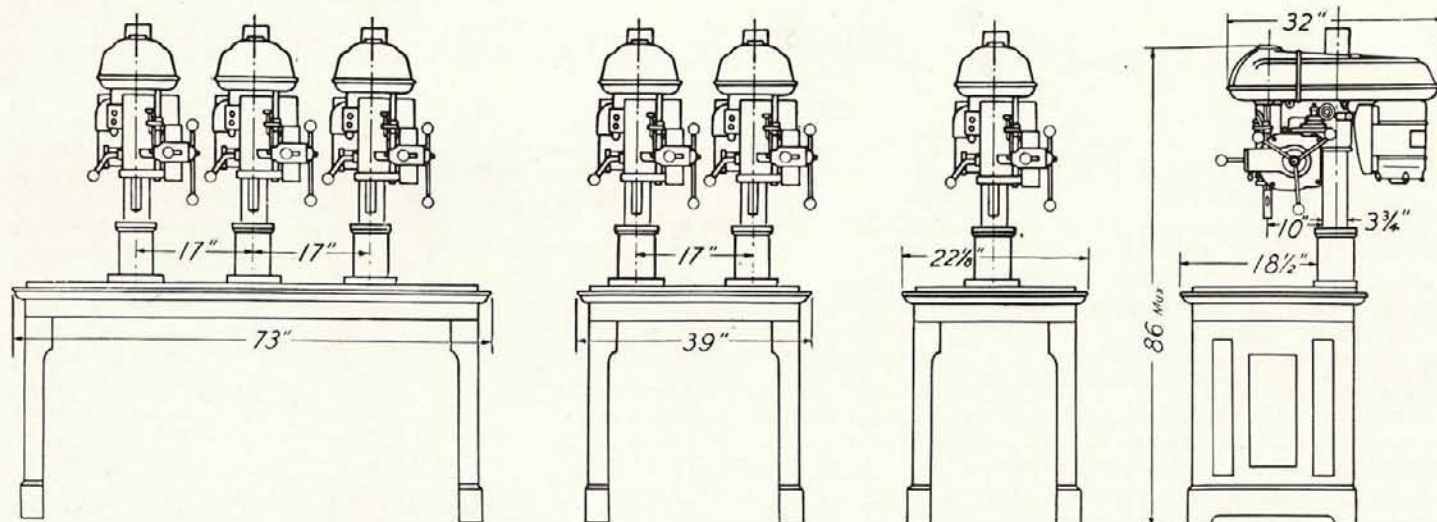


The depth gauge shown below gets micrometer accuracy from the fine thread adjusting screw.



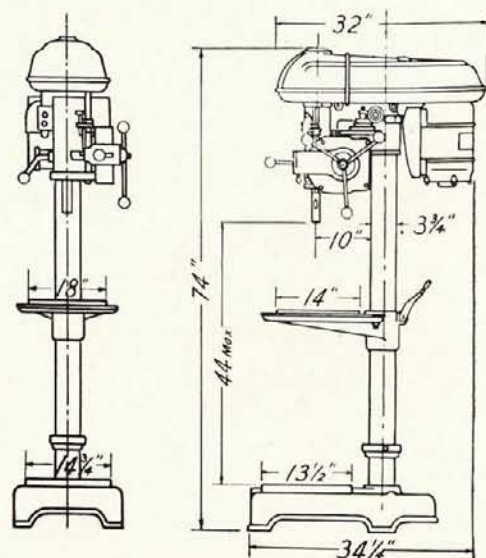
Elevating unit (below)—gears are totally enclosed in a cast-iron housing.





SHIPPING WEIGHTS (Approximate)

D-1100	Floor Model—Hand Feed	500 lbs.
D-1100B	Bench Model—Hand Feed	435 lbs.
D-1100F	Floor Model—Power Feed	565 lbs.
D-1100BF	Bench Model—Power Feed	472 lbs.
D-1102B	2 Spindle Model—Hand Feed	950 lbs.
D-1102BF	2 Spindle Model—Power Feed	1050 lbs.
D-1103	3 Spindle Model—Hand Feed	1515 lbs.
D-1103F	3 Spindle Model—Power Feed	1715 lbs.
D-1104	4 Spindle Model—Hand Feed	1600 lbs.
D-1104F	4 Spindle Model—Power Feed	1775 lbs.
D-1106	6 Spindle Model—Hand Feed	3050 lbs.
D-1106F	6 Spindle Model—Power Feed	3200 lbs.
11D45	Cast Iron Legs	200 lbs.



★ ★ ★ **MACHINE TOOLS**
WALKER-

SPECIAL SET-UPS

20" OVERHEAD DRILL PRESS ASSEMBLY

An unusual drill press head installation is shown at the right as used by a leading aircraft builder. A 20" drill press head is mounted on a sliding carriage supported by an "I" beam.

The sliding carriage contacts the "I" beam through eight adjustable ball bearings. These ball bearings provide easy lateral movement and the head swings radially through a complete circle, a ball bearing thrust supports the head on the column.

O. H. D. 1150X OVERHEAD DRILL HEAD ASSEMBLY—Includes 20" Hand Feed Drill Head, Belt guard, column, column carriage and elevating unit.\$200.00

O. H. D. 1151X OVERHEAD DRILLHEAD ASSEMBLY—Includes 20" Power Feed Drill Head, Belt guard, column, column carriage and elevating unit.\$275.00

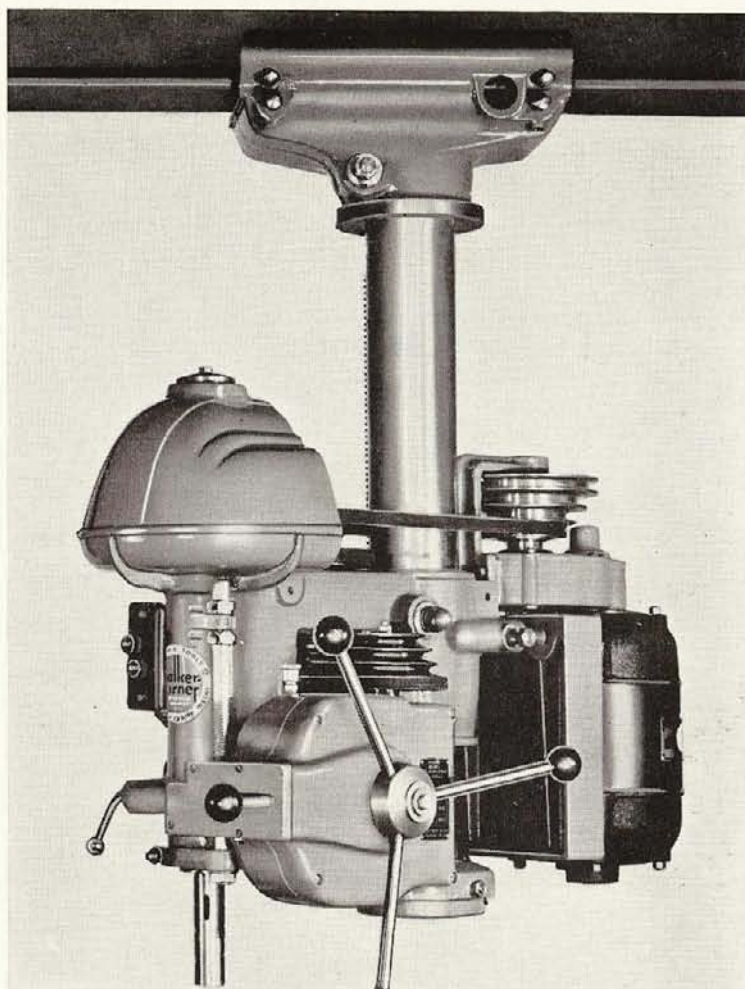
20" DRILL PRESS HEADS

D-1100-X—20" HAND FEED DRILL PRESS HEAD—Head only includes, belt guard, motor base, belt and motor pulley.\$105.00

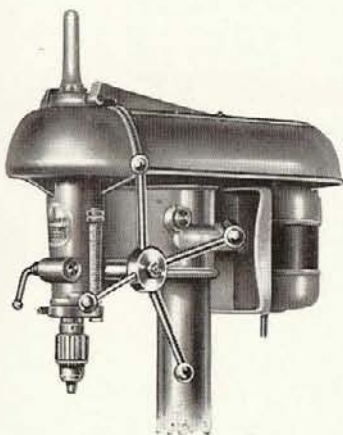
D-1101-X—20" HAND FEED DRILL PRESS HEAD—Head only includes, belt guard, motor base, belt and motor pulley.\$180.00

GPOB-10—1 H.P. 380 R.P.M. GEARED MOTOR 3 PHASE, 220 volts, 60 cycles.\$105.00

(Note: This motor is shown on the 20" Drill Press Head above). It was designed primarily for drilling alloys where extremely slow spindle speeds are required. It should not be used to permit the use of drills larger than the recommended capacity of the machine, that is $\frac{3}{4}$ " in steel and 1" in cast iron.



15" DRILL PRESS HEADS



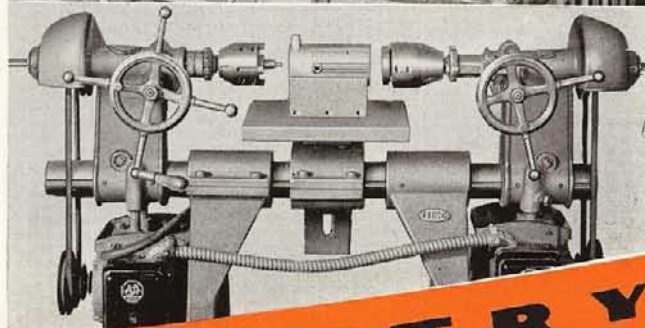
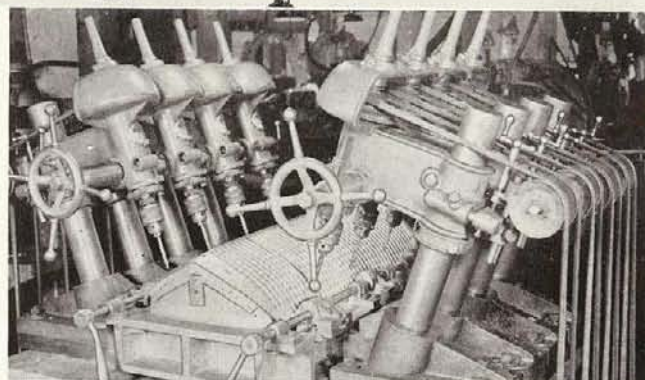
Specifications and illustration of head on page 11—The two illustrations on the right of this page are typical of the possibilities of the 15" Drill Heads.

The special set-ups can be made at a fraction of the cost of conventional set-ups and result in increased production, saving in many cases as much as 70% in labor.

9D13 X 15" HAND FEED DRILL PRESS HEAD—Head only includes motor base, belt and motor pulley\$32.50

9D11 COLUMN—Ground steel $2\frac{3}{4}$ " x 31" 3.95

9D55 BELT GUARD 6.95



TURNER



FOR

INDUSTRY

15 INCH PRODUCTION MODELS

These production model drill presses are designed to cover the widest range of service at new, low levels of investment and operating costs. The vital parts are machined to closer tolerances than similar parts found in other and higher-priced drill presses. Their sturdy construction permits many other operations besides drilling.

Maximum distance chuck to table, 18½".

Maximum distance center of chuck to column, 7½".

Center to center of chucks, 11" on 2 and 4 spindle models. 15" on 3 spindle model.

Machined cast-iron table 17" x 45" on 4 and 3 spindle models: 17" x 23" on 2 spindle model: 14½" x 16" on 1 spindle model.

Heads on multi-spindle models can be swung to right or left independently of each other.

Overall sizes (without legs): Height 42", depth 29" all models. Width, 4 and 3 spindle models, 50"; 2 spindle model, 27½"; 1 spindle model, 20". Shipping weights, less legs, motors and belt guards: 6 spindle model, 900 lbs.; 4 spindle model, 570 lbs.; 3 spindle model, 470 lbs.; 2 spindle model, 290 lbs.; 1 spindle model, 160 lbs.

D906—SIX SPINDLE DRILL PRESS, less motors and belt guards (Table size 17½" x 67")\$495.00

D904—FOUR SPINDLE DRILL PRESS, as shown, less motors and belt guards. 295.00

D903—THREE SPINDLE DRILL PRESS, not illustrated, less motors and belt guards. 260.00

D902—TWO SPINDLE DRILL PRESS, as

shown, less motors, belt guards and stand.139.50

D901—SINGLE SPINDLE DRILL PRESS, less motor, head raising mechanism and belt guard.67.00

D901-H—Same as D901 but with 9D75 head raising mechanism, as shown at right, less belt guard and motor 75.25

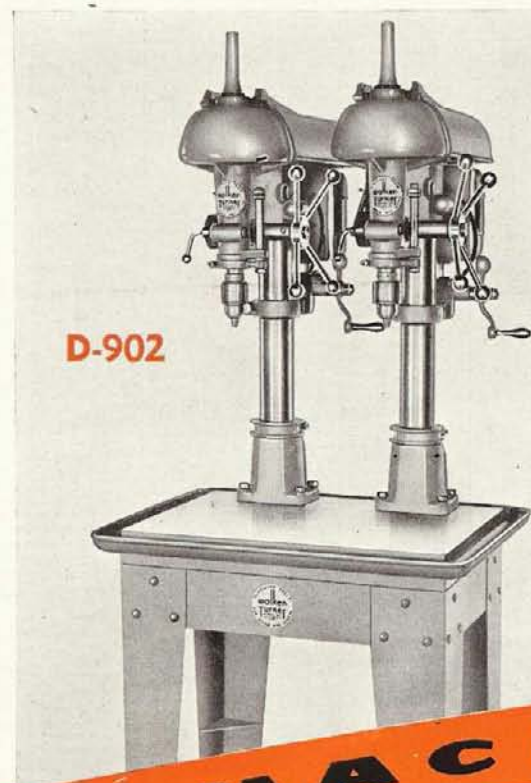
9D55—BELT GUARD

9D60—CAST-IRON LEGS for multi-spindle models. D906 requires 1½ pr. 27.50

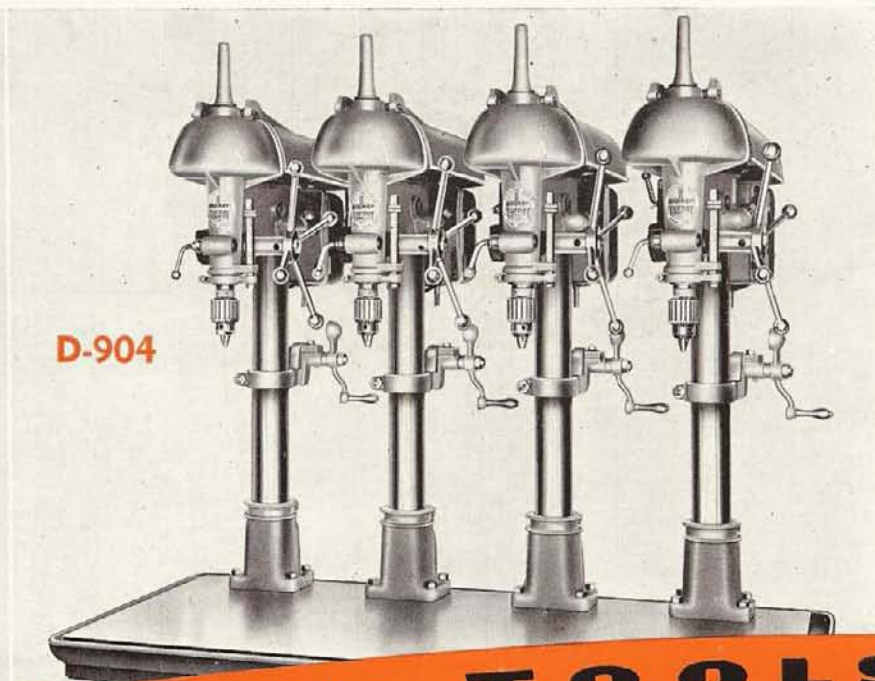
(Motors recommended: ½ H.P., 1740 R.P.M.)



D-901-H



D-902



D-904

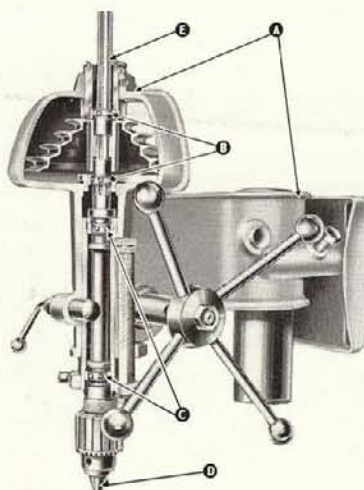
MACHINE TOOLS WALKER-

15 INCH BENCH MODELS

New one-piece table with larger working area.
 Straddle-mounted pulley design gives extra rigidity.
 6 spline spindle (pioneered by W-T) minimizes vibration.
 4 precision ball bearings correctly located.
 One-piece head casting closely fitted to column.
 Balanced pulleys.
 Jacobs 0-1/2" key chuck regular equipment.
 Guaranteed accuracy greater than higher-priced machines.
 Experienced shop men find these modern, efficient machines far ahead of the field . . . in design, in accuracy and in value. A study of the cutaway section of the head, below, shows why Walker-Turner Drill Presses perform better and last longer. Husky head construction, calibrated depth stop, positive locking device and Jacobs chuck are typical refinements. The column collar which permits swinging the head and belt guard are shown.

SPECIFICATIONS

CAPACITY: chuck to table 12" . . . chuck to base 17 1/2" . . . center of chuck to column 7 1/2", drills to center of 15" circle.
CHUCK: Jacobs key type, 0-1/2" capacity.
TABLE: new one piece type with larger working area 10" x 12 3/4".
BEARINGS: 4 precision ball bearings mounted one above and one below pulley; other two in rack.
BASE: heavy casting with machined surface 10" x 9".
SPINDLE: 6 spline, 5/8" dia. tapered for Jacobs chuck and collets.
SPINDLE TRAVEL: 3 5/8" adjustable spring return.
COLUMN: precision ground, 2 3/4" diameter.
RACK: machined from solid bar steel, 1 13/16" diameter. Teeth milled in rack to match pinion.
PILOT WHEEL FEED: bakelite knobs, calibrated depth stop.
HEAD: close grained gray iron. Parts machined to close tolerances.
ADAPTER: No. 1 Morse Taper adapter available. (Extra Cost)
STANDARD SPEEDS: with 1740 R.P.M. motor, 600, 1250, 2440, 5000.
SLO-SPEED MODEL SPEEDS: 480, 940, 1300, 2900 R.P.M.
OVERALL MEASUREMENTS: height 39 1/2", width 10", depth 25".
SHIPPING WEIGHT: 133 lbs. without motor

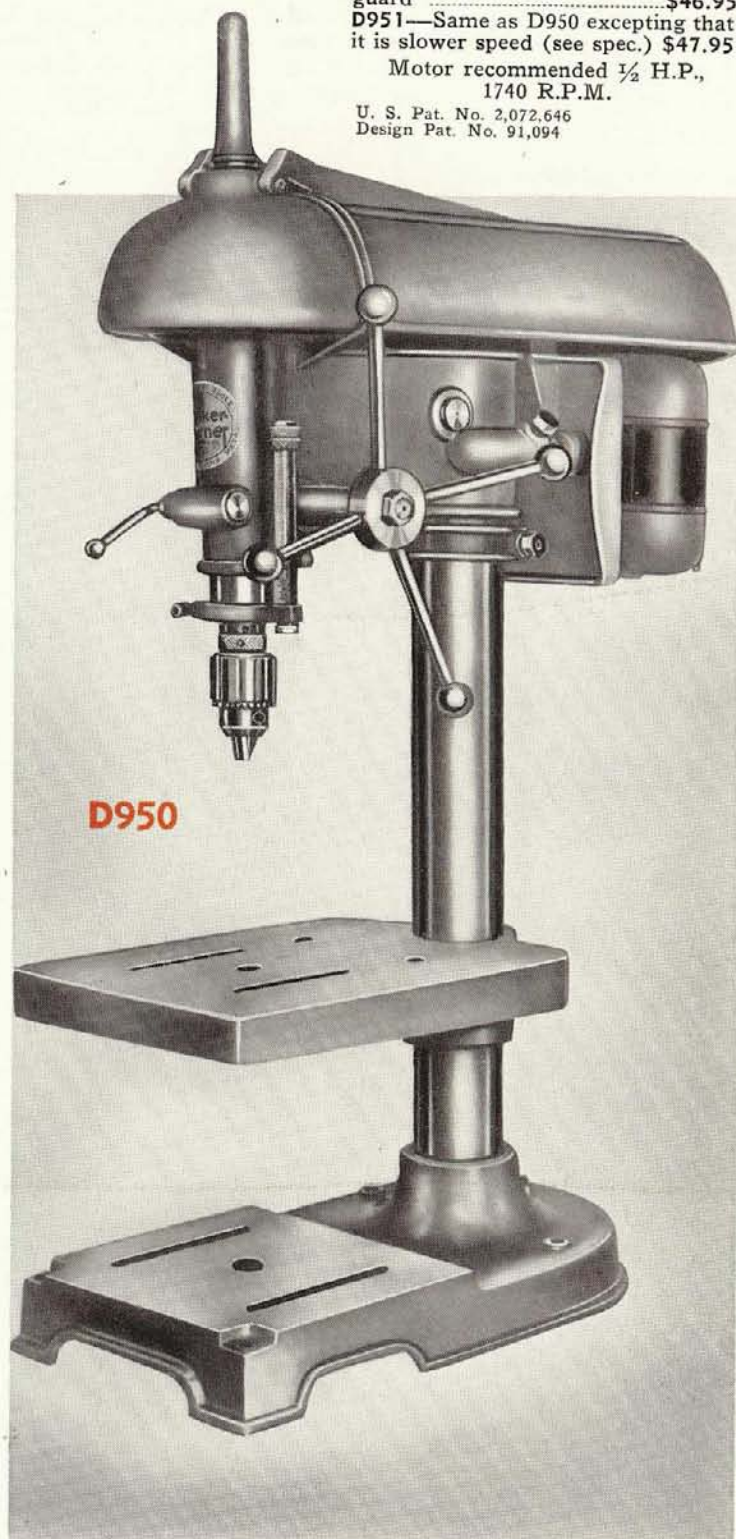


D950—As shown below, standard speeds, includes belt and motor pulley but less motor and belt guard \$46.95

D951—Same as D950 excepting that it is slower speed (see spec.) \$47.95

Motor recommended 1/2 H.P., 1740 R.P.M.

U. S. Pat. No. 2,072,646
 Design Pat. No. 91,094



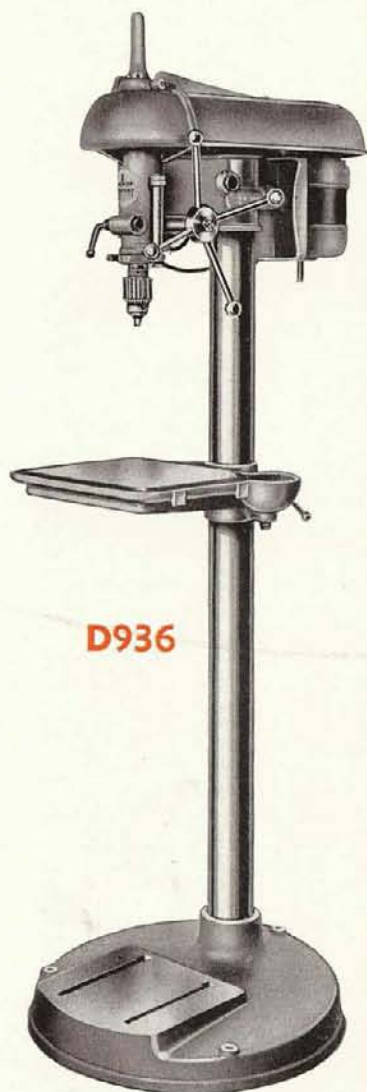
TURNER



FOR

INDUSTRY

15" FLOOR MODEL DRILL PRESSES



D936

D935—Floor model with standard table, less belt guard and motor.\$54.50
D937—Same as D935 but Slo-speed.\$55.50

9D80N—Foot-feed attachment, fits floor models with 2 3/4" columns.\$16.50

D936—With belt guard, production table, Standard speed. Less motor (left) \$65.00
D938—Same as D936 but Slo-speed.\$66.00

FD961—As shown at right, less motor. Standard or Slo-speed optional. Shipping weight without motor: 265 lbs.\$92.50
Motor recommended, 1/2 H.P. 1740 R.P.M.

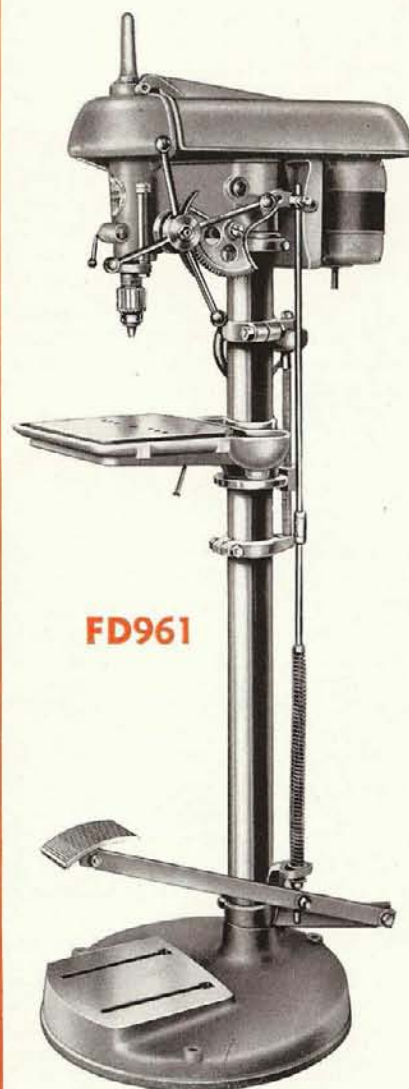
Floor models have the same head assemblies as the bench models. Columns are 60" in length. Head and table may be swung to various positions around column.

Distance chuck to base 46".
Round base affords greater portability.
6 spline spindle, 3 5/8" travel.
Balanced pulleys.



CORRECT BEARING SUPPORT—The straddle-mounted construction of the W-T head with ball-bearings directly above and below the pulley gives proper support to the pulley. The spindle "floats" freely through the pulley with no belt strain transmitted to the spindle.

U. S. Pat. No. 2,072,646. Design Pat. No. 91,094.



FD961

S P E C I F I C A T I O N S

CAPACITY: Chuck to base 46", center of chuck to column 7 1/2", drills to center of 15" circle.

CHUCK: Jacobs key type, 0-1 1/2" capacity.

TABLE: new one piece type with larger working area 10" x 12 1/2".

BEARINGS: 4 precision ball bearings mounted one above and one below pulley; other two in rack.

BASE: 22" in diameter. Has machined working surface 10" x 9".

SPINDLE: 6 spline, 5/8" diameter #33 taper at end for Jacobs chuck.

SPINDLE TRAVEL: 3 5/8", adjustable spring return.

COLUMN: Precision ground, 2 3/4" diameter.

RACK: machined from solid bar steel, 1 13/16" diameter. Teeth milled in rack to match pinion.

PILOT WHEEL FEED: with bakelite knobs, calibrated depth stop.

HEAD: close grained gray iron. Parts machined to close tolerances.

ADAPTER: number 1 Morse Taper adapter available to fit tapered spindle.

STANDARD SPEEDS: with 1740 R.P.M. motor, 600, 1250, 2440, 5000.

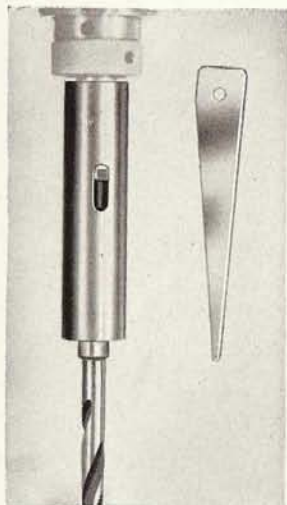
SLO-SPEED MODEL SPEEDS: 480, 940, 1300, 2900 R.P.M.

OVERALL MEASUREMENTS: height 69", depth 25"

SHIPPING WEIGHT: Approximately 200 lbs. without motor.

★ ★ ★ **MACHINE TOOLS WALKER-**

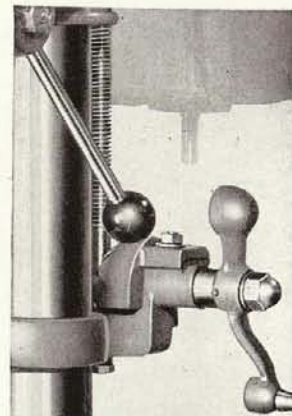
DRILL PRESS ATTACHMENTS



9MT1 — Morse Taper adapter including drift pin as shown.\$3.00
With this adapter attached to any series "900" drill press spindle in place of chuck, No 1 Morse Taper shank drills may be used.

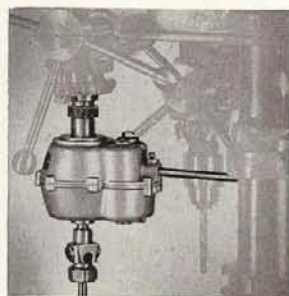
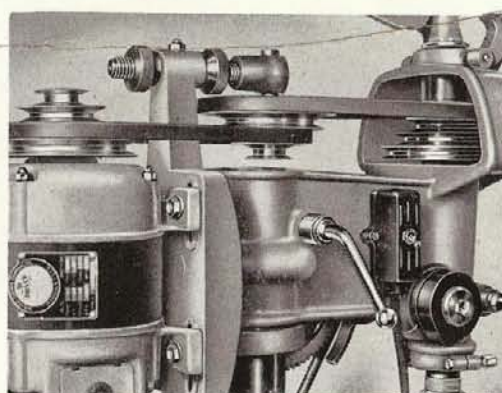
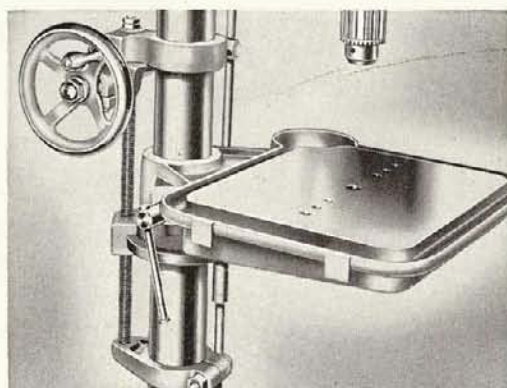
Walker-Turner Drill Presses are designed to perform several operations adequately and efficiently. With the proper attachments mortising, shaping, routing, dovetailing and similar wood-working operations can be performed. Also used for tapping, rivet-spinning, and light milling. The attachments shown definitely increase the versatility and utility of Walker-Turner drill presses, enabling the owner to get more service without increasing machine investment.

9D75 — Head raising mechanism (for bench model).\$8.25
9D76 — Head raising mechanism (for foot feed model).\$8.25
Fits all "900" series drill presses with 2 3/4" columns. Functions with head and column in any position. Positive action, easy to operate. Raising and lowering mechanism movable around column with head assembly.



9D113 — Slo-speed attachment, including ball bearing mounted pulley and 2 24" "V" belts.\$8.25
9D111 — Motor plate—for older models\$1.95
This new drive provides speeds of 165, 365, 385, 785, 800, 3260, 3600, 3700, 6700, 6750 R.P.M. The pulley assembly attaches to the motor base bracket now standard equipment on "900" drill presses except slow speed models. Adjustable belt tension. 9D111 not included. The pulley turns on dust-sealed, precision ball bearings. This attachment may be fitted to the older "900" models if old motor plate is replaced by new type listed above. The photo below shows how the attachment is installed.

9D65N — Production table.\$7.75
9D66 — Table raising mechanism (with hand crank instead of wheel shown).\$8.25
A production table 12" by 10" is shown with the new table raising and lowering mechanism. They fit any drill press with 2 3/4" diameter column and are very easily attached.



HIGH SPEED TAPPING ATTACHMENTS

No.
1-B \$55.00
2-B \$65.00

General Capacity

1-B No. 6 to 1/4" taps
2-B No. 10 to 3/8" taps

Capacity in Brass Aluminum Cast Iron

1-B 3/4" 3/8" 5/16"
2-B 1/2" 1/2" 7/16"

Steel

1-B 1/4"
2-B 3/8"

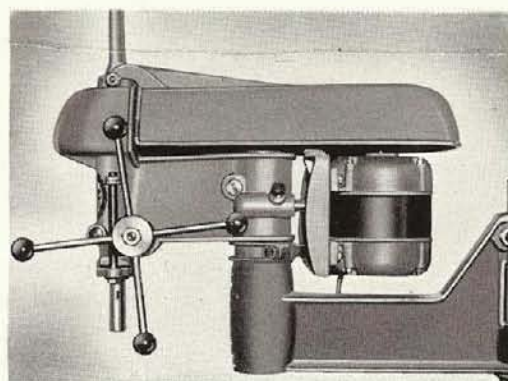
Maximum Speed

1-B 1800 R.P.M.
2-B 1200 R.P.M.

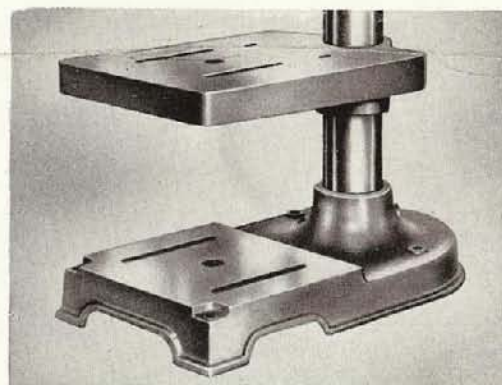
Weight

1-B 5 1/2 lbs.
2-B 8 1/2 lbs.

9D6 — Extension Arm complete.\$17.50
The extension arm increases the distance between the main column and the drill to 24". Intended for light drilling, it is useful for drilling or tapping holes in large sheets, plates and other wood or metal panels. For use on all bench model drill presses with 2 3/4" columns. Swings on accurately fitted bearings and is movable up and down the column.



9D125 — One-piece Table (fits 2 3/4" diam. cols.).\$4.00
Supplied as regular equipment on standard bench and floor models is a new sturdy one-piece table with 12 1/2" x 10" machined working surface providing greater usable table area. The table is locked in position on the column by a conveniently located clamp lever.



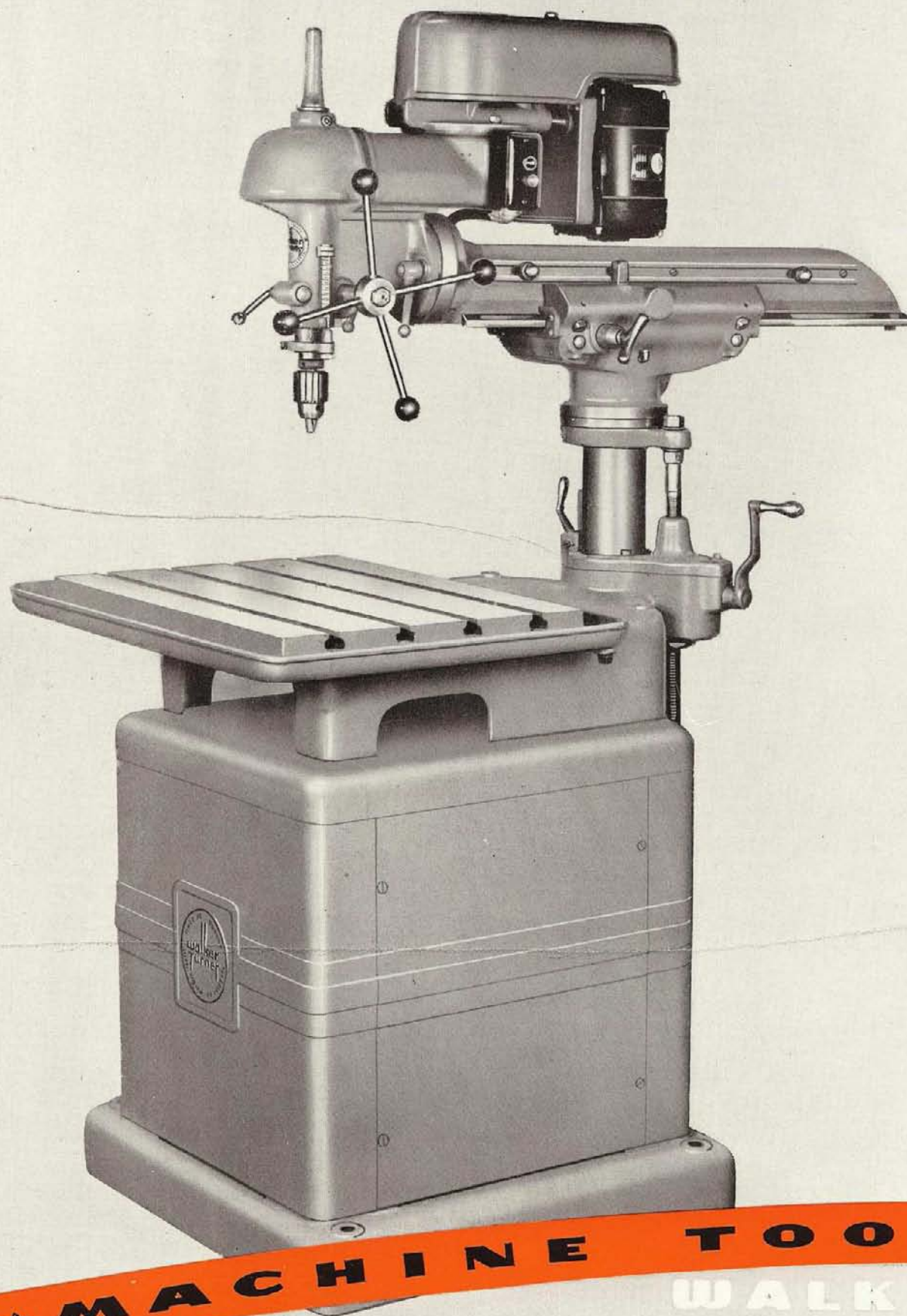
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W-T RADIAL DRILL PRESSES



MACHINE TOOLS
WALKER-



Walker-Turner Radial Drills are available in two models. The standard model RD1170 is equipped with an end-mounted motor which is belted directly to the drill press spindle. Standard 1740 R.P.M. motors provide four speeds from 600 to 5,000 R.P.M. Motors are also available with a two speed (1740-3450 R.P.M.) winding (for 3 phase only) which doubles the speed range. See specifications for complete data.

Model No. RD1175-J incorporates a built-in ball bearing jack-shaft which greatly widens the speed range. When using an 1140 R.P.M. motor speed from 110 to 5400 R.P.M. are available—sixteen speeds in all. Specifications on next page give full details.

In addition to the jack-shaft, the RD1175-J is also equipped with a ball thrust bearing on the column support collar. This feature makes moving the drill head to any position within its range a very simple operation.

TWO MODELS, each designed for a particular need, the Walker-Turner Radial Drill can probably do that difficult job in your shop more efficiently than it is now being accomplished.

RD1170—Radial Drill—4 speeds
600 to 5,000 R.P.M. with 1740
R.P.M. Motor. As shown below
less motor and base\$292.50

MOTORS FOR RD1170

RPAB5— $\frac{1}{2}$ H.P. 1740 R.P.M.
220 Volts 60 Cycle Three
Phase\$32.50

RD1175-J—Radial Drill—Ball-
bearing Column Support and
Ball-bearing Jack-shaft — 16
speeds 160 to 8,200 R.P.M. with
1740 Motor. As shown opposite,
less stand, belt guard and motor.
\$346.50

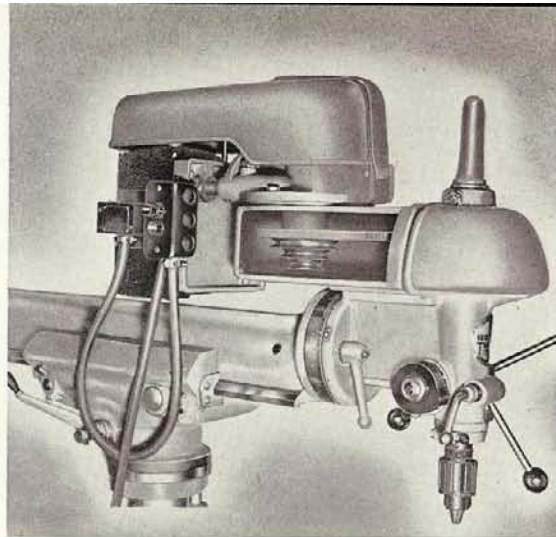
RA365 — Belt Guard for
RD1175-J\$6.00

MOTORS FOR RD1175-J

DPAB5 — $\frac{1}{2}$ H.P. 1740 R.P.M.
220 Volts 60 Cycle Three
Phase\$32.50

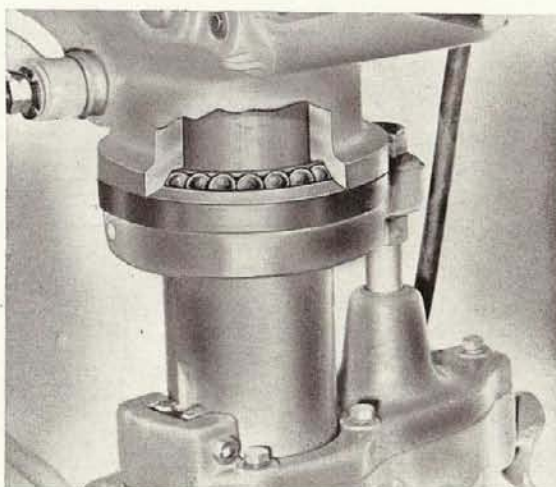
Note: Additional motors will be found on page 34.
Switch is included in the price of all motors.

RD17-B — Cast-Iron Stand for
RD1170 and RD1175-J\$48.50

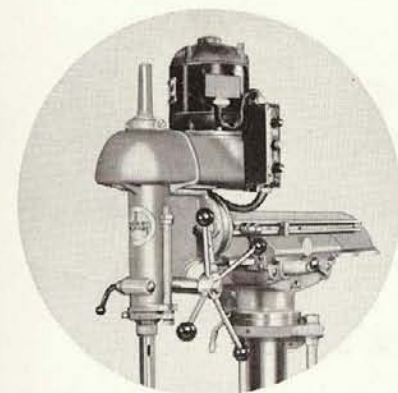
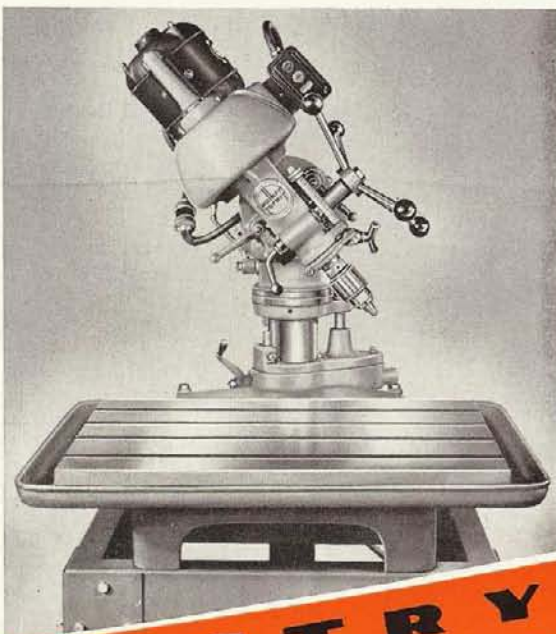


Counter Shaft drive on Model RD1175-J gives wide range of spindle speed.

Ball-bearing support collar on RD1175-J facilitates moving arm and head.

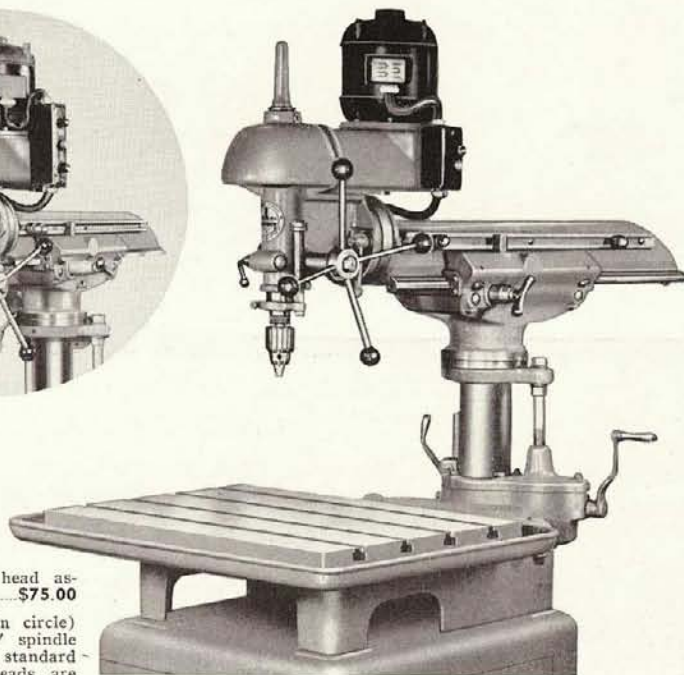


Head tilts to 45° in either direction this feature is found on both RD1170 and RD1175-J.



RD311X — Standard head as-
sembly only\$75.00

Special heads (shown in circle)
are available having 6" spindle
travel in place of the standard
3 $\frac{3}{4}$ ". These special heads are
made to order only at a charge
of \$100.00 extra.

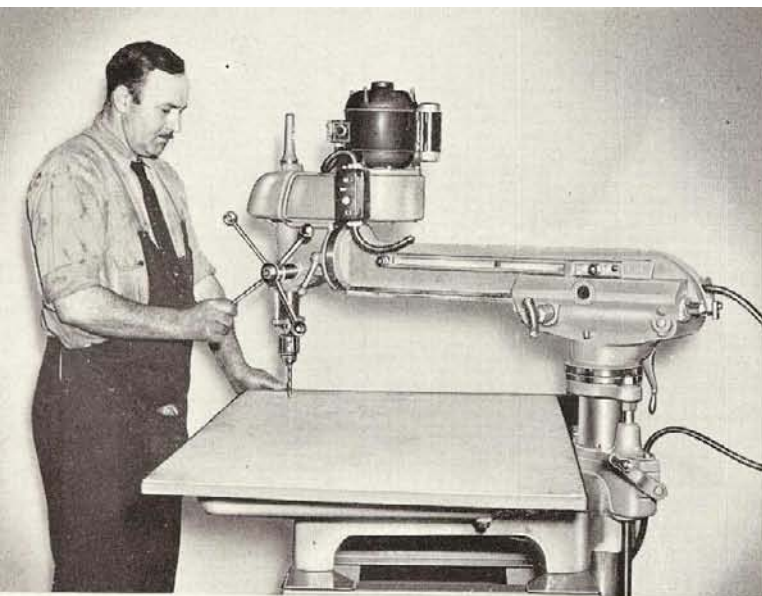


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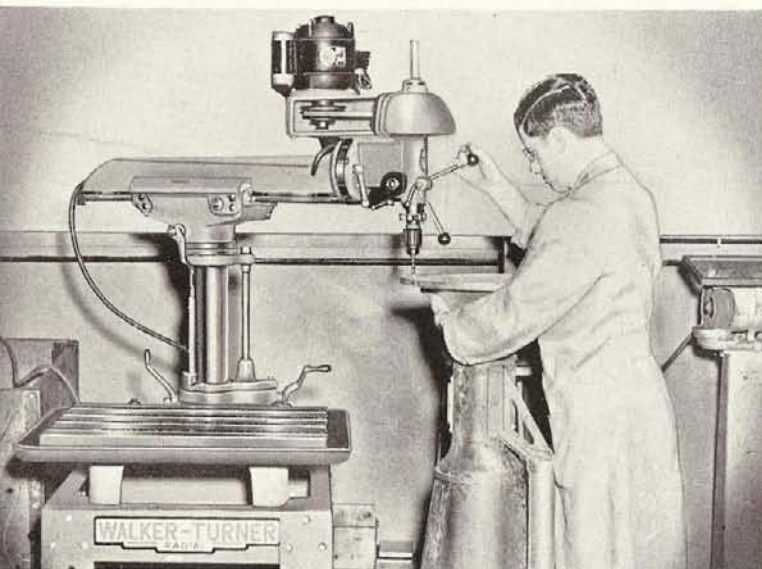
FOR

INDUSTRY





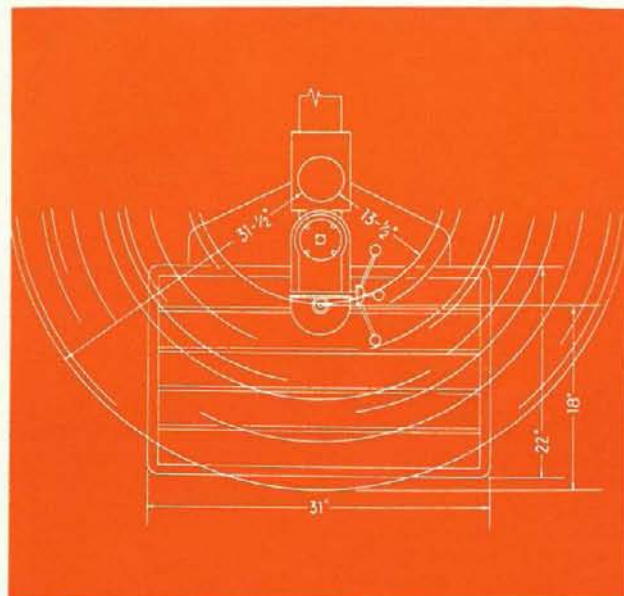
The unusual range of the W-T Radial Drill is illustrated here. This machine will drill to the center of a 62" circle. The drill head can be swung in a complete circle to accommodate large work.



In the toolroom or on the production line the W-T Radial Drill performs drilling, tapping, routing, light profiling and other such operations with speed and accuracy.



RANGE & CAPACITY



SPECIFICATIONS

NO. 1 MORSE TAPER ADAPTER, or JACOB'S CHUCK 0 to $\frac{1}{2}$ " capacity.

TABLE SIZE: 31" x 22". Machined surface, 28" x 19".

OVERALL DIMENSIONS: Height: 68 $\frac{1}{2}$ "; Width: 31"; Depth: 58".

SHIPPING WEIGHT: 450 lbs.

SPINDLE SPEEDS: RD1170. Four speeds from 600 to 5000 R.P.M. with 1740 R.P.M. $\frac{1}{2}$ H.P. single phase motor.

DISCONTINUED
Eight speeds from 600 to 10,000 R.P.M. with two-speed 1740-3500 R.P.M. three-phase motor with push-button control.

SPINDLE SPEEDS: RD1175-J. Sixteen speeds from 160 to 8300 R.P.M. with 1740 R.P.M. motor, proportionately lower with 1140 R.P.M. motor. Available speeds with 1740 R.P.M. motor are 160, 330, 340, 580, 670, 680, 1000, 1200, 1300, 2000, 2160, 2700, 4000, 4700, 8300 R.P.M.

CHUCK TO TABLE: Maximum distance, 16 $\frac{1}{2}$ ".

VERTICAL TRAVERSE OF SPINDLE: 35 $\frac{5}{8}$ ".

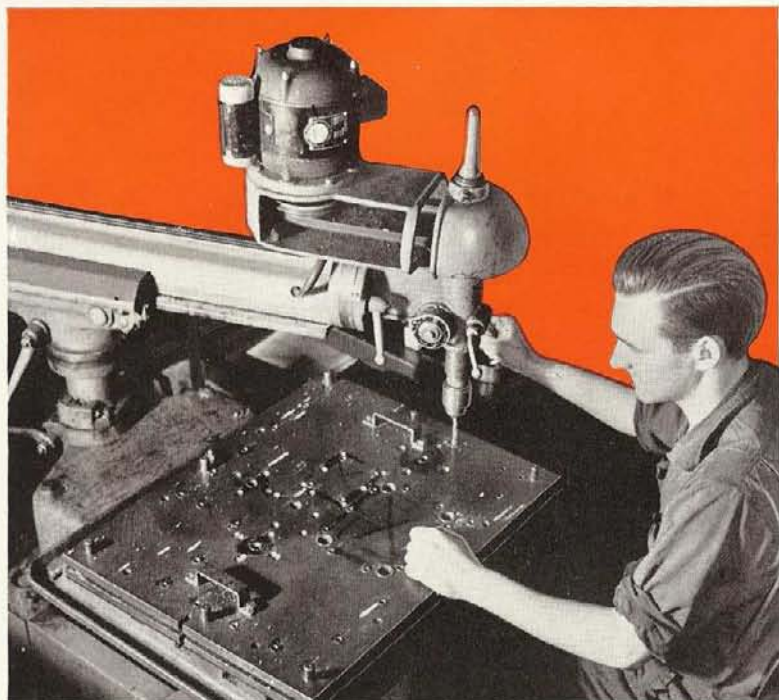
COLUMN TO DRILL CENTER: Maximum distance: 31". Minimum distance: 13".

MAXIMUM TRAVERSE OF RAM: 18".

WEIGHTS: RD1175J 630 lbs.
RD17B stand 350 lbs.

MACHINE TOOLS
WALKER-

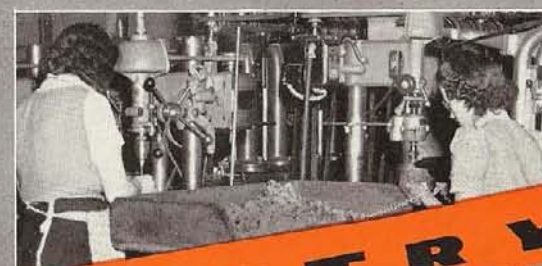
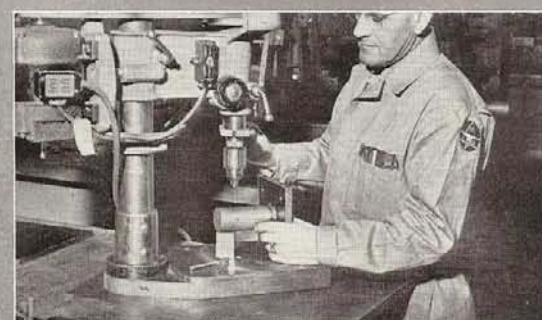
DRILL PRESS INSTALLATIONS



Walker-Turner Drill Presses have been time and service tested in all types of manufacturing plants in many parts of the world. Their inherent stamina, their ability to stand up under severe production demands and their adaptability has won for them definite industrial recognition. Particularly adapted to operation by unskilled help or women operators they are of considerable assistance in meeting today's shortages of machine tools and skilled help.

The photograph above illustrates a solution to a difficult drilling operation, a series of small diameter holes to be drilled in a large area. A heavy cumbersome jig that would be difficult to handle on a conventional drill press is easily manipulated on a Walker-Turner Radial. The drill head can be easily and rapidly brought into position over each bushing.

Typical installations are shown at the right. Illustrated (from top to bottom) are: A precision drilling operation at North American Aviation Products, women operators using W-T drill presses at Fleetwing, a small section of the W-T installation at Wright Aeronautical. A large west coast aircraft manufacturer uses W-T drill presses in several different departments. The Lionel Corp. in filling war contracts depend on W-T Drill Presses and women operators to maintain production.



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INDUSTRY

WET AND DRY CUTTING OF STEEL AND STEEL ALLOYS

METAL CUTTING: On account of the wide variety of metals—different in shapes and sizes, formed into tubing or solid bars and flats, and consisting of unlimited varying degrees of hardness; we show on page 20 an orderly grouping with general recommendations for METAL CUTTING SAWS for the NON-FERROUS METALS, and Abrasive Wheels for Ceramics and FERROUS METALS.

STRAIGHTNESS and SMOOTHNESS: These are desirable factors along with minimum burr on hard high carbon steel tubing, etc. It is frequently economical to use the Radial Machine instead of the usual methods where shear, torch, hacksaw or band-sawing can not give the desired result. In the cutting of heavy solids and low carbon steel shapes, or hot rolled flats and bars we do not recommend the abrasive wheel as ECONOMICAL except in special cases.

TRANSVERSE TRAVEL: Mechanical principle of op-

eration that makes it possible to cut WIDE material and DIFFERENT shapes. Finger touch lightness with gliding ram on EIGHT PRECISION ball bearings—so the operator can "FEEL THE BITE" with SENSITIVE CONTROL. Very little practice is required to "feel" difference between "light rubbing" (feeding too slowly); "efficient" cutting (feeling the bite); and "forcing" (feeding too heavily).

VERY THIN WHEELS USED: Geared motor makes possible small diameter wheels. ONLY HALF AS MUCH WORK is required to part material with $\frac{1}{16}$ " thin wheel as with $\frac{1}{8}$ " thick wheel. Only half as much material is removed.

CONTROLLED ACCURACY: Tapered latches and rugged locking-levers insure accurate alignment and precision cutting. Right and left hand adjusting screws provide for maintaining accuracy. Both "climb-milling" and "kick-cutting" by reversing motor end for end about position.

MRA1112—RADIAL SAW, as shown opposite, but less base, including 1 H.P., single phase, 110-220 volt, 60 cycle, A.C., 3450 R.P.M. Motor, less abrasive wheel.\$330.50

MRA1115—RADIAL SAW, same as MRA1112, less base except with $1\frac{1}{2}$ H.P., three phase, 220 volt, 60 cycle, A.C., 3450 R.P.M. Motor, less abrasive wheel and magnetic overload release. 330.50

MRA1120—RADIAL SAW, same as MRA1112, less base except with 2 H.P., single phase, 110-220 volt, 60 cycle, A.C., 3450 R.P.M. Motor, less abrasive wheel. 374.50

MRA1130—RADIAL SAW, same as MRA1112, less base except with 3 H.P., three phase, 220 volt, 60 cycle A.C., 3450 R.P.M. Motor, less abrasive wheel and magnetic overload release. 374.50

RA14B—Cast Iron base as shown opposite 48.50

Odd voltages on 1 H.P. Single Phase, \$1.25 Extra; Odd cycles on 1 H.P. Single Phase, \$.75 Extra; Odd voltages on 2 H.P. single phase, \$2.50 Extra; Odd cycles on 2 H.P. Single Phase, \$1.50 Extra.

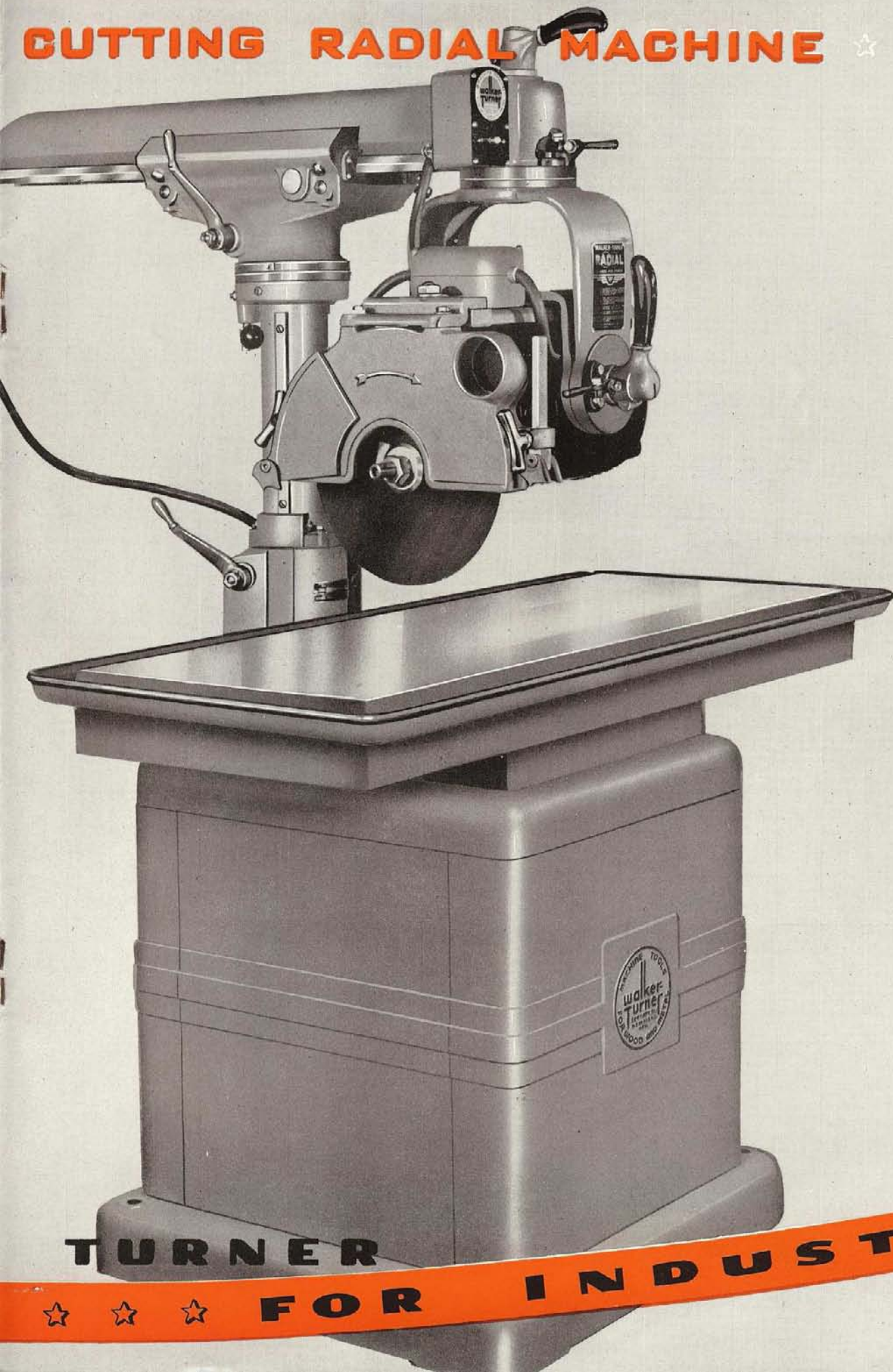
Available in 2 phase. For 440 volts no Extra. Odd cycles 10% of Motor price extra. Other odd voltages \$2.50 extra.

If Radial Saw is wanted with Long Ram, specify S after number, as MRA1112S. S models \$40.00 extra.

SHIPPING WEIGHT lbs.

Machine with 1 H.P. Motor.....	445
Machine with 3 H.P. Motor	555
Metal Table Top	185
Cast Iron base	375

CUTTING RADIAL MACHINE ☆ ☆



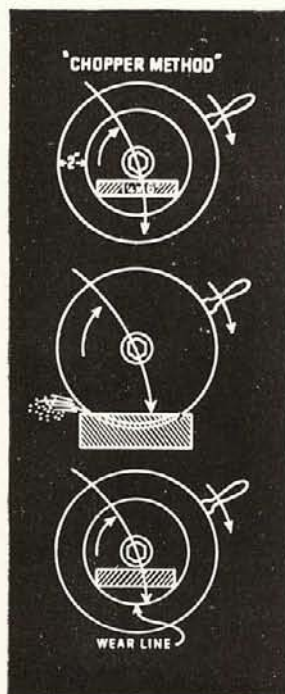
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METAL CUTTING RADIAL MACHINE



REASONS WHY IT CUTS ECONOMICALLY

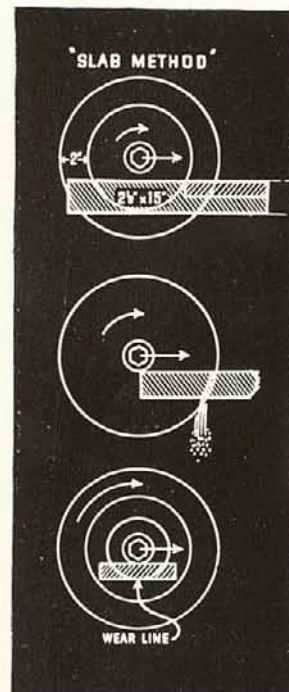
"SLAB CUTTING" METHOD USED: Wide flat metal stock, wide mouldings, sheets of insulating material, etc., are classified as "slab" materials on account of the WIDE cut required. The usually employed downward shearing motion classified as "chopper" method may be compared in operating principles with the "slab" cutter for CAPACITY, and EFFICIENCY OF ARC, and ECONOMY OF WHEELS.

MORE CAPACITY: Compare the areas of cross-section here drawn to actual scale. WIDTH and DEPTH are shown with suitable allowance for abrasive wheel wear. Actually 500% more capacity.

"SHORT ARC" VS. "LONG ARC": Small particles of the material being cut plus small particles of the wheel ROLL and RUB to cause friction and heat rather than cutting unless quickly released. The shorter the path they have to travel for release the better.

ECONOMY—MORE CUTS PER WHEEL: Abrasive wheels must be discarded when they wear down to the corner of the material by "chopper" method while "slab" method permits use until bottom line clears. 22% more utility out of EVERY wheel used—means approximately \$.45 saved on EVERY wheel—\$135.00 per year of 300 working days where only ONE wheel per day is worn out.

UNLIMITED USEFULNESS: Skillful design permits positioning the head so you can RIP WIDE SHEETS of metal or insulation material. You can move the material while saw is in fixed position. You can "trench" or dado, miter, compound miter, and also operate with motor in VERTICAL positions. The applications and use of this machine are limited only by the ingenuity of the operator.



GENERAL RECOMMENDATIONS are made below for various materials. EVERY MATERIAL PRESENTS A SLIGHTLY DIFFERENT CUTTING PROBLEM. Solid bars and thin wall tubing of the SAME material require different treatment. It is IMPORTANT that you get the right blade or abrasive wheel.

METAL CUTTING BLADES listed are semi high speed steel—10" Diam.— $\frac{3}{4}$ " hole—4 expansion slots in the rim—hollow ground—properly tensioned and balanced. Harder high-speed steel blades may be ordered through us or obtained from a responsible saw manufacturer.

ABRASIVE WHEELS listed are for general purpose. 12" diameter— $\frac{3}{32}$ " thick— $\frac{3}{4}$ " hole. Responsible abrasive wheel manufacturers render free engineering service and make recommendations if you submit a sample of the material to be cut and request a wheel of suitable grit, bond, structure, hardness, etc., for efficiently cutting the material to give desired finish and maximum number of cuts per wheel.

Classification	Group	Material	Wheel	Prices
FERROUS METALS	High Carbon	High Speed Stellite Hardened	237-M	\$1.60
	Low Carbon	Cold Rolled Angle Iron Steel Pipe	225-M	1.60
	Tubing Moulding	Sheet Iron Thin Wall Tubing Mouldings	465-M	1.60
NON-FERROUS METALS	Solids Tubing Shapes Sheets	Brass, Bronze Copper Aluminum Magnes (Dow Met)	236-M	1.60
CERAMICS	HARD	Porcelain, Vitrous Tile Slate, Marble	56-M	1.75
	MEDIUM	Fire Brick Limestone Brake Lining	53-M	1.75
	SOFT	Build-Tile Transite Terra Cotta	123-M	1.75
PLASTICS	MEDIUM	Bakelite Catalin Hard Rubber	21-M	1.75

SPECIFICATIONS

Height Overall (with steel stand)	61"
Height of Steel Floor Stand	29"
Size of Table Top	46" x 24"
Floor Space Required	4' x 5'
Standard Ram Travel	21 $\frac{1}{2}$ "
Special Long Ram Travel	28 $\frac{1}{2}$ "
Total Vertical Adjustment	8 $\frac{1}{2}$ "

Saw Spindle— $\frac{3}{4}$ " Diam. 2 $\frac{1}{2}$ " long.

Depth of Cut with 1 H.P. and 1 $\frac{1}{2}$ H.P. Motors

8" Blade—2 $\frac{3}{4}$ " deep.
10" Blade—3 $\frac{3}{4}$ " deep.
12" Blade—4 $\frac{3}{4}$ " deep.

(Deduct only $\frac{1}{4}$ " for 2 or 3 H.P. Motors)

SHIPPING WEIGHT	LBS.
Machine, with 1 H.P. Motor	445
Machine, with 3 H.P. Motor	555
Maple Table Top	75
Cast Iron Floor Stand	375
Metal Table Top	185

★ ★ ★ MACHINE TOOLS WALKER-



DELAWARE HARDWARE CO.
WILMINGTON, DELAWARE

FOR CUTTING NON-FERROUS METALS, PLASTICS AND WOOD

MODERN DESIGN: Correct mechanical principles—balanced power—skillful arrangement for taking care of structural stresses and strains so accurate performance is assured and maintained.

GLIDING RAM: Moves $21\frac{1}{2}$ " with finger touch lightness on 8 precision Ball-Bearings. Operator has clear view of work and no interference from overhanging arm extending out over the table.

UNIVERSAL HEAD: Convenient locating latches and locking levers for quick change and rigid setting. Mechanical adjustments for maintaining accurate alignment.

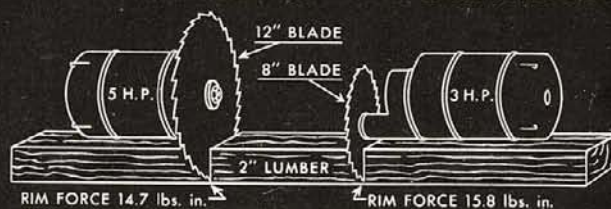
GEARED MOTOR: Equipped with a patented "SHOCK ABSORBER" or mechanical cushion—an exclusive feature—U. S. Patent No. 2,236,854. (Not used on 2 and 3 H.P. motors.)

SAFETY GUARD: With adjustable segment for covering otherwise exposed part of saw blade—double kick-backs provided both front and rear.

MAPLE TABLE TOP: Selected kiln dried maple laminated—46" x 24"—removable center fence with quick change wedges. Rigidly supported on ONE PIECE base extending out under table to support it and insure ACCURACY.

UNEQUALLED CAPACITY: Rips 38" wide. Travels $21\frac{1}{2}$ " to cut material $4\frac{3}{4}$ " deep with 12" blade. For mitering, compound mitering, shaping and routing its capacity is unequalled.

5 H.P. PERFORMANCE WITH 3 H.P. MOTOR



12" blade cuts	$4\frac{3}{4}$ "	8" blade or Dado	$3\frac{3}{4}$ "
10" blade cuts	$3\frac{3}{4}$ "	6" Dado Head	$1\frac{3}{4}$ "
2" x 8" Jack Rafters are cut with 10" saw.			

(Deduct only $\frac{1}{4}$ " capacity for larger 2 & 3 HP Motors)

RA1104—RADIAL SAW COMPLETE , as shown above, including 1 H.P. single phase 110/220 volt, 60 cycle. 3450 R.P.M. motor, two 10" blades and RA1185 Maple Table Top		301.25
RA1106* —RADIAL SAW, same as RA1104, except with $1\frac{1}{2}$ H.P. 3 phase 220 volt and without magnetic overload release		310.25
RA1107* —RADIAL SAW, same as RA1104, except with 2 H.P., 12" blades instead of 10". Motor speed 3000 R.P.M.		354.50
RA1108* —RADIAL SAW, same as RA1107, except with 3 H.P., three phase, 220 volt, 60 cycle, 3000 R.P.M., A.C., Motor, and without magnetic overload release		354.50
RA1185—MAPLE TABLE TOP , laminated, 46" x 24".		20.25
RA14B—CAST IRON FLOOR STAND		48.50

Odd voltages on 1 H.P. Single Phase, \$1.25 Extra; Odd cycles on 1 H.P. Single Phase, \$.75 Extra; Odd voltages on 2 H.P. single phase, \$2.50 Extra; Odd cycles on 2 H.P. Single Phase, \$1.50 Extra.
Available in 2 phase. For 440 volts no Extra. Odd cycles 10% of Motor price extra. Other odd voltages \$2.50 extra.
If Radial Saw is wanted with Long Ram, specify S after number, as RA1104S. S models \$40.00 extra.

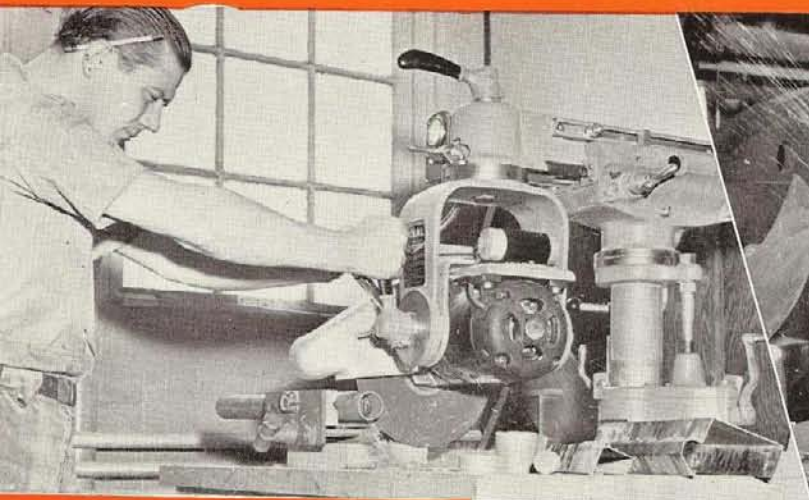
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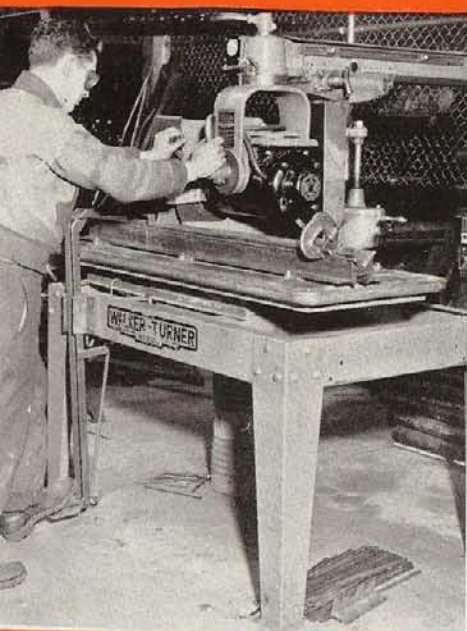
RADIAL INSTALLATIONS



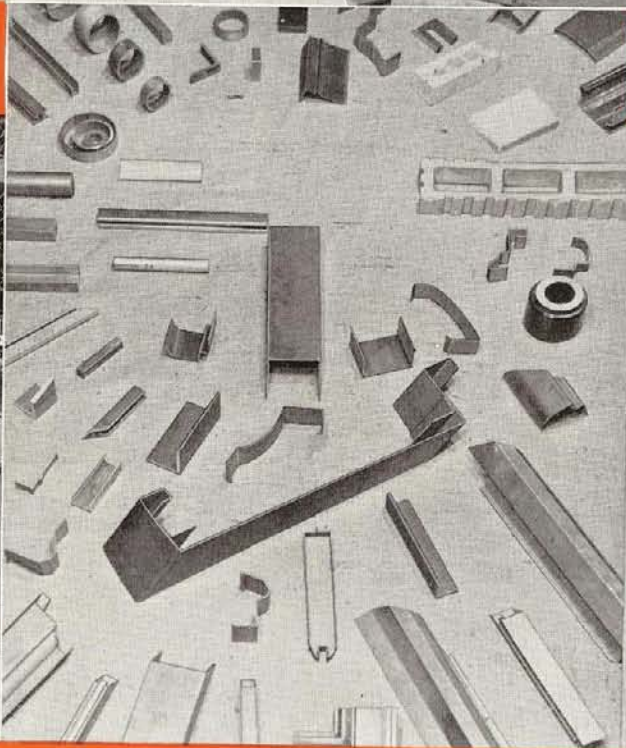
(Above) Cutting thin wall steel tubing with an abrasive wheel.



(Above) "Kick" cutting with a W-T Radial Cut-off machine.



A foot operated clamp holds the work being cut, in the illustration above.

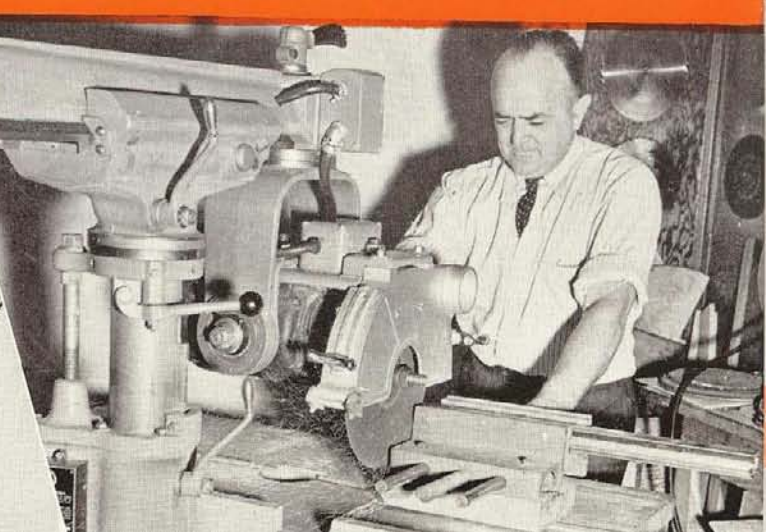


An extremely wide variety of materials and shapes can be successfully handled on the W-T Radial Cut-off Machine.



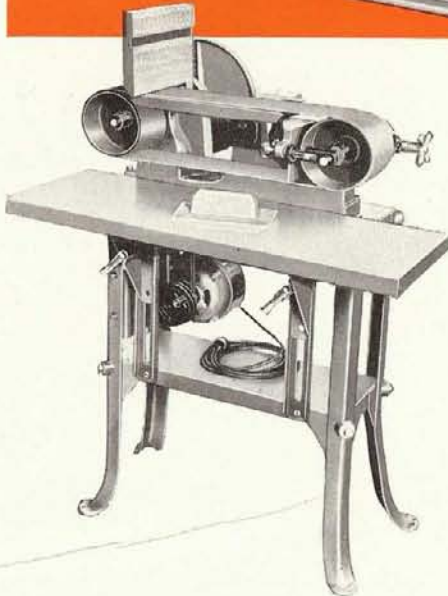
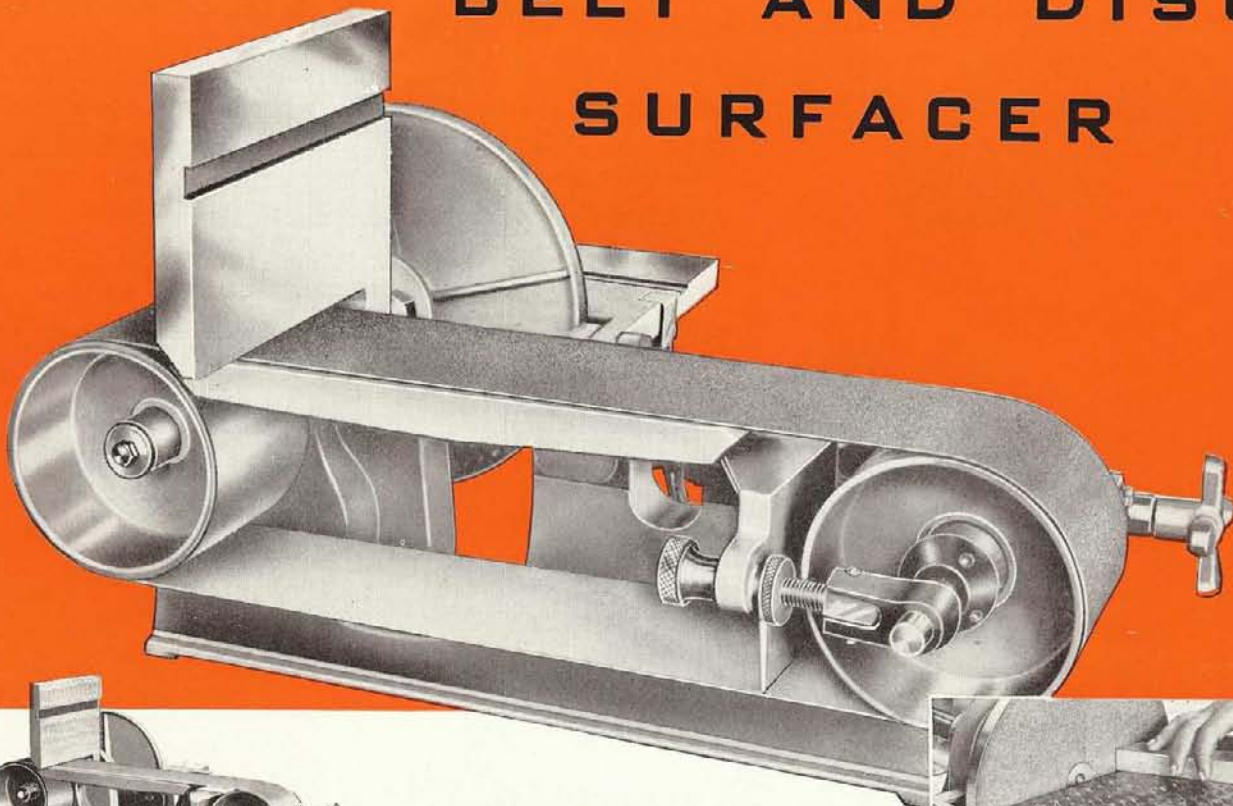
This photo shows the motor turned 180° to facilitate a special cutting operation.

A 90° cut-off operation on preformed steel moulding.



Formed steel moulding held on a special fixture is accurately cut to 45°.

BELT AND DISC SURFACER



FLOOR MODEL — With the special all-steel stand it is possible to do "stroke surfacing" on large panels, up to 12" in width and 4' to 5' in length. The shelf is adjustable up and down for a distance of 14" permitting wood up to that thickness to be sanded.

SM700—Surfer (as shown above) includes motor pulley, V belt, hand block and mitre gauge.\$39.00

SM705—SM700 Surfer with steel bench, above (less motor). 53.00

(Motor recommended—for ordinary work 1/3 H.P. 1740 R.P.M. For heavy work 1/2 H.P. 1740 R.P.M.)

24 — Bench only, for converting SM700 to SM705. 14.00

SPECIFICATIONS

BASE: Heavy cast-iron, accurately machined for various parts. Has built-in drive belt and pulley guard.

BEARINGS: Completely dust-sealed, packed with grease at the factory and require no further attention or lubrication. Four ball bearings are used.

PULLEYS: Aluminum die castings 5" in diameter, accurately balanced. Drive pulley is rubber faced and slightly crowned.

BELT: Aluminous oxide, fabric backed. Available in three grades of grit, 36, 60 and 120. Regular equipment 60 grit. Belt 4" x 52 1/2". Tension varied by cushion spring control.

SANDING DISC: 10" diameter, cast-iron, carefully balanced.

ABRASIVE: Aluminous oxide, 40 grit. 60 and 80 grit abrasive discs also available.

MACHINE SPEEDS: 765, 1350 and 2275 R.P.M.
ABRASIVE BELT SPEEDS: 1050, 1760 and 3100 feet per minute.

TILTING TABLE: Hinged for disc. Cast-iron with smooth ground surface. 12" x 6", tilts from 90° to 45°, with angle of tilt indicated on graduated quadrant.

MITRE GAUGE: Furnished regular equipment.

SANDING TABLE: (Under the upper section of belt) cast-iron, carefully machined 12" x 4 1/4". Is attached to and adjusts on base. Carries a stop table 8 1/2" x 6", which tilts 90° with indicator and graduated collar.

PIVOTED BRACKET: With knurled adjusting and lock nuts to control idler pulley alignment.

DISTANCE: Between centers of pulleys 18".

LENGTH: Overall 29". **HEIGHT:** Overall 16".

SHIPPING WEIGHT: SM700 (98 lbs.), SM705 (143 lbs.).



(Above) Sanding with Disc.



(Above) Stroke Sanding.
(Below) Sanding Mitred Joint.



ABRASIVE BELTS & DISCS

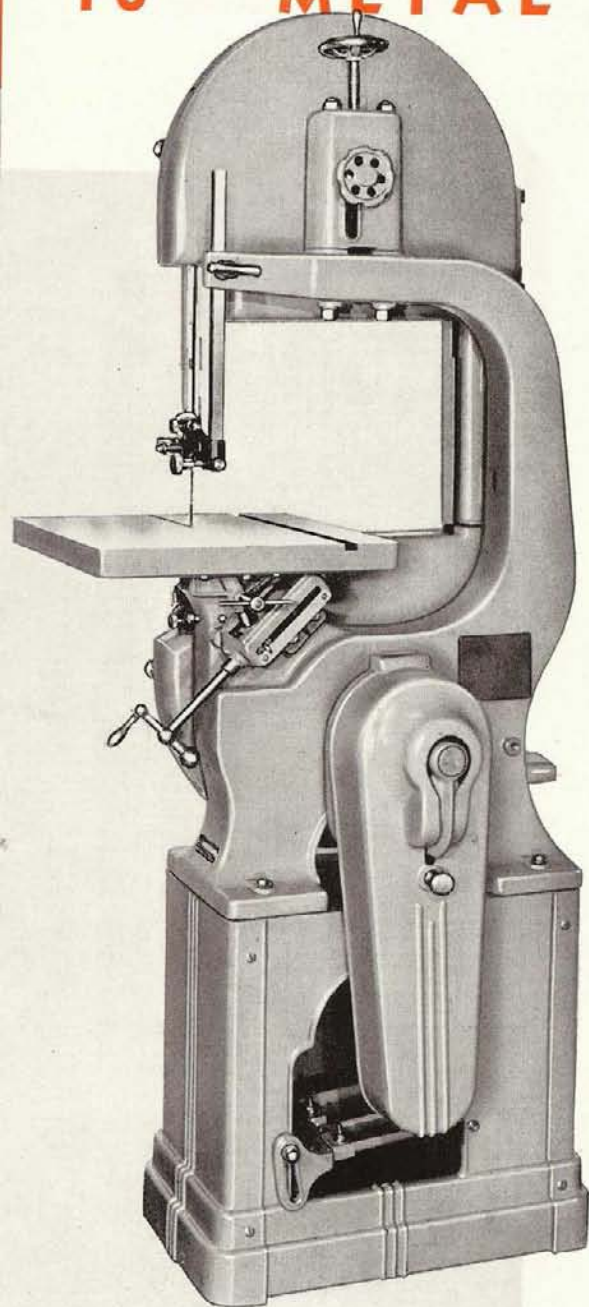
Aluminous oxide, fabric backed for SM700. Endless, 53" long.

SM36B —36 grit belt.	\$1.00
SM60B —60 grit belt.	.85
SM120B —120 grit belt.	.85
SM40 —40 grit, pkg. of 6.	1.25
SM60 —60 grit, pkg. of 6.	.85
SM80 —80 grit, pkg. of 6.	.85



FOR INDUSTRY

16" METAL CUTTING BAND SAW



All wheel bearings are heavy duty precision ball bearings.

Tables are heavily ribbed and carefully machined, tilt to 45° and have mitre gauge grooves.

Wheels are carefully balanced and rubber faced.

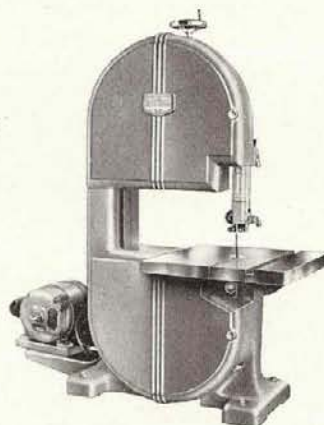
Blade guides have ball bearing thrust wheels and adjustable steel-faced guide pins designed especially for metal cutting.

Blade tensioning devices have spring cushions to absorb shocks.

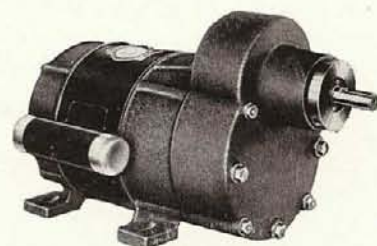
Guard construction assures complete protection to operator.

Back gear unit provides wide range of slow speeds.

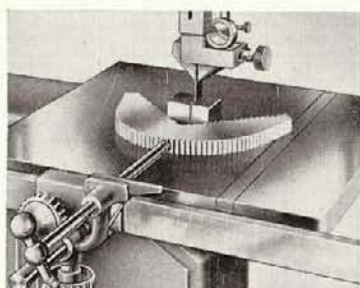
Heavy cast-iron, one piece frames have extra strength and rigidity.



(Above) Rear Motor Mounting



SLO-SPEED MOTOR — A new 716 R.P.M. back geared motor provides the extremely slow speeds necessary in cutting certain types of steel. Used on these metal cutting machines many speeds are available.



SCREW FEED—The screw feed with guiding segment, shown above left, greatly simplifies metal cutting. This attachment clamps to the table guide bar with the screw directly in line with the saw blade. The segment is not attached to table or screw. It holds square, hexagonal, triangular or round work in line without clamping while the screw advances it into the blade.

9BN125—Including guide bar. \$18.50

11BN2—Belt Guard for BN1135 and BN905 \$8.50



BACK-GEAR UNIT — This photo shows how substantially this unit is built. It is designed for long-run, trouble-free service on steady production work. Back-gearing and cone pulley—similar to those found on a screw-cutting lathe—provide eight speeds suitable for cutting practically every material from tool steel to wood. The gear train can be disengaged and the machine operated on direct drive for higher speed operations.

U. S. Pat. No. 1,996,825
MBN1105—16" metal cutting band saw, as shown, less motor, rip fence and base. Includes 1/2" blade, new metal cutting guides, belt guard, belt and motor pulley. \$159.50
BN1135—Same as above but less gear assembly and belt guard. 110.00
11BN45—Cast-iron base 23.75
KAB55—1/2 H.P., 1740 R.P.M. motor, 110 volts, AC, 60 cycles. 26.50
GIB5 — 1/2 H.P., 716 R.P.M. geared motor, single phase, 110-220 volts, AC, 60 cycles. 50.00
GIB7—3/4 H.P., 716 R.P.M., 3 phase, 220 volts, AC, 60 cycles motor. 55.00
 (Note: GIB5 and GIB7 require the use of V.B. 44 belt).

★ ★ ★ MACHINE TOOLS WALKER-

14" METAL CUTTING BAND SAW

Every tool room, experimental department, general machine shop and metal-working plant has an opportunity to save money with these new back-geared band saws. They cut sheets, rods and tubes of steel, iron, aluminum, brass, alloys and compositions quickly, accurately and economically. Molded plastics such as bakelite and catalin are also cut or trimmed efficiently on these metal cutting band saws.

In many shops these machines will pay for themselves on the first job. Their low initial cost and high operating efficiency combine to make them indispensable tools . . . money-makers from the start.

The geared speed reducer is a precision unit designed by engineers who know what is required of such a unit. A glance at the photos on the opposite page will show you that it is correctly and substantially designed for long-run, trouble-free service on steady production work. A feature that adds still greater value is the fact that the metal cutting machine may be speeded up for woodworking. By simply throwing the lever which disengages the gear train and engaging a pin it is immediately converted into a direct-drive machine with correct speeds for woodworking.

WHEELS: Gray iron carefully machined and balanced, rubber faced.

BALL BEARINGS: Large dust-sealed, precision in both wheels.

GUIDES: Are both ball-bearing with steel insert blocks for metal cutting.

WHEEL GUARDS: Are cast-iron hinged for convenience . . . telescoping guards at area of operation.

ADJUSTING MECHANISM: Blade and upper wheel mounted on two

heavy ground steel rods . . . Cushion springs absorb blade shocks.

MOTOR BRACKET: At rear of frame supplied with 16" model. For 14" model available as an extra.

BLADE SPEEDS: Standard motor, 16" model, 200, 300, 400, 560, 2000, 3000, 4150, 5300 F.P.M. 14" model, 175, 260, 350, 490, 1750, 2625, 3630, 4630 F.P.M. Slo-speed motor, 16" model, 70, 106, 151, 208, 746, 1129, 1607, 2216 F.P.M. 14" model, 61, 93, 132, 182, 653, 1103, 1413, 1950 F.P.M.

	16" Model	14" Model
Capacity, blade to frame	16"	14"
Capacity, guide to table	12"	7"
Table size	18" x 17"	16" x 16"
Blade speeds, ft. per min., standard motor	200-5300	175-4630
Blade speeds, ft. per min., slow-speed motor	70-2216	61-1950
Height overall, without base	50½"	44"
Height overall, with base	71½"	65"
Width	30½"	25¾"
Distance front to back	22"	20"
Shipping weight, without base or motor	455 lbs.	350 lbs.
Shipping weight, with base, less motor	575 lbs.	470 lbs.

BLADES FOR 16" BAND SAW

Cat. No.	Price	Width	Teeth Per In.
11BN90		1½"	10
11BN91		1½"	14
11BN92		1½"	18

*Blade length 114¾"

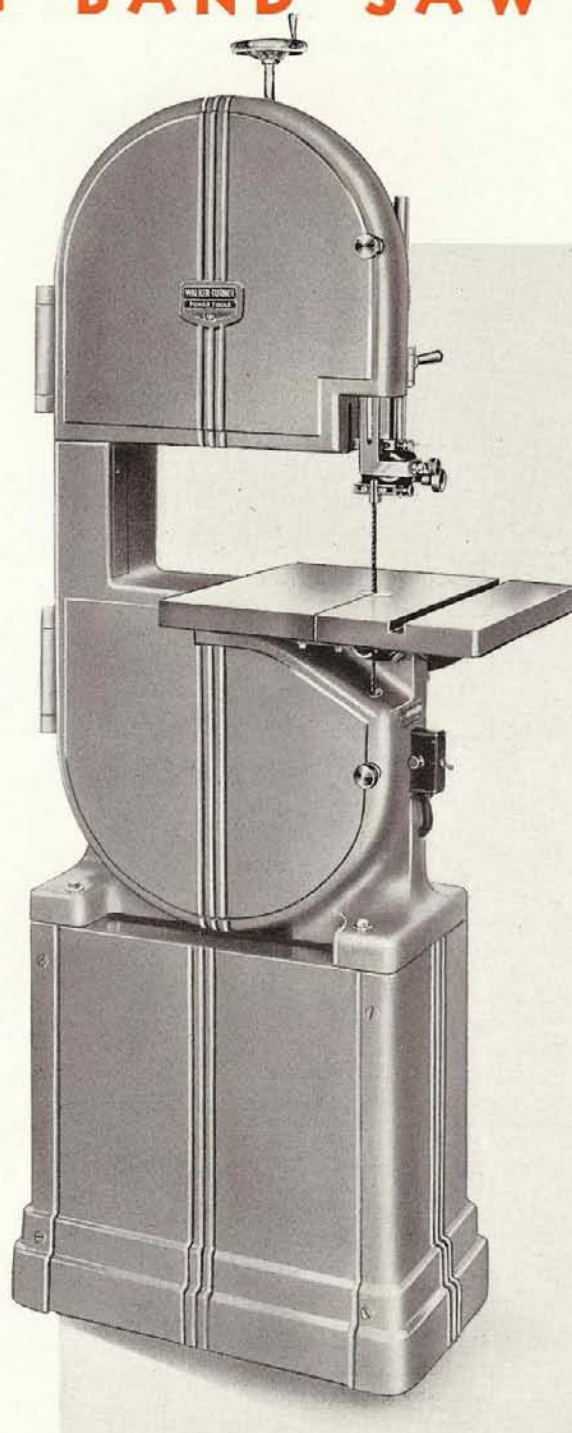
BLADES FOR 14" BAND SAW

Cat. No.	Price	Width	Teeth Per In.
9BN55		1½"	10
9BN56		1½"	14
9BN57		1½"	18

*Blade length 96⅝"

Above blades for mild steel and non-ferrous metals.

A chart of blades recommended for various materials upon request.



MBN935—14" metal cutting band saw, as shown above with new metal cutting guides including belt, motor pulley and guard; less base and motor \$127.50
BN905—Same as above but less gear assembly and belt guard 79.50
9BN5—Motor bracket for rear mounting (not needed with 11BN4S). 3.75
11BN4S—Cast-iron base 23.75

See page 24 for motors.

TURNER
FOR INDUSTRY

W-T POLISHING LATHES



LEFT—Model No. TPL 10, showing $\frac{3}{4}$ " Jacobs Chuck and gear housing.

CENTER—Four inch Universal Chuck can be supplied in place of the Jacobs Chuck. Add symbol "A" to model number.

RIGHT—Rear view shows clean cut lines of switch and brake housing.

WALKER-TURNER POLISHING LATHES fill a definite need in all industries where accurate finishing of metal parts is necessary. Engine builders, (airplane, tank and marine) Arsenals, Airplane manufacturers, Ship-yards and other metal working plants are using this machine for finishing operations that were formerly done on more expensive machines which can be released for other types of work. These new machines will be found especially adapted for burring, polishing, and hand lapping operations that are usually performed on the conventional type engine lathe.

THE MOTOR is a standard W-T 3 H.P. frame wound for $1\frac{1}{2}$ H.P. To assure cool operation the motor is not fully enclosed, but ventilated through an air inlet located in the base of the machine. (Available in 3 phase only.) Abrasive dust is thus settled out and does not enter the motor. The base is made from heavy iron castings and is of correct height for comfortable operation.

BEARINGS are of the double and single row type, and are provided with shields to retain lubricant and exclude foreign materials.

BRAKE is of the self releasing automotive type and bands are lined with high grade brake lining. Brake bands operate against a cast-iron drum which is keyed to the motor shaft. The foot pedal operates the brake and motor switch simultaneously. Adjusting bolts provide means for regulating brake pressure and adjusting for wear.

SPINDLE SPEEDS—W-T Polishing Lathes are available with speeds ranging from 950 to 7200 R.P.M.

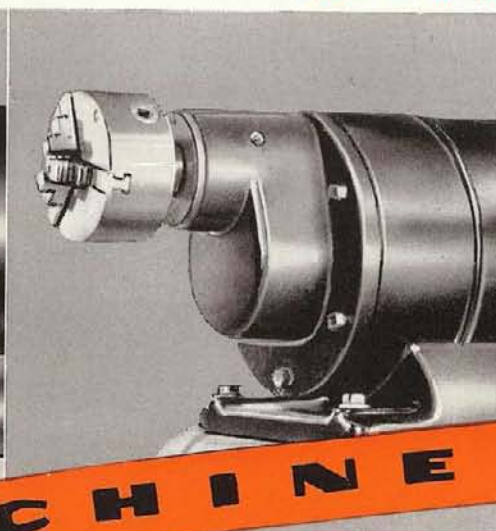
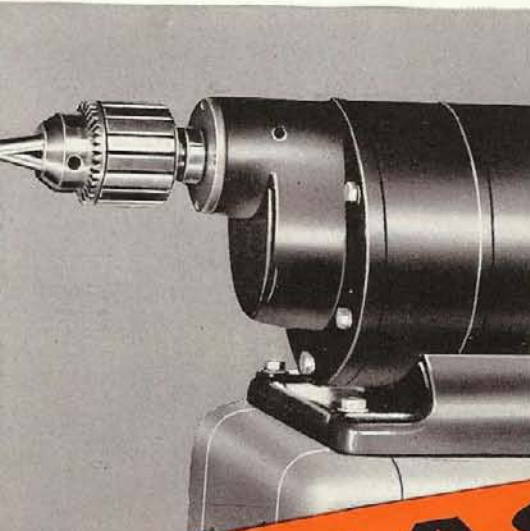
ELECTRIC EQUIPMENT is all of approved type. Allen Bradley limit Switches are used in conjunction with the foot pedal and they operate through a magnetic circuit breaker attached to the base of the machine.

DIRECT DRIVE MODELS shown at the left are identical in all features to the geared model except that the chuck is attached directly to the motor shaft. The speed range of this model is also somewhat limited. It is available with speeds of 1800 or 3600 R.P.M.

Special speeds, voltages and cycles are available in some instances. Write to the factory describing special needs. Your inquiry will receive prompt attention.

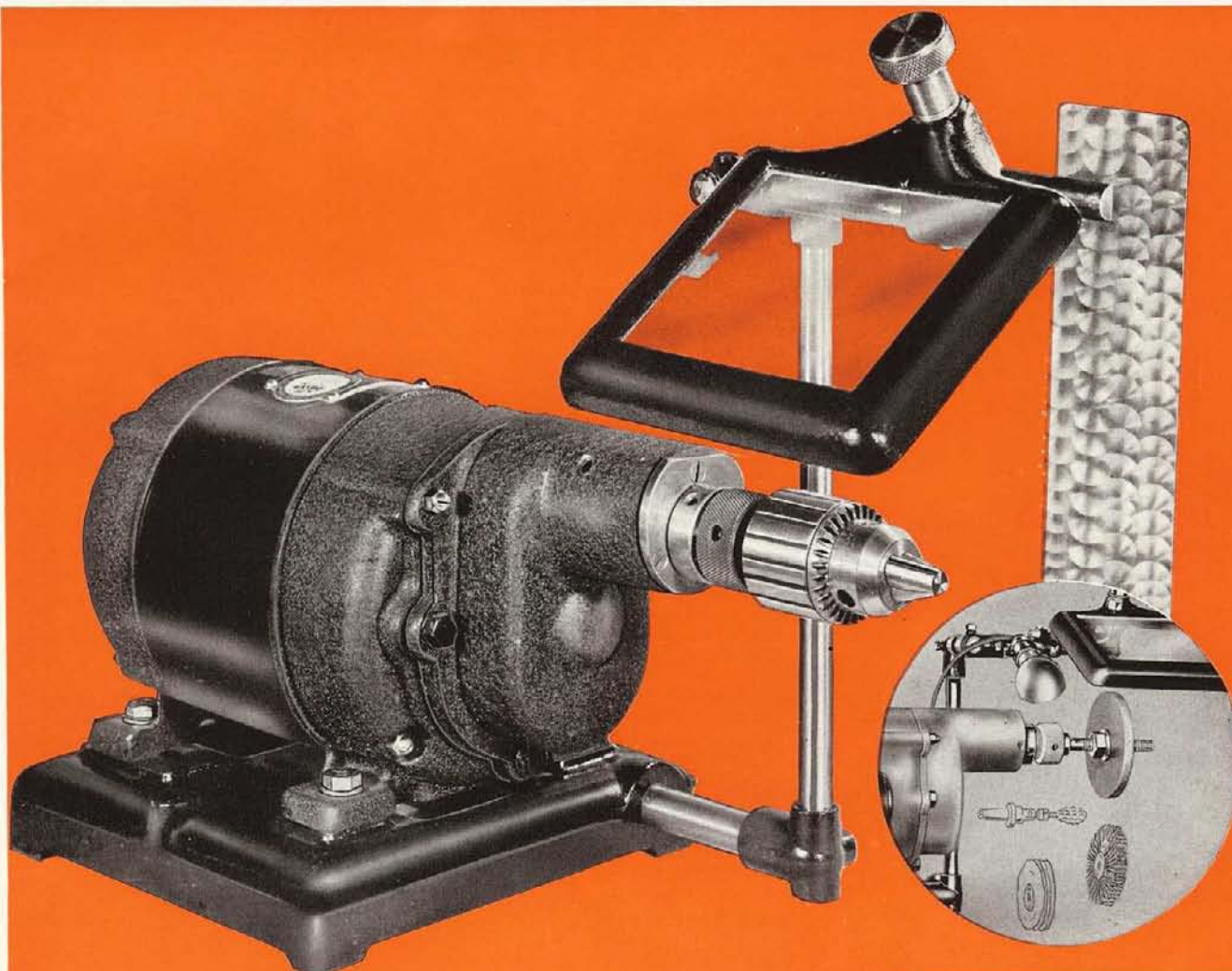
TPL 6	POLISHING LATHE—1800 R.P.M. Less Chuck. Spindle has No. 4 Jacobs Taper	\$187.50
TPL 8	POLISHING LATHE—3600 R.P.M. No. 18 Jacobs Chuck $\frac{3}{4}$ " Cap.	205.00
TPL 10	POLISHING LATHE—Geared motor in any of the following speeds, 950, 1500, 1800, 2200, 3000, 3600, 4400 and 7200 R.P.M. with No. 18 Jacobs Chuck $\frac{3}{4}$ " Cap.	240.00

Note: Geared lathes only up to 3600 R.P.M. can be supplied with $1\frac{1}{2}$ "—8 thread spindle extra \$10.00



MACHINE TOOLS
WALKER-

W - T POLISHING LATHES



This ruggedly built grinder was developed several years ago for one of the most widely known airplane engine manufacturers. Since then hundreds of these machines have been put into operation in tool rooms and on production lines in factories engaged in producing airplane parts and similar type of equipment.

The over-hanging extension of the geared spindle providing complete accessibility and a high speed of 8000 R.P.M. make an ideal combination for light grinding, burring and polishing operations.

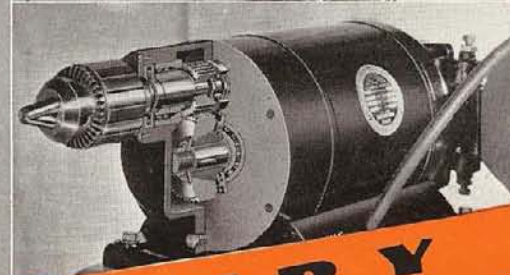
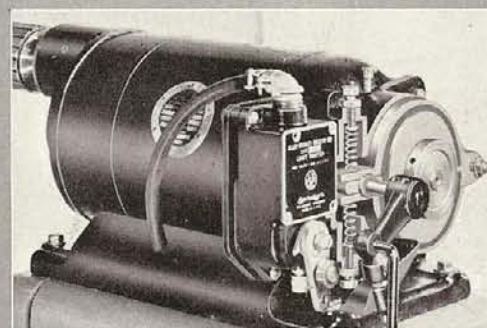
A removable work arbor and collet chuck are standard equipment on WAC7 and WAC7-2; WAC8 is furnished with a $\frac{1}{2}$ " capacity Jacobs chuck.

Standard speed for 60 cycle current is 8000 R.P.M. although speeds of 3600 and 4400 are also available on special order. Motor is semi-enclosed $\frac{3}{4}$ H.P. single phase 110/220 Volt—60 cycle A.C. Special voltages and cycles available on special order.

WAC7 GEARED GRINDER including eye-shield, $\frac{1}{2}$ " work arbor and $\frac{5}{16}$ " collet chuck—8000 R.P.M.—110/220 Volt—60 cycle A.C. $\frac{3}{4}$ H.P.\$88.50

WAC7-2 $\frac{1}{2}$ H.P. 3600—7800 R.P.M. with switch, other equipment same as WAC7 (3 phase only)\$103.50

WAC8 GEARED GRINDER as shown including eye-shield and Jacobs Chuck —0" to $\frac{1}{2}$ " capacity 8000 R.P.M.—110/220 Volt 60 cycle A.C. $\frac{3}{4}$ H.P.\$92.50



TURNER

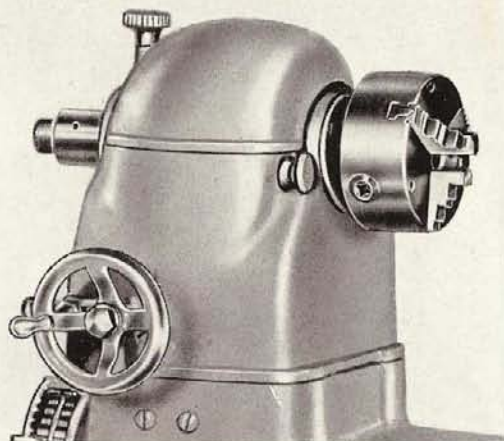


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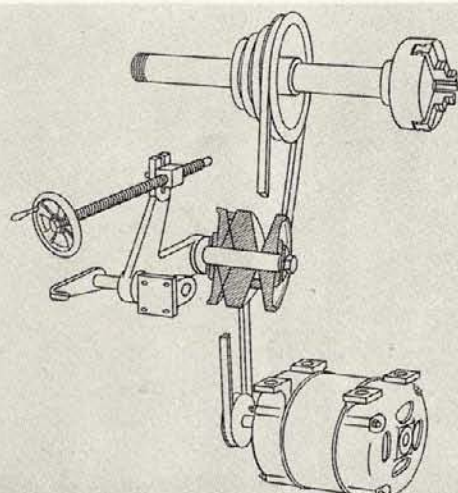
W-T POLISHING LATHES VARIABLE SPEED

SPECIFICATIONS



The 4" Universal Chuck is mounted on a hollow spindle. Work up to $\frac{5}{8}$ " in diameter may be passed through the chuck and spindle.

Schematic drawing below shows relative position of motor, variable pitch pulley and spindle pulley.



The hand wheel provides infinitely variable spindle speeds within the range specified.

OVERALL HEIGHT: 47 inches.

SWING OVER BASE: $15\frac{1}{2}$ inches.

DISTANCE: Spindle to floor 38".

SPINDLE SIZES: 1-inch diameter threaded 1"-12 R&L No. 2 Morse Taper in spindle nose.

BEARINGS: SKF, double row at spindle nose—single row at other end, pulley is placed between the bearings.

Designed to meet a specific need where frequent speed changes are necessary the W-T Variable Speed Polishing Lathe has met with complete success wherever it has been installed.

SPEED RANGES from 260 R.P.M. 4500 R.P.M. are available depending on motor and motor pulley used. Speed changes are affected through a variable diameter pulley mounted between the motor and headstock pulley. Changes are made by a hand-wheel conveniently located on the front of the headstock casting. A graduated scale shows the speed at which the spindle is running.

HEAD STOCK SPINDLE is 1" in diameter threaded on both ends to carry a chuck or other holding device. A 4" 3 jaw universal chuck is supplied with the machine. The spindle is hollow, having a $\frac{5}{8}$ " diameter hole through its center; this permits chucking small diameters of indefinite length.

TWO BALL BEARINGS, one on either side of the drive pulley carry the spindle. The bearing at the chuck end of the spindle is double row preloaded and will take all thrust as well as radial loads.

THE MOTOR is suspended below the headstock casting and is completely enclosed by the base which protects it from dust and chips. Spindle speeds are governed by the selection of motor and motor pulley as shown in the chart below.

Motor R.P.M.	Catalog No.	Pulley Dia.	Min. R.P.M.	Max. R.P.M.
1740	LKAB5S or	2"	260	2000
1740	PAB5	4"	465	3750
1740-3450	LPAEB5	2"	260	4500

SVL52 POLISHING LATHE complete with 2" motor pulley (less motor and chuck)\$105.50

LKAB5S $\frac{1}{2}$ H.P. 1740 R.P.M. motor—110/220 Volts 60 cycle A.C.\$26.50

LPAEB5 $\frac{1}{2}$ H.P. 1740-3450 R.P.M. Two Speed Motor 220 Volt—60 cycle—3 phase A.C.\$45.50

PAB5 $\frac{1}{2}$ H.P. 1740 R.P.M. motor 220 Volt 60 cycle—3 phase A.C.\$24.50



**MACHINE TOOLS
WALKER-**

W - T 10 INCH GRINDER

THE MOTOR is fully enclosed and specially designed seals prevent the entrance of dust into ball bearings. The motor end bells are extended, allowing the use of both sides of the grinding wheels.

WHEEL GUARDS are of heavy construction with removable covers affording ready access to the wheels.

TOOL RESTS are rigidly mounted on steel bars which extend from the base. Every necessary adjustment is readily available.

TWO VITRIFIED WHEELS (one fine grit, one coarse grit, both 10" diameter by 1" face x $\frac{3}{4}$ " bore) are supplied as standard equipment.

Extra Equipment Available

GR100-A EYE SHIELDS, available as extra equipment, are of the approved type of shatter-proof glass. A light is built into the frame of the eye shield and so mounted as to illuminate the work without causing glare on the glass.

No. GR101 BASE or pedestal, available as extra equipment, is of heavy cast-iron. The top provides a convenient tray for tools or work, as well as a receptacle for holding cooling water.

(Note)—No. GR100 Grinders are available in three phase current only.
SPEEDS: 1725 RPM with 60 cycle motor;
1500 RPM with 50 cycle motor.

$\frac{1}{3}$ H.P. GRINDER

GR36—This GR36 grinder has tool rests adjustable two ways, guards which have covers on the outside of the wheels, a sturdy 10 ampere switch located in the base. Wheels are 6" in diameter, $\frac{3}{4}$ " wide, $\frac{1}{2}$ " hole. A 10' cord and plug is supplied.



$\frac{1}{3}$ H.P. LIGHT DUTY GRINDER

GR3—Wheels are 6" in diameter, $\frac{1}{2}$ " wide, $\frac{1}{2}$ " hole. Tool rests are adjustable for wheel wear. On and off switch, cord and plug supplied.



GR100—1 H.P. Grinder, as shown, less eye Shields and base	\$87.50
GR100A—Shatterproof shields	Pair 12.00
GR101—Cast-iron base	35.00
GR36— $\frac{1}{3}$ H.P. Grinder (110 volts, 60 cycle, A.C.) as shown. Shipping weight 60 lbs.	29.75
GR35—Same as GR36 but including eye shields and cooling cup. Odd voltages and cycles available at extra cost	33.00

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FOR

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W-T 1/2 H.P. MOTOR GRINDERS



GR50—1/2 H.P. Grinder (110 volts, 60 cycle, A.C.) as shown above (without stand).\$48.00

CG50—Combination Grinder and Disc Sander as shown at right. 63.50

GMP5—PEDESTAL STAND FOR ALL MODELS—Table and tripod stand are of cast iron. Table is 18" x 14" with cooling cup located at front center. Tool tray provided on either side of cooling cup. Table top is drilled to take grinders shown on this page only. Ground steel column, 2" in dia., connects table with stand. Adjustable 12" up or down. Shipping weight 70 lbs. 15.00

Also available as follows: 50 cycle, 110 volts, Extra; 50 cycle, 220 volts, three phase, Extra; 60 cycle, 220 to 250 volts, single phase, Extra; 115, 230 or 250 volts, D.C. Extra. Switch not supplied with three phase. Three phase 220 volts, 60 cycle no extra.

All grinders have extended end bells except the 1/2 Horse Power model, GR-3.

Motors are totally enclosed with special shaft seals to prevent abrasive dust damaging vital parts

Precision, dust sealed ball bearings are standard equipment on all models.

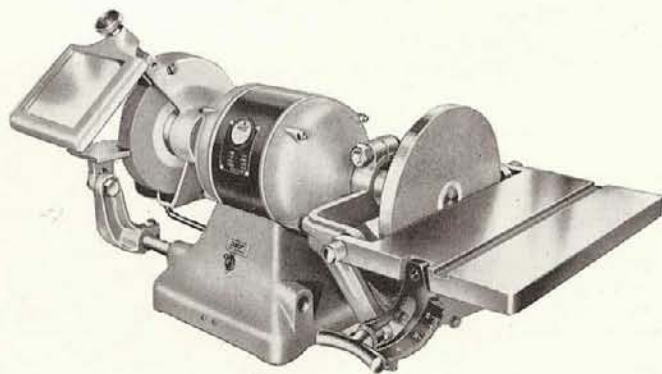
A ground wire is furnished on all models except the three phase.

The guards are easily removed for buffing operations. All models fit the pedestal base, GMP5, which is adjustable for height. Height—21" to 32".

Operating speed of all standard models is 3450 R.P.M.

1/2 H.P. CAPACITOR TYPE GRINDER—This grinder GR50 with its capacitor type motor and ample overload capacity will deliver years of steady, consistent service. The wheels are 7" in diameter, 1" wide, 5/8" hole. Full protection guards designed according to latest safety code requirements; large, non-shatterable glass shields; adjustable tool rests and cooling cup. A highgrade snap switch is built into the base.

COMBINATION GRINDER AND DISC SANDER—This combination model CG50 has the same features as specified above for the GR50 except that the disc sander attachment is substituted for one wheel and guard. CG50 will prove an invaluable aid in any shop where there are small parts to be ground and surface . . . a workman can do several different operations on a single piece without leaving the machine. Available for right side only. (The disc sander attachment will not fit model GR50.)



MACHINE TOOLS
WALKER-

W-T GEARED MOTORS

Improved ventilation insures maximum temperature rise not to exceed 40° C.

Motors guaranteed to develop 300% of full load H.P. for intermittent service, more than full-rated power for continuous service.

Gears are synthetic and steel, protected by a shock-absorbing clutch on motors of 1 H.P. and under. Guaranteed for one year.

Selected precision ball-bearings used, 2 on spindle, 2 in motor.

2 and 3 H.P. motors have double row of bearings on spindle.

Magnetic circuit breaker switch protects motors against overloading.

Cast-iron end bells, gear housing diamond bored to take bearings.

High silica, electric sheet steel laminations in rotor and stator annealed after punching. Rotor of copper bar construction with copper end rings brazed with silver alloy.

Air-filtering device supplied on 1 H.P. geared motors for circular saws: for other motors on special order.

A most severe service for fractional and integral horsepower motors is powering relatively small circular saws. Larger machines may be overpowered to a point where motor load is not so severe, but smaller saws, because of portability, must employ motors operating almost constantly under full load. W-T engineers knowing ordinary motors couldn't be expected to give satisfactory results, develop the geared motor. Eliminating belt and pulleys was the greatest step for with gears transmission efficiency of 97-98% was obtained whereas with belt drive losses in transmission often ran as high as 40%.

This power saving was put to work at the tooth of the saw.

By constant research our engineers have improved the efficiency to a point where we believe W-T motors are the most compact and efficient made and will develop greater H.P. per pound of material used than any other motor on the market. Geared motors of 1 to 3 H.P. are guaranteed to have a pull-out torque up to 300%, or, a 1 H.P. motor will develop nearly 3 H.P. before stalling. This is true to a greater extent in the 1 and 3 H.P. three-phase motors.

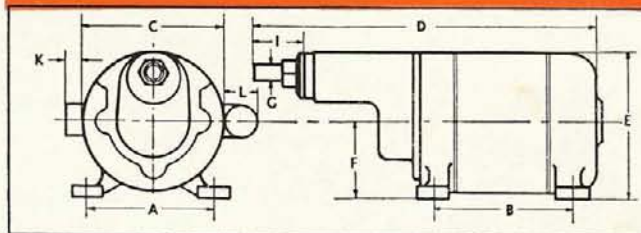
POSITIVE PROTECTION. Complete mechanical and electrical protection is afforded through exclusive features built into W-T geared motors. When a geared motor is suddenly stalled a terrific impact is thrown on the gear tooth. To safeguard their motors under such conditions W-T engineers developed a slip-clutch which is built into one of the gears in each pair. When the shock occurs this gear slips momentarily easing the load on the teeth. No resetting is ever necessary. In the many years this clutch has been in use not a single case of gear breakage has been reported. Used on 1/2, 3/4, 1, and 1 1/2 H.P. motors only.



2 and 3 HORSEPOWER



1/2, 3/4, 1 and 1 1/2 HORSEPOWER



CAPACITOR and 3 PHASE GEARED MOTORS

(Dimensions in inches)

- △ 3-Phase only.
 - Overload Switch supplied.
 - Drum Reversing Switch supplied.
- 220 to 250 volts \$1.25 extra. 440 volts 3-phase \$5.50 extra. Not available for Direct Current or for 25 and 40 cycles.
(Dimensions L = 2 1/4")

MBS5 Circuit breaker for single phase motors of 2 H.P. or less. Specify size and type of motor. **6.00**
5062 C. B. switch for 1 1/2 and 3 H.P. 3 phase, 220 volt. **24.75**
5064 C. B. switch for 1 1/2 and 3 H.P. 440 volts. **29.00**
F927 Non-fluid oil (3450 R.P.M. motors) **.40**

(Dimension L = 2 1/4")

Cat. No.	Price	Key	H.P.	Volts	RPM	Frame No.	A	B	C	D	E	F	G	I	K	Wgt.
GB-5	\$40.00		1/2	110-220	3450	118	5 1/4	5 3/16	6 5/16	14 21/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	60
GB-5S	41.50	□	1/2	110-220	7600	118	5 1/4	5 3/16	6 5/16	14 21/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	60
GIB-5	50.00		1/2	110-220	716	118	5 1/4	5 3/16	6	15	7 3/4	3	3/8	1	1	66
GIB-7	55.00	△	3/4	220	716	120	5 1/4	5 11/16	6	15	7 3/4	3	3/8	1	1	70
GB-7X	49.50		3/4	110-220	7600	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	68
GB-7T	57.75		3/4	110-220	7600	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	68
GB-10	55.00	●	1	110-220	3450	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	68
GB-10S	55.50	□	1	110-220	7600	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/8	1 1/8	1 3/8	68
GB-12	55.50		1	110-220	3450	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/4	2 1/2	1 3/8	80
GB-15	55.50	△	1 1/2	220	3450	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/4	2 1/2	1 3/8	80
GB-15A	55.50		1 1/2	220	3450	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/4	2 1/2	1 3/8	80
GB-15S	57.50	□ △	1 1/2	220	7600	120	5 1/4	5 11/16	6 5/16	15 5/32	6 11/32	3 3/8	3/4	2 1/2	1 3/8	80
GB-20	99.50		2	220	3000	127-B	5 3/4	5 3/4	8	20 3/4	8 3/4	4 3/4	3/4	2 1/2	—	140
GB-20S	99.50	□	2	220	7600	127-B	5 3/4	5 3/4	8	20 3/4	8 3/4	4 3/4	3/4	2 1/2	—	140
GB-30	99.50	△ □	3	220	3000	127-B	5 3/4	5 3/4	8	20 3/4	8 3/4	4 3/4	3/4	2 1/2	—	165
GB-30S	105.00	△ □	3	220	7600	127-B	5 3/4	5 3/4	8	20 3/4	8 3/4	4 3/4	3/4	2 1/2	—	165

TURNER



FOR

INDUSTRY

W-T CUSTOM BUILT MOTORS



Motors in the standard frame group include $\frac{1}{8}$ to 1 H.P. Capacitor type, and $\frac{1}{8}$ to 1 H.P. three phase. All motors are designed and built to Walker-Turner specifications, and cannot be obtained under any other brand name.

Highly efficient, cool running. Temperature rise not to exceed 40° under full load conditions (unless otherwise noted).

Every motor guaranteed to develop 2½ to 3 times its horse power rating for intermittent periods.

Motor feet cast integral with end bells. Machined on bottom for uniform height and alignment.

End bells diamond-bored for bearings. Selected precision ball bearings used throughout unless otherwise noted.

Approved switch and 30" cord for remote control supplied on practically all single phase models.

(Due to restrictions on use of rubber, extension cords and plug are no longer supplied).

All rotors are of copper bar construction. Copper end rings are brazed with silver alloy (not soldered).

Capacitor start motors wound for 110 and 220 volts.

SERVICE REQUIREMENTS of motors used with portable and semi-portable machine tools are unusually severe. These motors must be rugged, compact and free from excess weight yet they must be able to stand up under severe and continuous overloading.

Because in the past the chief limiting factor in the development of better and more efficient machine tools has been the motor, Walker-Turner engineers have worked consistently toward the development of a highly efficient compact motor—one that would develop maximum power for the weight of material employed.

MOTORS USED with W-T tools are not general purpose motors but are designed and built expressly for the powering of Walker-Turner machines. By building a motor expressly for the machine on which it is to be used, we have been able to get a much higher over-all efficiency and utility.

Starting with a correct basic design, Walker-Turner motors have been constantly improved and every advantage taken of new methods and materials. By the use of new heat resisting insulation, silver brazed copper rotors, welded connections throughout, a highly efficient ventilating system, and ball bearings which carry sufficient lubrication for months of constant service. Walker-Turner motors will not only develop 2½ to 3 times their rated H.P. for intermittent periods but will operate continuously under full load conditions with a minimum of care and attention.

Selection of Motors: As stated above, Walker-Turner motors are designed for the machines but quite frequently the kind of current available will influence the selection of the motor to be used. Almost without exception, the best type of motor for any machine is a poly-phase (two or three phase) motor. But where two or three-phase current is not always to be had, capacitor type single phase motors are available.

★ ★ ★ **MACHINE TOOLS**
WALKER-

POLY-PHASE MOTORS

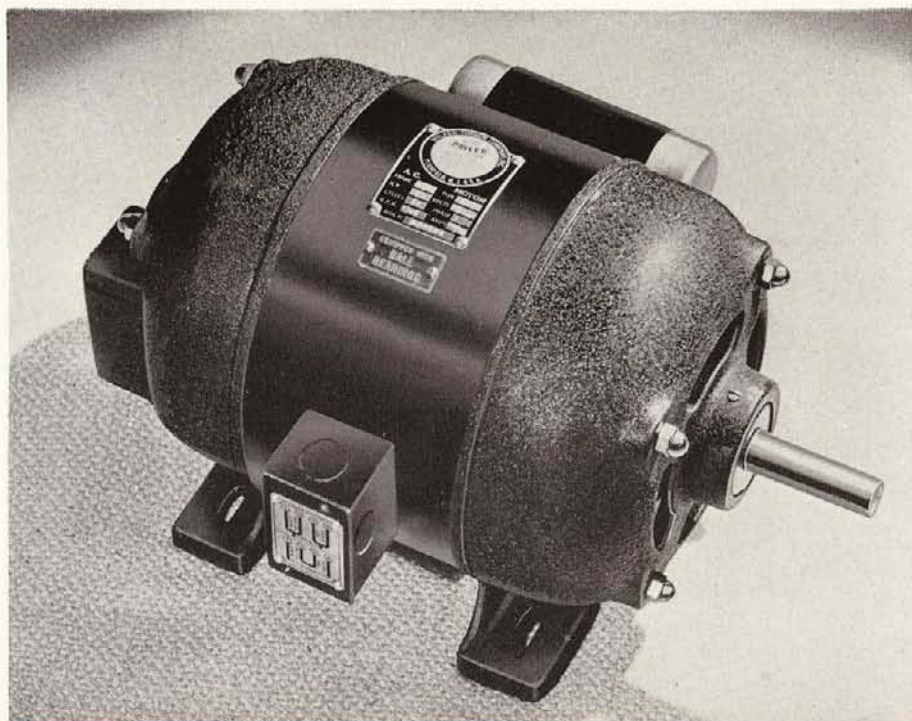
Motors from this group should be used where two or three-phase current is available because of their outstanding efficiency, high torque and quiet operation. They will handle all hard starting loads, regain speed quickly after loading and are exceptionally cool running. Standard motors are 220 volts, three-phase: two-phase and odd voltage and frequency are available on special order. H.P. sizes range from $\frac{1}{3}$ to 3 H.P.

CAPACITOR START MOTORS

These single phase motors should be used for hard starting applications and for use where overloading is apt to be constant. They have more than 300% full load starting torque and will continue to perform under extremely hard use. Circular saws, jointers and band saws will operate at top efficiency when operated with this type motor. The open type fan ventilated construction assures cool operation under all conditions.

Capacitor motors do not have extension cords, but are supplied with a control switch mounted on a 2' extension. Direction of rotation may be changed in the terminal box. Made for operation on 110 or 220 volts at 60 cycles: other voltage and cycles obtainable on special order. H.P. sizes from $\frac{1}{3}$ to 2 H.P.

No. 14 10' Extension cord & plug \$1.00

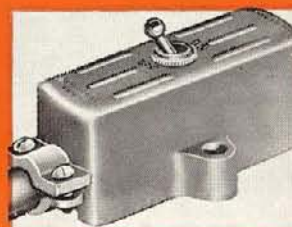


NEW LARGER FRAME SIZE MOTORS

Motors in the large frame group include the $1\frac{1}{2}$ and 2 H.P. Capacitor Type and the slow speed and dual $\frac{3}{4}$ H.P. 3 phase, the $1\frac{1}{2}$ and 2 H.P. 3 phase motors. Proportionately larger and heavier, they will not fit standard machine motor base without the use of NB23A Adapters.



Attached to Drill Press—(above) The remote control switch can quickly be attached to drill press heads as illustrated above, or it can be mounted on the bench if preferred.



T55 — Remote control switch with 30' of rubber covered cord. May be used on any make of single phase of motor up to 1 H.P. 220 volts.\$3.25



Location for Lathe—Installed on the lathe in front of the bed, the remote control switch affords great convenience to the operator.



MB1—PAIR OF MOTOR RAILS—Motor rails can be mounted at any required distance apart and used with most motors.\$0.85



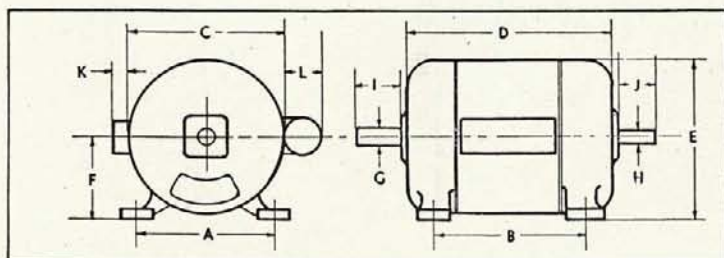
9P5 — ROCKER TYPE BASE—(above) Used on horizontal drives. Weight of motor keeps belt at proper tension.\$1.65



AD17—HINGED MOTOR BASE —(above) Ideal mounting with bench saws or jointers.\$2.65

TURNER FOR INDUSTRY

WALKER-TURNER MOTOR DATA



Factors to be considered in the selection of motors for power tool equipment are the electric current available, type of service, and initial cost. Three-phase motors are superior to all other types and their use is recommended wherever three-phase power is available. Next, from the standpoint of service comes the capacitor-start motor, which has a high starting and running torque, low starting current, and is suitable for all types of power drives. Repulsion-induction motors are recommended in sizes larger than 1 H.P. when three-phase current is not available. Split-phase motors have a higher starting current inrush and a lower starting torque than any of the above motors. Consequently they are seldom built in sizes larger than 1/3 or 1/2 H.P. Their running torque, however, compares favorably with either the capacitor-start or the repulsion-induction motor, and they are entirely satisfactory where the starting load is relatively light. (R.I. and Split Phase motors have been temporarily discontinued.)

THREE-PHASE MOTORS (60 CYCLES)

Dimensions in Inches

Cat. No.	Price	H.P.	Volts	RPM	Frame No.	A	B	C	D	E	F	G	H	I	J	K	Keyway $\frac{3}{8}$ " Deep Width-Length	Wgt.	Key to Foot notes
PAB3	22.50	$\frac{1}{3}$	220	1740	115	5 $\frac{1}{4}$	4 $\frac{1}{16}$	6 $\frac{1}{16}$	7 $\frac{1}{4}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	28	△ ¶
POB3	23.50	$\frac{1}{3}$	220	1140	115	5 $\frac{1}{4}$	4 $\frac{1}{16}$	6 $\frac{1}{16}$	7 $\frac{1}{4}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	28	○ △
PAB5	24.50	$\frac{1}{2}$	220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{3}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
PEB5	26.75	$\frac{1}{2}$	220	3450	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{3}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
POB5	26.75	$\frac{1}{2}$	220	1140	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{3}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	○ △
LPAEB5	45.50	$\frac{1}{2}$	220	1740 3450	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{3}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	2	2 $\frac{1}{4}$	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	☆
PAB7	30.00	$\frac{3}{4}$	220	1740	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{3}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	2	2	1 $\frac{3}{4}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	62	△ ¶
PIB7	64.75	$\frac{3}{4}$	220	865	P.R.204 8	6 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{2}$	9	8 $\frac{7}{8}$	4 $\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{3}{4}$	$\frac{3}{16}$ " 2 $\frac{1}{8}$ "	76	# ○ △
PEB10	42.50	1	220	3450	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{3}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	2	2	1 $\frac{3}{4}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	62	△
POB10	42.50	1	220	1140	125	6 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{4}$	10 $\frac{3}{8}$	8 $\frac{3}{8}$	4 $\frac{1}{4}$	—	$\frac{3}{4}$	—	2 $\frac{1}{4}$	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	75	△

CAPACITOR START MOTORS (60 CYCLES, SINGLE PHASE)

KAB3	19.50	$\frac{1}{3}$	110-220	1740	114	5 $\frac{1}{4}$	4 $\frac{3}{16}$	6 $\frac{1}{16}$	7 $\frac{1}{4}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	—	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	29	□
KEB5	25.50	$\frac{1}{2}$	110-220	3450	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
KAB5-S	25.50	$\frac{1}{2}$	110-220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	—	$\frac{3}{8}$	—	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
KAB5	24.50	$\frac{1}{2}$	110-220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
KEB7	31.50	$\frac{3}{4}$	110-220	3450	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{1}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	2	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	41	□
KAB7	35.00	$\frac{3}{4}$	110-220	1740	125	6 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{4}$	10 $\frac{7}{8}$	8 $\frac{3}{8}$	4 $\frac{1}{4}$	—	$\frac{3}{4}$	—	2 $\frac{1}{4}$	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	41	□
KEB10	41.50	1	110-220	3450	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{1}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	2	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	62	□

MOTORS FOR RD1170 (Pref. R) AND RD1175-J (Pref. D) RADIAL DRILL

RKAB5	32.50	$\frac{1}{2}$	110-220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
RKEB5	32.50	$\frac{1}{2}$	110-220	3450	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
RPAB5	32.50	$\frac{1}{2}$	220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
RPEB5	32.50	$\frac{1}{2}$	220	3450	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
RPAEB5	47.50	$\frac{1}{2}$	220	1740 3450	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{1}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	2	2 $\frac{1}{4}$	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
RPOB5	36.00	$\frac{1}{2}$	220	1140	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{1}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1 $\frac{3}{8}$	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
DKAB5	32.50	$\frac{1}{2}$	110-220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1—	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	□
DPAB5	32.50	$\frac{1}{2}$	220	1740	118	5 $\frac{1}{4}$	5 $\frac{3}{16}$	6 $\frac{1}{16}$	8	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1—	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	△
DPOB5	32.50	$\frac{1}{3}$	220	1140	120	5 $\frac{1}{4}$	5 $\frac{11}{16}$	6 $\frac{1}{16}$	8 $\frac{1}{2}$	6 $\frac{3}{16}$	3 $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{3}{8}$	2	1—	$\frac{3}{16}$ " 1 $\frac{1}{2}$ "	40	○ △

All motors, excepting 3-phase, D.C., or those already having dual voltage can be supplied for 220 to 250 volts \$1.25 extra. D.C. available for 230 volts at \$1.25 extra.

All motors excepting 3-phase can be supplied in 50 cycles, \$.75 extra.

Three-phase motors except POB3, PIB7, POB7 and POB5 can be supplied for 50 cycles. Voltages other than 220-240 10% extra.

25 to 40 cycles not available except as shown in chart.

All Capacitor, Repulsion-Induction, and motors supplied with Reversing Switch on special order, \$4.25 extra. (Switch not mounted on D.C. motors.) 3-phase motors supplied with Reversing Switch on special order, \$4.95 extra.

Capacitor motors are not supplied with cord or plug, but with remote control switches (unless otherwise noted).

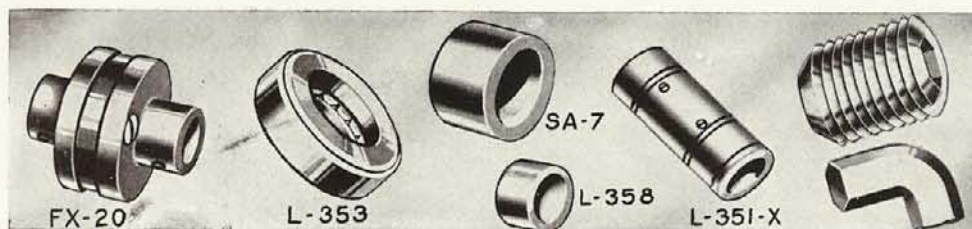
All motors have ball bearings.

△ 3-Phase motors have three wires in terminal box—no switch, cord or plug.

*Cord, plug and switch not included. □ Reversible in terminal box. ○ Not furnished for 50 cycles. # Requires NB23A adapter when mounted on W-T machines. Price per pair \$.85. †Can be supplied for 25 cycles on special order.

☆Interlocking push button switch included. Write for specifications and prices.

TRANSMISSION EQUIPMENT



All transmission parts are for light shafting. With them a drive for light machinery can be set up very inexpensively.

FX20—Flexible coupling (for $\frac{1}{2}$ " shafting)

L351X—Rigid coupling (for $\frac{1}{2}$ " shafting)

L351— $\frac{1}{4}$ " x 24" Ground steel shaft

COM.— $\frac{1}{4}$ " Hollow-head set screws

COM.—Wrench for above

COM.— $\frac{5}{16}$ " Hollow-head set screws

COM.—Wrench for above

L358— $\frac{1}{4}$ " Shaft Collar

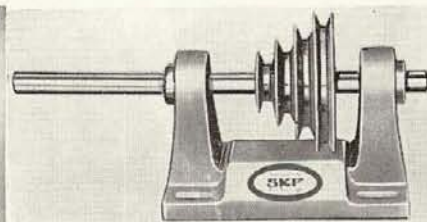
C58— $\frac{5}{8}$ " Shaft Collar

SA7— $\frac{3}{4}$ " Shaft Collar

L353— $\frac{1}{2}$ " Ball thrust bearing

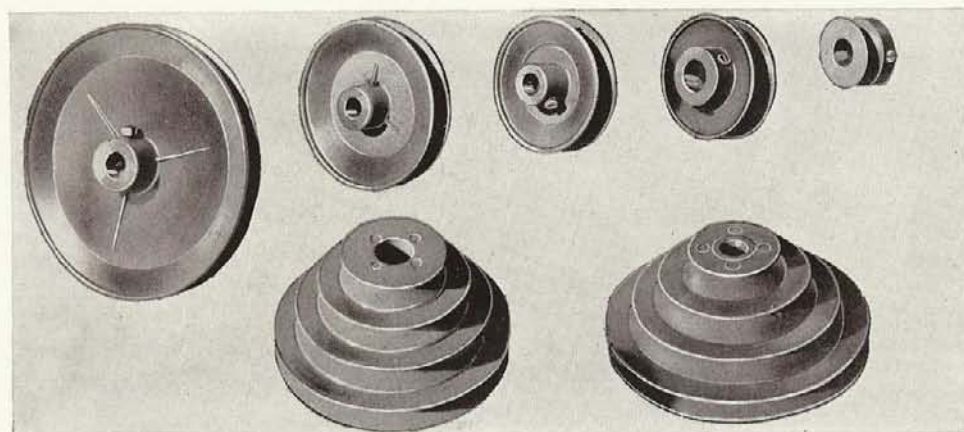
58— $\frac{5}{8}$ " Ball thrust bearing

75— $\frac{3}{4}$ " Ball thrust bearing



JACKSHAFT ASSEMBLY—This unit can be used for increasing or reducing machine speeds. The shaft turns on precision ball-bearings. Base holes are located identically with most W-T motor mountings. Four variations of speeds are provided.

MD18—Jackshaft assembly as shown



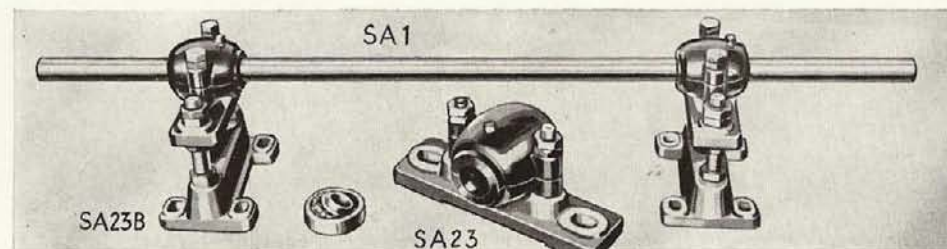
WIDE SELECTION OF PULLEYS—Walker-Turner pulleys are available in various diameters and bores to fit practically every need. Each pulley has two set screws for maximum holding power. Pitch of all pulley grooves is 43° .

$\frac{1}{2}$ " BORE				$\frac{3}{8}$ " BORE				$\frac{3}{4}$ " BORE			
No.	Price	Inch Size of Steps		No.	Price	Inch Size of Steps		No.	Price	Inch Size of Steps	
PV175	1 $\frac{3}{4}$	1 $\frac{3}{4}$		PV158	1 $\frac{3}{4}$	1 $\frac{3}{4}$		PV275	2 $\frac{1}{4}$	2 $\frac{1}{4}$	
PV25	2 $\frac{1}{2}$	2 $\frac{1}{2}$		PV258	2 $\frac{1}{2}$	2 $\frac{1}{2}$		PV375	3	3	
PV350	3	3		PV365	3	3		PV475	4	4	
PV450	4	4		PV458	4	4		BN18	6 $\frac{1}{2}$	6 $\frac{1}{2}$	
PV65	6 $\frac{1}{2}$	6 $\frac{1}{2}$		PV658	6 $\frac{1}{2}$	6 $\frac{1}{2}$		PV37	3 $\frac{1}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$
PV30	3 $\frac{1}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$	PV35	3 $\frac{1}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$	PV47	3 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$
PV34	1 $\frac{3}{4}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	PV45	3 $\frac{1}{4}$	2 $\frac{3}{4}$	2 $\frac{1}{4}$	PV49	4 $\frac{1}{4}$	4 $\frac{1}{4}$	3 $\frac{3}{4}$
PV41	3 $\frac{1}{4}$	2 $\frac{3}{4}$	2 $\frac{3}{4}$	PV48	4 $\frac{1}{4}$	4 $\frac{1}{4}$	3 $\frac{3}{4}$	PV40	4	3 $\frac{1}{4}$	2 $\frac{1}{4}$
PV43	4 $\frac{1}{4}$	4 $\frac{1}{4}$	3 $\frac{3}{4}$	PV625	4	3 $\frac{1}{2}$	2 $\frac{1}{4}$	PV575	5	3 $\frac{7}{8}$	2 $\frac{1}{2}$
PV4	4 $\frac{1}{4}$	3 $\frac{1}{4}$	2 $\frac{1}{2}$	PV58	5	3 $\frac{7}{8}$	2 $\frac{1}{2}$	PV750	5 $\frac{1}{2}$	4 $\frac{3}{8}$	3 $\frac{1}{8}$
PV550	5	3 $\frac{7}{8}$	2 $\frac{1}{2}$	PV62	5 $\frac{1}{2}$	4 $\frac{3}{8}$	3 $\frac{1}{8}$				
PV500	5 $\frac{1}{2}$	4 $\frac{3}{8}$	3 $\frac{1}{8}$								

V-BELT LISTING

VB20—20"	VB42—42"
VB24—24"	VB44—44"
VB26—26"	VB48—48"
3270—27"	VB54—54"
VB29—29"	VB58—58"
5332—30"	3600—60"
3310—31"	VB62—62"
VB32—32"	VB66—66"
VB34—34"	VB86—86"
VB36—36"	VB92—92"
VB39—39"	

3VB16—Texrope Belts. Set of three matched. V-Belts



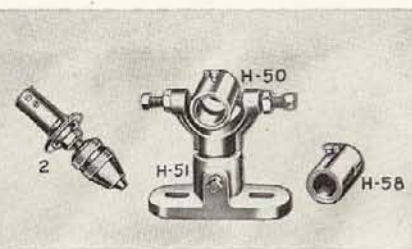
SELF-ALIGNING BALL-BEARING HANGERS—Friction or binding due to faulty shaft alignment is eliminated with these hangers which absorb considerable misalignment by their self-aligning feature. These bearings will more than repay the difference in cost over cheap babbit or sleeve bearings through their savings in power and attention.

SA23B— $\frac{3}{4}$ " Hanger (with base)

SA23— $\frac{3}{4}$ " Pillow block only

SA78— $\frac{7}{8}$ " Pillow block only

SA1— $\frac{3}{4}$ " x 48" Ground steel shaft



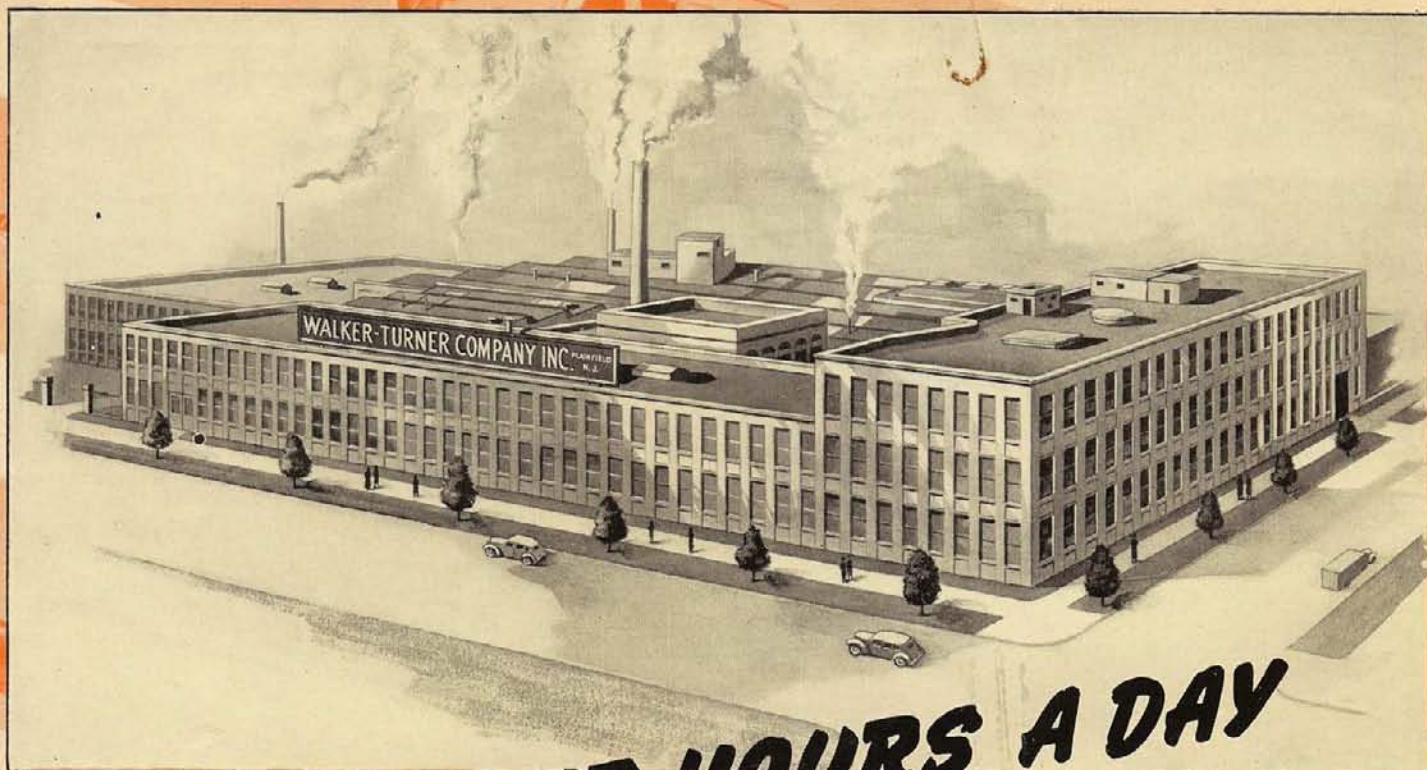
SHAFT HANGERS FOR WORK ARBOR—No. 2 Motor Work Arbor (with $\frac{1}{2}$ " chuck)

H51—Hanger only (less bearing)

H50— $\frac{1}{2}$ " Bronze bush bearing for H51

H58— $\frac{5}{8}$ " Bronze bush bearing for H51

H75— $\frac{3}{4}$ " Bronze bush bearing for H51



TWENTY-FOUR HOURS A DAY *Seven days a week*

Twenty-four hours a day, seven days a week, Walker-Turner production facilities are being pushed to the limit with one objective:

That is, to supply war industries with as many machine tools of the type we build as possible, consistent with the high standards of accuracy and dependability demanded by industry.

That Walker-Turner Machine Tools are able to meet high industrial standards is best evidenced by the fact that they are in daily use the world over.

Thousands are helping in the defense of England—many have been transported over the Burma Road to China—while in the United States there are numerous installations of up to several hundred machines operating day and night.

To companies with war production problems, we suggest: Call in your Walker-Turner distributor for the latest information on how these machines are helping others to speed production, lower costs and keep maintenance worries at a minimum.

WALKER-TURNER CO., INC.

PLAINFIELD, NEW JERSEY, U. S. A.
EXPORT OFFICE • 75 WEST ST., NEW YORK CITY

DELAWARE HARDWARE CO.
WILMINGTON, DELAWARE