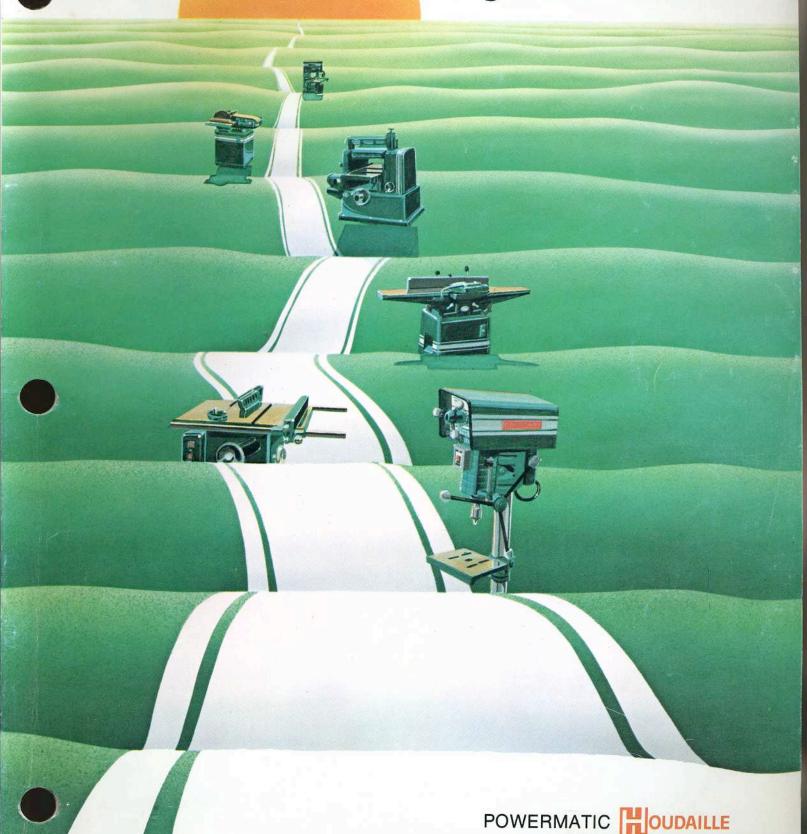
# POVERNATIC® Strength and Performance right down the line.





CATALOG DE



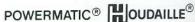
# **POWERMATIC®**

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### WARRANTY

This machine and its component parts have been carefully inspected and performance tested at various stages of production and each finished machine is subjected to a final inspection before shipment. Powermatic Houdaille agrees that for a period of eighteen (18) months or 3000 hours of use, whichever occurs first from date of delivery from its authorized dealer to repair or replace, at its option, any machine (or component part thereof) proving defective within the above period, F.O.B. its plant, providing such machine (or component part) is returned prepaid to its plant, or to a designated service center of the undersigned, for its examination. This warranty does not include repair or replacement required because of misuse, abuse, or because of normal wear and tear. Nor does it include electrical motors and electrical components which are warranted by their manufacturer and which should be taken to their local authorized repair station. Cost of removal, shipment and reinstallation are not covered hereby. Further, Powermatic Houdaille cannot be responsible for the cost of repairs made or attempted outside of its factory or designated service center without our authorization. No claims for defects will be honored if Serial No. plate has been removed. THIS WARRANTY IS MADE EXPRESSLY IN PLACE OF ALL OTHER WARRANTIES OR GUARANTEES. EXPRESS OR IMPLIED, WITH RESPECT TO FITNESS, MERCHANTABILITY, QUALITY OR OPERATIVENESS. THIS WARRANTY IS MADE ONLY TO THE ORIGINAL PURCHASER AND BECOMES EFFECTIVE ONLY WHEN THE ACCOMPANYING CARD IS FULL AND PROPERLY FILLED OUT AND RETURNED TO THE FACTORY WITHIN TEN (10) DAYS FROM DATE OF DELIVERY.



# **OUTSTANDING PERFORMANCE**



Exclusive New Power — designed for use with motors from 1½ to 3 HP (1.119 to 2,238 kw)! Three A-Section belts drive blade.

Precision Miter Gauge — guarantees true accuracy on even largest stock. Easily adjustable in table T-slots.

Designed for Safety — saw

Designed for Safety — saw guard and splitter have antikickback pawls. Guard swings away easily for blade change.

away easily for blade change.

Super-Smooth Operation —
heavy-duty, sealed-for-life ball bearings throughout.

Ruggedly Built — heavy-gauge reinforced steel cabinet. Basic parts steel or cast iron.

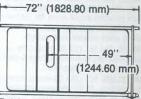


Table with extension sections and 72" (1828.80 mm) rails for cutting 49" (1244.60 mm) to right of saw blade. (OPTIONAL.)



Fence Adjustment Fast and Sure from either side with Vernier control knob and top-reading front guide bar calibrations. Upper knob locks rear of fence. Fence is precision machined cast iron with tubular steel guide bars. Standard guide rails provide 25" (635.00 mm) cut to right of blade.



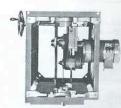
Individual action of guard sides cover blade during any and all cutting operations.



Overarm guard (optional) with 'hide away' heavy duty splitter.



As blade tilts, overarm guard sides form stationary cage to guard blade.



Wide Stanced Trunnion precision machined from heavy-duty grey iron castings. Maintains perfect alignment for easy hand-wheel worm-gear adjustment. Exclusive C-flange motor mount relieves weight at trunnion pivot.



Extra Capacity—10" (254.00 mm) blade cuts stock up to 3%" (79.38 mm) at 90° ranging to 2%" (53.98 mm) cut at 45° position.



Extra Cut-off Capacity table in front of blade is full 15" (381.00 mm) at 1" (25.40 mm) cut.



Miter Cut Accuracy—miter gauge adjusts easily, extends beyond table for bigger stock.



Added Safety—blade tilts away from fence to guard against possible binding of material against fence

NOTE: Guard removed on lower four pictures for illustration purpose only.

MODEL

# **FEATURES**

TABLE: Standard table with extensions measures 28" x 38" (711.20 mm to 965.20 mm), accurately machined and reinforced with ribs to hold a true surface. A 4" (101.60 mm) insert plate provides ample room for removing saw blade or dado head.

T-SLOTS: An excellent safety and accuracy feature, the T-slots prevent miter gauge from falling when making wide cut-off.

ARBOR: The %" (15.88 mm) arbor is mounted in large sealed ball bearings requiring no lubrication and is driven by three A-section belts for maximum power. Arbor tilts away from rip fence for safer operation.

SAW BLADE: 10" (254.00 mm) combination saw blade tilts 45° with a 21/4" (54.98 mm) cut at this position. At 90° the saw cuts a full 31/4" (79.38 mm) for heavy-duty work.

FENCE: The precision machined, cast iron fence locks on front and back on two tubular guide rails assuring rigid support. Front rail is equipped with an easy-to-read, graduated scale. Fence adjustment is accomplished by means of a steel pinion operating in guide rail rack.

SAW GUARD: The rigid saw guard and splitter is fitted with antikickback pawls. Guard swings out of way when not in use.

MOTOR MOUNT: An EXCLUSIVE new trunnion accommodates a standard C-flange motor which mounts on the saw arm pivot shaft and does not place weight on the saw arm. This type of mounting relieves the saw arbor of motor weight, making it very easy to raise and lower saw

POWER REQUIREMENTS: The saw is designed for motors from 2 to 3HP (1.119 to 2.238 kw) in either 3 or 1-phase. For light and medium work, 2HP (14.92) is sufficient. For heavy-duty cutting, 3 HP (2.238 kw) is recommended.

# MODEL 66 BASIC TILTING ARBOR SAWS

- 1660010—10" Tilting Arbor Saw equipped with rip fence, miter gauge, 48" (1219.20 mm) guide rails, extension wings, combination blade guard, splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley. Less: Motor and Controls.

  1660030—10" Tilting Arbor Saw, equipped with rip fence, miter guage, 72" (1828.80 mm) guide rails, cast iron extension wings for ripping 49" (1244.60 mm) to right of blade, combination blade, blade guard, splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley. Less: Motor Controls.

  1660600—10" Tilting Arbor Saw, equipped with rip fence, miter guage, 72" (1828.80 mm) guide rails, steel extension wings for ripping 49" (1244.60 mm) to right of blade, combination blade, blade guard, splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley. Less: Motor and Controls.

  1660610—Same as 1660010 except with 72" (1828.80 mm) rails in lieu of standard.
  1660630—Same as 1660030 except with overarm guard in lieu of standard.
  1660650—Same as 1660010 except with overarm guard in lieu of standard.

- -Same as 1660010 except with 72" (1828.80 mm) rails and overarm guard in lieu 1660650of standard.
- 1660660—10" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 25½" to right of blade, combination blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motor and controls
- 1660670—10" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 47" to right of blade, extension support leg, combination blade, blade guard and splitter with anti-kickback pawls, wrenches, motor cover

- and motor pulley less motor and controls.

  1660680—10" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 25½" to right of blade, combination blade, overarm blade guard and splitter with anti-kickback pawls, wrenches, belts motor cover and
- guard and spittler with an in-ackdade, pawis, whethers, but a moot of such and motor pulley less motor and controls.

  -10" Tilting Arbor Saw equipped with production fence, miter gage, cast interesting a support leg, combination blade, overarm blade guard and splitter with anit-kickback pawls, wrenches, belts, motor cover and motor pulley less motor and controls.
- 1660710-10" T.A. Saw with all standard equipment except with gliding table attachment
- 1660720-
- less left hand extension, motor and controls.

  -10" T.A. Saw with all standard equipment except with gliding table attachment long extensions, rails and leg less left hand extension, motor and controls.

  -10" T.A. Saw with all standard equipment except with gliding table attachment and production fence less left hand extension, standard fence, rails, motor and
- 1660740—10" T.A. Saw with all standard equipment except with gliding table attachment, production fence, long extensions and leg less left hand extension, rails, standard fence, motor and controls.

# MOTORS FOR USE WITH MODEL 66 T.A. SAWS

- 1 Phase 2- HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, 145TC frame, TEFC. 6471723-
- 3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v, 145 TC frame, TEFC. Requires magnetic control.

  3 Phase
- 6471719—2HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145 TC frame.
- 6471720-2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 145TC frame
- 6472024 3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145 TC frame
- Requires magnetic control. -3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 145 TD 6472025frame. Requires magnetic control.

# **CONTROLS FOR USE WITH MODEL 66 T.A. SAWS**

- 1 Phase
- 2398044 Magnetic Controls, 115/230v. 2398155 Pushbutton Switch, 115/230v, (for 2hp motors only) \*2398485 Magnetic Controls, 115/230v, w/24v transformer.

- 2398051-Magnetic Controls, 200/230/460/575v.

- 2398154—Pushbutton Switch, 200/230/460/575v (for 2hp motors only) 2398230—JIC Controls, 200/230/460/575v. \*2398480—Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003—Conduit in lieu of standard wiring.

- \*May be specified with 110v transformer

# **OPTIONAL ACCESSORIES**

- 2104016—Motor Cover , Wt. 9 lbs. (4.1 kg).
  2250116—Blade Guard and Splitter Assembly. Wt. 5 lbs. (2.3 kg).
  2250117—Safety-flex Overarm Guard. Wt. 10 lbs. (4.5 kg).
  2328002—Dado Insert Plate. Wt. 1 lb. (.45 kg).
  2389001—Steel Extension including rails, for ripping 49" (1244.60 mm) to right of saw. Wt. 62 lbs. (28.1 kg).
- 02 105. (25.1 kg).
  2389003—Iron Extension including rails, for ripping 49" (1244.60 mm) to right of saw. Wt.
  170 lbs. (77.1 kg).
  2471009—Miter Gauge. Wt. 4 lbs. (1.8 kg).
  2653001—48" (1219.20 mm) Table Rails with mating hardware.
  2653002—72" (1828.80 mm) Table Rails with mating hardware, for ripping 49" (1244.80 mm) table rails with mating har

- mm) to right of saw. Wt. 62 lbs. (28.1 kg). 2670003—Stop Rods for Miter Gauge. Wt. 1 lb. (.45 kg). 3186008—8" (203.20 mm) Cast Iron Extension Wing.

- 6077004—Motor Belts (3 required) 4L230. Wt. 8 oz. (.23 kg) ea. 6080041—Combination Saw, %" (15.88 mm) bore. Wt. 1½-lbs (.68 kg).
- 6080044—Hollow Ground Planer Blade, %" (15.88 mm) bore. Wt. 11/2 lbs (.68 kg).
- 2195021—Production Fence
- 2397069—42" Extension kit with extensions, production fence and leg 2397069—21" Extension kit with extensions, production fence and leg
- 2761023—Fence mtg. stock stop
- 2028081—Gliding table attachment

# SPECIFICATIONS

- Rip fence, box type precision ground .11/2" x 21/2" x 33"
- Maximum depth of cut .90°: 31/6" (79.38 mm) 45°: 21/6" (53.98 mm)
- Maximum cut with std. extensions to right of saw blade, std. fence .....25" (635.00 mm) Maximum width cut-off in front of saw in 1" (25.40 mm) stock

- Maximum width cut-off in
  - front of saw in 31/8" (79.38 mm)
- ......12¼'' (311.15 mm) stock Maximum width of dado
- Motor power recommended
- ...350 lbs. (158.8 kg) ..450 lbs. (204.1 kg) Weight, net less motor . Weight, net with motor .
- Weight, domestic crated ......500 lb. (226.8 kg) app. with motor

\*Mit ad

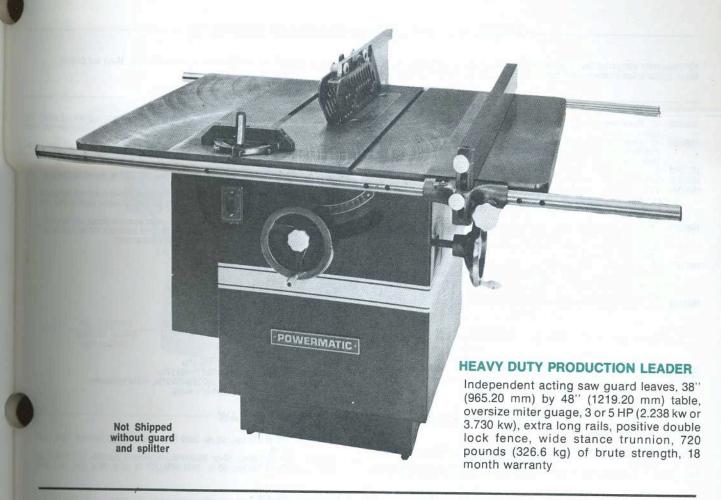
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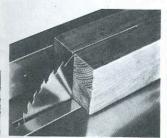
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# **ADDITIONAL FEATURES**



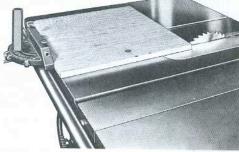
\*Miter Cut Accuracy—miter gauge adjusts easily, extends beyond table for wide stock.



\*Extra Capacity—12" (304.80 mm) blade cuts stock up to 4%" (104.78 mm) at 90° ranging to 2%" (73.02 mm) cut at 45° position at maximum height



Optional Stock Stop—Used for easy repetitive cutting without binding.



\* Extra Cut-Off Capacity table in front of blade is full 21" (533.40 mm) at 1" (25.40 mm) cut.



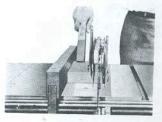
Overarm guard (optional) with hide away' heavy duty splitter provides maximum safety.



Individual action of each guard leaf covers balde through entire tilt range. Saw Blade is never exposed to operator.



Fence Adjustment fast and sure from either side with Vernier control knob and top-reading front guide rail calibrations.



Guard completely covers blade on all through cuts from narrow to full capacity.



# MODEL 68 — 12" T.A. SAW STANDARD EQUIPMENT

12" Powermatic Tilting Arbor Saw, equipped with Rip Fence, Miter Gauge, Guide Rails, Blade Guard, Splitter w/Anti-Kickback Pawls, two Table Extension Wings, three Motor Belts, Arbor

Pulleys, Motor Cover and Combination Saw Blade. Less: Motor and Com-

# BASIC MODEL 68 - 12" T.A. SAWS

1680010-12" Powermatic T.A. Saw, with all standard equipment. Less: Motor and Con-

trols.

1680030—12'' Powermatic T.A. Saw, with all standard equipment, except with 80'' (2032 mm) Rails and cast iron extensions, for ripping 49'' (1244.60 mm) to right of saw

blade. Less: Motor and Controls. 1680050—Same as 1680010 except with overarm guard in lieu of standard. 1680060—Same as 1680030 except with overarm guard in lieu of standard.

1680070—12" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 32" to right of blade, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motor

1680080—12" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 43" to right of blade, extension support leg, blade guard and splitter with anti-kickback pawls, wrenches, belts motor cover and motor

pulley less motor and controls.

1680090—12" Tilting Arbor Saw equipped with production fence, miter gage, cast iron extension wings to rip 32" to right of blade, overarm guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motor

and controls. 1680100—12" Tilting Arbor Saw equipped with production fence, miter gage, cast iron

extension wings to rip 43" to right of blade, overarm quatture anti-kickback pawls, wrenches, belts, motor cover and materials and controls.

-12" Powermatic T.A. Saw with all standard equipment excellent attachment less left hand extension, motor and controls.

-12" Powermatic T.A. Saw with all standard equipment every

attachment and long cast iron extensions, rails, and leg less letture motor and controls.
-12" Powermatic T.A. Saw with all standard equipment except and

1680140attachment and production fence less left hand extension, status motor and controls.

-12" Powermatic T.A. Saw with all standard equipment except and are standard except and are

attachment, production fence, long cast iron extensions and extension, rails, standard fence, motor and controls.

1680160-Same as 1680010 except with 80" rails.

# CONTROLS FOR USE WITH MODEL 68 T.A. SAWS

1 Phase

2398334—Magnetic Controls, 115/230v. 2398496—Magnetic Controls, 115/230v, w/24v transformer.

3 Phase 2398230-JIC Controls 200/230/460/575v 2398332—Magnetic Controls, 200/230/460/575v.

\*2398468—Magnetic Controls, 200/230/460/575v, w/24v transformer
9100003—Conduit in lieu of standard wirring.

# MOTORS FOR USE WITH 12" T.A. SAW

3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v TEFC, 145TC frame. 6472028

6472024-3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145TC frame.

6472025-3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 23045h frame.

6472307—5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/450, TB. 6472327-5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200, TH

# OPTIONAL ACCESSORIES

2028082—Gliding table attachment.

2104031-Motor cover.

2195009—31/2" (88.90 mm) Aluminum fence. Wt. 20 lbs. (9.1 kg).

2195021-Production Fence.

2250113-Blade guard and splitter assembly. Wt. 5 lbs. (2.3 kg).

2250115-Safety-flex overarm guard. Wt. 10 lbs. (4.5 kg).

2328018-Dado insert plate. Wt. 1 lb. (.45 kg).

2389002—Iron extensions, including rails for ripping 49" (1244.60 mm) to right of saw blade. Wt. 170 lbs. (77.1 kg).

2471005-Miter gauge. Wt. 4 lbs. (1.8 kg).

2653003-80" (2032 mm) Table rails with mating hardware for (1244.60 mm) to right of saw blade. 62 lbs. [281]

2761025—Fence mtg. stock stop.

6077004-Motor belts (3 required) 4L230. Wt. 8 oz. (.23 kg) se

-12" (304.80 mm) Combination saw, %" (15.88 mm) 6080129lbs (.68 kg).

-12" (304.80 mm) Rip saw, 5/8" (15.88 mm bore M.) kg).

6081032-12" (304.80 mm) Hollow ground planer blade, § bore. Wt. 11/2 lbs. (.68 kg).

# **SPECIFICATIONS**

Table height	
Table Size with extension wings	38 x 48" (965.20 mm x 1219.20 mm)
Saw blade diameter	
Arbor diameter Saw blade diameter Blade tilt (left only) Maximum depth of cut	
Maximum rip to right of blade with standard extensions	

Maximum rip to left of blade with	201
standard extensions, standard fence	
Maximum rip to right of blade with	507.47
long extensions, standard fence	12/6/0
Maximum width of dado	
Cahinet size	
23%'' x 25%'' (606.42 mm x 644.52 mm)	
Shipping weight, with	777.64

Not Shipped without guard and splitter.



\*Miter Cut Accuracyadjusts easily, exte table for wide stock.



Overarm guard (op 'hide away' heavy dut vides added safety.

\*Shown with guard



Economy and extra capacity, coupled with rugged dependability, makes the "Performance Master" an unmatched value in its class.

**EXCLUSIVE FEATURES**—C-Flange Motor Mounting, Blade Tilt to Left, Aluminum Precision Machined Fence with Front and Rear Lock, and Greater Cut-Off Capacity.

New Saw Guard Featuring Anti-kickback Pawls to provide positive work holding. Solid Cast Iron Extension Tables (optional) for ripping 49" (1244.60 mm) to right side of blade, 5%" (130.18 mm) Depth of Cut and the built-in capabilities that surpass the most rigid requirements of industry, and Vocational Technical and Trade Schools.

ALUMINUM RIP FENCE: Precision ground on both sides for perfect alignment with Saw Blade.

Fence alignment if necessary, is easily accomplished by turning two screws. Front and rear locks provide accurate aligning and positive clamping.



table

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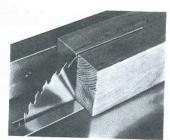
rails

able and

9"

68 n)

\*Miter Cut Accuracy—miter gauge adjusts easily, extends beyond table for wide stock.



\*Extra Capacity—14" (355.60 mm) blade cuts stock up to 5%" (130.18 mm) at 90° ranging to 3%" (92.08 mm) cut at 45° position at maximum height.



\*Extra Cut-Off Capacity table in front of blade is full 21" (533.40 mm) at 1" (25.40 mm) cut.



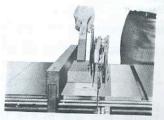
Overarm guard (optional) with hide away heavy duty splitter provides added safety.



Individual Action of each guard leaf covers blade through entire tilt range. Saw Blade is never exposed to operator.



Fence Adjustment Fast and Sure from either side with Vernier control knob and top-reading front guide rail calibrations.



Hide-away Guard completely covers blade on all through cuts from narrow to full capacity.

<sup>&#</sup>x27;Shown with guard removed for illustration purposes only.

# **POWERMATIC®**

MODEL

# 12"-14" TILTING ARBOR SAW

# 12"-14" T.A. SAW STANDARD EQUIPMENT

12"-14" Tilting Arbor Saw: Rip Fence, Miter Gauge, Guide Rails, Blade Guard, Splitter with Anti-Kickback Pawls Two Table Extension Wings, Four Motor Belts, Arbor, Motor Cover and Pulleys. Less: Motor, Controls and Saw Blade.

# BASIC 12"-14" T.A. SAWS

1720120-12"-14" Powermatic Tilting Arbor Saw, with all standard equipment.

1720120—12"-14" Powermatic Hiting Arbor Saw, With all standard equipment.
Less: Motor, Controls and Saw Blade.
1720150—12"-14" Powermatic Tilting Arbor Saw, with all standard equipment,
except with cast iron Extensions and 80" Rails for ripping 49" to right
of saw blade. Less: Motor, Controls, Saw Blade.
1720160—Same as 1720120 except with overarm guard in lieu of standard.
1720170—Same as 1720150 except with overarm guard in lieu of standard.

1720180—12"-14" Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extension wings to rip 32" to right of blade, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor

cover and motor pulley less motor and controls.

1720190—12"-14" Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extension wings to rip 43" to right of blade, extension support leg, blade guard and splitter with anit-kickback pawls, wrenches, belts, motor cover and motor pulley less motor and con-

1720200—12"-14" Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extension wings to rip 32" to right of blade, overarm blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motor and controls.

12"-14" Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extension wings to rip 43" to right of blade, extension support leg, overarm guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motor and con-

-12"-14" Powermatic Tilting Arbor Saw with all standard equipment 1720230-

except with gliding table attachment less left hand extension, motor, controls and saw blade.

-12"-14" Powermatic Tilting Arbor Saw with all standard equipment except with gliding table attachment long cast iron extensions, rais 1720240and leg for cutting 49" to right of blade less left hand extension, motor, controls and saw blade. -12''-14'' Powermatic Tilting Arbor Saw with all standard equipment

except with gliding table attachment and production fence less let hand extension, standard fence, rails, motor, controls, and saw

-12"-14" Powermatic Tilting Arbor Saw with all standard equipment except with gliding table attachment, production fence, long casting 1720260extensions and leg less left hand extension, standard fence, rails motor, controls and saw blade.

1720270-Same as 1720120 except with 80" rails.

# MOTORS FOR USE WITH 12"-14" T.A. SAWS

6472028—3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v TEFC, 145TC frame 3 Phase

-5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s) 230/460v. TEFC, 6472307 184C frame

5HP (3.730 kw), 60 Hz, 36000 RPM (376.99 rad/s) 200v, TEFC, 184C 6472504—7½HP (5.595 kw), 60Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC

184C frame 6472511-71/2HP (5.595 kw), 60Hz, 3600 RPM (376.99 rad/s), 200v, TEFL 184C frame.

# MOTOR RECOMMENDATIONS

3.5 or 71/2HP (2.238, 3.720, 5.595 kw) for 12" (304.80 mm) T.A. Saws, 71/4/1 (5.595 kw) for 14" (355.60 mm) T.A. Saws

# CONTROLS FOR USE WITH MODEL 72 T.A. SAWS

1 Phase 2398334—Magnetic Controls, 115/230v. \*2398496—Magnetic Controls, 115/230v, w/24v transformer

\*May be specified with 110v transformer.

3 Phase 2398230-JIC Controls, 200/230/460/575v 2398332-Magnetic Controls, 200/230/460/575v 2398468—Magnetic Controls, 200/230/460/575v, w/24v transformer 9100003-Conduit in lieu of standard wiring

# **SPECIFICATIONS**

Table Height
Table size, with extension wings
Saw Blade diameter
Maximum depth of cut. 12" (304.80 mm) blade. 90°
Maximum depth of cut, 14" (355.60 mm) blade, 90°  514" (104.78 mm)

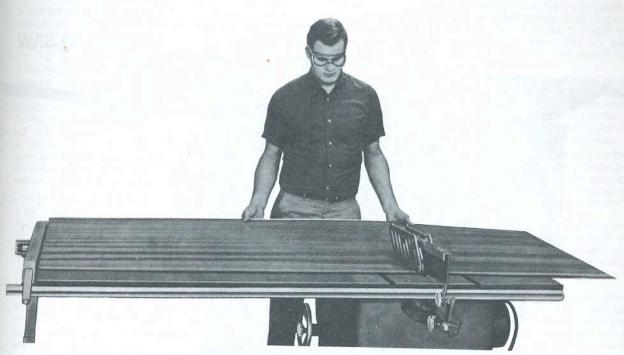
Maximum rip to right of blade, with standard extensions 30" (762.00 mm)
Maximum rip to left of blade, with standard extensions
24" (609.60 m
Maximum rin to right of blade, with long extensions
50" (1270.00 mm)  Maximum width of cut-off, 1" (25.40 mm) stock 21" (533.40 mm)
Maximum width of cut-off, 51/8" (130 18 mm) stock 17" (431.80 mm
Maximum width of dado
Cabinet size 26" x 30" (660,40 mm x /62,00 mm
Shipping Wt., with motor

# **OPTIONAL ACCESSORIES**

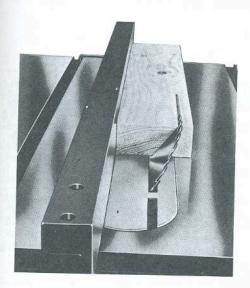
2028082—Gliding table attachment. 2104016—Motor cover. Wt. 9 lbs. (4.1 kg). 2250154—Blade Guard and Splitter Assembly. Wt. 5 lbs. (2.3 kg).

2250154—Blade Guard and Splitter Assembly. Wt. 5 lbs. (2.3 kg).
2250115—Safety-Flex Overarm Guard Assembly. Wt. 10 lbs. (4.5 kg).
2328018—Dado Insert, with leveling screws. Wt. 1 lb (.45 kg).
2328019—Table Insert, with leveling screws. Wt. 1½-lbs. (.68 kg)
2389002—Cast Iron Extensions with 80" (2032 mm) Rails, for ripping 49" (1244.60 mm) to right of blade. Wt. 340 lbs. (154.2 kg). (std. fence)
2471005—Miter Gauge. Wt. 4 lbs. (1.8 kg)
2653003—80" (2032 mm) Table Rails with mating hardware, for ripping 49" (1244.60 mm) to right of saw blade. (std. fence)
2670003—Stop Rods for Miter Gauge. Wt. 1 lb. (4.5 kg).

6077047—Motor Belts (4 required) 3V-250 Wt. 8 oz. (.22 kg). 6080048—12" (304.80 mm) Combination Saw Blade, 1" (25.40 mm) bore. W. 1% lbs. (.8 kg). 6080050—12" Ripping blade 6080051—12" Hollow Ground Planer Blade 1" (25.40 mm) bore. Wt. 1½ lbt 6080119—14" (335.60 mm) Combination Saw Blade, 1" (25.40 mm) bore W 21/4 lbs. (1.0 kg) 14" (355.60 mm) Hollow Ground Planer Saw Blade, 1" (25.40 m. bore. Wt. 21/4 lbs. (1.0 kg). 2195021--Production Fence 2761025-Fence mig. stock stop



SOLID CAST IRON EXTENSIONS: (Optional) Provide unequaled accuracy for precision cutting of wide panels,—up to 49" (1244.60 mm) to the right of saw blade. NOT grillwork or wood extensions, but cast iron, the same type construction as the table top.

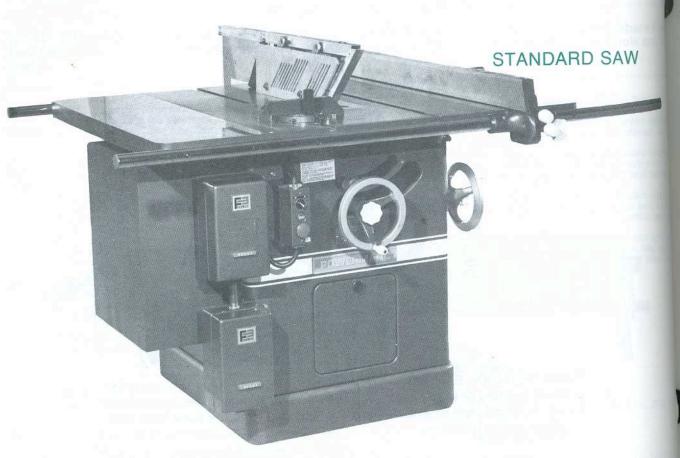


ADDED SAFETY: Blade tilts to left, away from Rip Fence, eliminates binding of material between blade and fence, thus helping to prevent "kickback" tendencies.

On miter cuts, simply move the gauge to the right hand T-slot to obtain maximum safety.

NOTE: Guard removed for illustration purposes only.

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice.





Scoring

The first American made saw to feature scoring—minimizes panel chipping.



Miter gauge-

\*Miter Cut Accuracy—miter gauge adjusts easily, extends beyond table for wide stock.



Production fence-

Precision ripping is assured with this rigid, and accurately adjusted rack and pinion fence.



**GUARD** 

Guard hold down—a unique spring loaded hold down prevents panel lift by the blade during scoring operations.



Standard fence-

Fence Adjustment Fast and Sure from either side with Vernier control knob and topreading front guide rail calibrations.



Extra Capacity

Overarm guard (optional) with hide away heavy duty splitter provides added safety.

1740010—12" a r bla wre les 1740020—12"

a rip

ki m

le

pu 1740030—12 a

1740040—12 a

1740050—1

1740060—1

6472028—3

6472307— 6472327—

6472504-

2398535

\*May Be

Table Heig Table size Table size Arbor Diar Saw Blade Blade Tilt Max deptl Max deptl 14" (355.

# **POWERMATIC®**

# SCORING SAW

# BASIC MACHINES

1740010—12"-14" Scoring Tilting Arbor Saw equipped with a rip fence, miter gauge, cast iron extensions, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740020—12''-14'' Scoring Tilting Arbor Saw equipped with

a rip fence, miter gauge, cast iron extensions for ripping 50" to right of blade, extension support leg, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740030—12"-14" Scoring Tilting Arbor Saw equipped with a rip fence, miter gauge, cast iron extensions, overam blade guard and splitter with antikickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740040-12"-14" Scoring Tilting Arbor Saw equipped with a rip fence, miter gauge, cast iron extensions for ripping 50"to right of blade, extension support leg, overarm blade guard and splitter with antikickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740050-12"-14" Scoring Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extensions for ripping 32" to right of blade, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740060-12"-14" Scoring Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extensions for ripping 32" to right of blade, extension support leg, overarm blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740070—12"-14" Scoring Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extensions to rip 43" to right of blade, overarm blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls.

1740080-12"-14" Scoring Tilting Arbor Saw equipped with a production fence, miter gauge, cast iron extensions to rip 43" to right of blade, extension leg support, overarm blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and motor pulley less motors and controls

1740100—12"-14" Scoring T.A. Saw equipped with rip fence, miter gauge, R.H. cast iron extension, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and pulley and gliding table attachment less left hand extension, motor and controls.

1740110—12"-14" Scoring T.A. Saw equipped with rip fence, miter gauge, long cast iron R.H. extensions, rails, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and pulley, and gliding table attachment less left hand extension, motor, and controls.

1740120--12"-14" Scoring T.A. Saw equipped with production fence, miter gauge, R.H. cast iron extension, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and pulley, and gliding table attachment less left hand extension, pawls, motor and controls.

12"-14" Scoring T.A. Saw equipped with produc-1740130tion fence, miter gauge, long R.H. cast iron extensions, blade guard and splitter with anti-kickback pawls, wrenches, belts, motor cover and pulley, and gliding attachment less left hand extension, rails, motor, and controls.

# MOTORS

1 Phase 6472028-3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v TEFC, 145TC frame

3 Phase 6472307-5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s) 230/460v. TEFC, 184C frame

-5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s) 200v, TEFC, 184C 6472327frame

6472504--71/2HP (5.595 kw), 60Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 184C frame

6472511-71/2HP (5.595 kw), 60Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 184C frame.

### MOTOR RECOMMENDATIONS

3.5 or  $7\frac{1}{2}$  HP (2.238, 3.720, 5.595 kw) for 12" (304.80 mm) T.A. Saws  $7\frac{1}{2}$  HP (5.595 kw) for 14" (355.60 mm) T.A. Saws

# 1 PH (230 Volts only)

2398535—Magnetic controls 230V

'May Be Specified With 110V Transformer

# - CONTROLS

3 PH 2398536-Magnetic controls 200/230/460/575V

\*2398537-Magnetic Controls 200/230/460/with 24V transformer

9100002-conduit in liew of standard wire

# Note: Scoring Motor Included With Magnetic Controls

# **SPECIFICATIONS**

	Table Height
	Table size std. extensions
	Table size long extensions
	Arbor Diameter
	Saw Blade diameter
	Blade Tilt (left only)
۱	Max depth of cut 12" (304.8 mm) blade 90°
ı	Max depth of cut 14" (355.6 mm) blade 90° 5 1/8" (130.18 mm
	14" (355.6 mm) blade is 5/8" (15.88 mm) Above the table at lowest position

Standard fence surface 3 1/4" (82.55 mm) x 43 7/8" (1114.42 mm)
Max rip cut to right of blade std. fence and extensions 30" (762 mm)
Max rip cut to right of blade std. fence and long extensions .50" (1270 mm)
Max width of cutoff 1" (25.4 mm) stock
Max width of cutoff 5 1/8" (130.18 mm) stock
Max width of dado
Shipping wt. with motors and contorls std. machine 1000 lb. (451 kg)
Shipping wt. with Pan'l Handler, motor and controls 1500 lb. (676.5 kg)
Production fence surface
Production fence travel

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# OPTIONAL ACCESSORIES

2028082—Gliding table attachment

2104016-Motor cover

2195009-Std. fence wt. 25 lbs (11.3 kg)

2250113—Blade guard and splitter assembly (wt. 5 lbs) (7.3

2250115—Safety-flex overarm guard assembly wt. 10 lbs (4.5

2328022—Dado insert with leveling screws 1 1/4 lb (.57 kg)

2328021—Std. insert with leveling screws 1 3/4 lb (.79 kg)

2389002—Cast iron extensions with 80" (2032 mm)

2195021-Production fence

2761025-Fence mtg. stock stop

6080120—14" (335.6 mm) Flat Ground Cutoff Saw blade 1" (25.4 mm) bore wt. 2 1/4 lbs (1.0 kg)

6080122—14" (335.6 mm) Hollow Ground Planer Saw§1 1" (25.4 mm) bore wt. 2 1/4 lbs (1.0 kg)

6080138—12" (305 mm) 72T Combination Carbide Top Saw Blade 1" (25.4 mm) bore .118 (3 mm) ly

6080139—3 15/16 diameter (100 mm) 20T Adjusting Can Tipped Scoring Blade 7/8 approximate bor mm) kerf width .102 (2.6 mm) to 142 (3.6 mm

2653003-80" Table Rails with mating hardware for income 50" (1270 mm) to right of saw blade

2670003-Stop rods for miter gage

6077047—Main motor belt (4 reg.) 3V-250 wt. 8 oz. (28)

6077165—Scoring motor belt, 7M950 wt. 2 oz.

6080048—12" (304.8 mm) Combination Blade 1" (25.4 m bore wt. 1 3/4 lb (.8 kg)

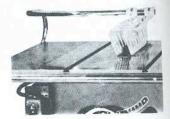
6080119—14" (335.6 mm) Combination Blade 1" (25.4 m bore wt. 2 1/4 lb (1.0 kg)



Solid cast iron extensions: (Optional) Provide unequaled accuracy for precision cutting of wide panels,—up to 49" (1244.60 mm) to the right of saw blade. NOT grillwork or wood extensions, but cast iron, the same type construction as the table top.

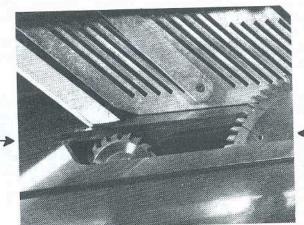


Production fence—
Precision ripping is assured with this rigid, and accurately adjusted rack and pinion fence.



Overarm guard (optional) with hide away heavy duty splitter provides added safety.

BLADES



CARBIDE MAIN 6080138

CARBIDE SCORING — 6080139

# POWERMATIC !

AND NOW. . .

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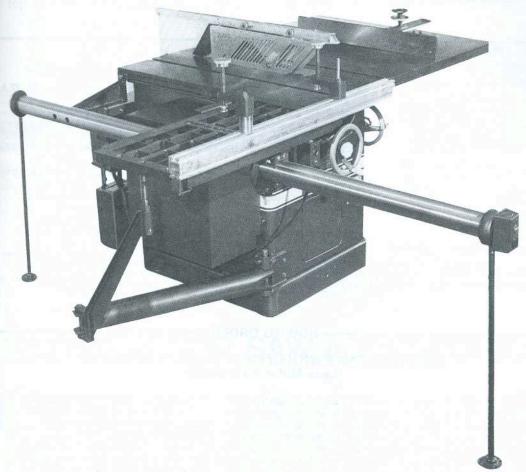
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# Powermatic 's answer to ordering your Gliding Table Attachment



The new Gliding Table Attachment is designed to provide outstanding versatility for woodworking operations. Attachment fits new and old saws alike. Standard equipment includes: cast iron table, miter/cross cut fence with adjustable clamp and stock stop, 3" dia. (76.2 mm) guide rail, supporting legs, articulating arm and all necessay mounting hardware.

# · FEATURES ·

GUIDE RAIL: The large 3" (76.2 mm) diameter x 87" (2209.8 mm) guide rail is supported by legs at front and rear providing extra rigidity for added stability when cutting large panels.

GUIDE RAIL MOUNTS: Heavy cast iron guide rail mounts position guide rail 12%" (314.3 mm) to the left of the main table adding rigidity by centrally supporting the slide table. Precision machined mounts automatically align rail to miter slot. Rail extension provides convenient operator access to saw.

TABLE GUIDE: Includes six (6) preloaded bearings assuring smooth operation and 'glide-in' accuracy.

SET UP: Assembly & alignment are relatively quick and easy.

FENCE: The extruded aluminum fence permits one or more clamps to be positioned along the entire length of the fence. Fence is fully adjustable 45° left or right, and may be face mounted for 90° cross-cutting.

FENCE SCALE is graduated in one degree increments for accurate cross-cut and miter operations.

# IPOWERMATIC<sup>®</sup>

# GLIDING TABLE ATTACHMENT

TABLE CARRIAGE LOCK permits the sliding table to be used as a conventional table extension when performing any standard operation.

CUT-OFF & MITER CAPACITY: The long guide rail permits cut-off and 45° miter cuts on 48" wide panels.

UNIVERSAL MOUNTING: The Gliding Table Attachment is designed for right or left hand mounting. It may be easily retrofitted to similar saws manufactured by others.

STOCK STOP is included as standard equipment for repetitive cutoff operations.

# SPECIFICATIONS -

# Gliding Table Attachment

# 66

# 68, 72 & 74

Powerm

never be swing in

or close

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Rail diameter Rail Length Sliding Table (Cast Iron)

Fence

Table Travel
Fence position
Scale graduations
Stock clamp capacity
Edge of table to rail
Stock support (optional accessory)

Maximum width of cutoff Maximum width miter (45°) 3" (76.2 mm) 87" (2209.8 mm) 16" x 29 7/8" x 1 3/8" (406.4 x 758.8 x 34.9 mm) 1 3/4" x 2 1/2" x 42" (44.4 x 63.5 x 1066.8 mm) 70 3/4" (1797 mm) 45° (either direction) 1° increments 3 1/8" (79.4 mm) 12 3/8" (314.3 mm) 1/2" x 11/2" x 24" (12.9 x 38.1 x 609.6 mm) 57" (1447.8 mm) (w/10" blade) 72" (1828.8 mm) (3/4" thickness, w/10" blade)

3" (76.2 mm)
87" (2209.9 mm)
16" × 29 7/8" × 1 3/8"
(406.4 × 758.8 × 34.9 mm)
1 3/4" × 2 1/2" × 42"
(44.4 × 63.5 × 1066.8 mm)
70 3/4" (1797 mm)
45° (either direction)
1° increments
5 1/8" (79.4 mm)
12 3/8" (314.3 mm)
1/2" × 1 1/2" × 24"
(12.9 × 38.1 × 609.6 mm)
54" (1447.8 mm) (w/12" blade)
72" (1828.8 mm) (3/4" thickness, w/12" blade)

# - HOW TO ORDER -

# COMPLETE SAWS WITH GLIDING TABLE ATTACHMENT (Less Motor & Controls)\*

1660710\* 66 T.A. Saw, 10" with std. guard, std. cast iron ext., 48" rails & Gliding Table Attachment. 66 T.A. Saw, 10" with std. guard, 49" cast iron ext., 72" rails & Gliding Table Attachment. 1660720\* 66 T.A. Saw, 10" with std. guard, prod. fence, 55" table & Gliding Table Attachment. 66 T.A. Saw, 10" with std. guard, prod. fence, 35" table & Gliding Attachment. 1660730\* 68 T.A. Saw, 12" with std. guard, st. cast iron ext., 64" rails & Gliding Table Attachment. 1680120\* 68 T.A. Saw, 12" with std. guard, 49" cast iron ext., 80" rails & Gliding Table Attachment. 68 T.A. Saw, 12" with std. guard, prod. fence, 51" table & Gliding Table Attachment. 68 T.A. Saw, 12" with std. guard, prod. fence, 62" table & Gliding Table Attachment. 1680140\* 1680150\* 72 T.A. Saw, 12"-14" with std. guard, std. cast iron ext., 64" rails & Gliding Table Attachment. 72 T.A. Saw, 12"-14" with std. guard, 49" cast iron ext., 80" rails & Gliding Table Attachment. 1720230\* 1720240\* 72 T.A. Saw, 12"-14" with std. guard, prod. fence, 51" table & Gliding Table Attachment. 72 T.A. Saw, 12"-14" with std. guard, prod. fence 62" table & Gliding Table Attachment. 1720250\* 1720260\* 74 T.A. Saw, scoring, 48" table, std. guard, 64" rails & Gliding Table Attachment. 74 T.A. Saw, scoring, 49" cast iron ext., std. guard, 80" rails & Gliding Table Attachment. 74 T.A. Saw, scoring, 51" table, std. guard, prod. fence & Gliding Table Attachment. 1740100 1740110 1740120 74 T.A. Saw, scoring, 62" table, std. guard, prod. fence & Gliding Table Attachment. 1740130

# - RETROFIT KITS -

2028081 Gliding Table Attachment for model 66 T.A. Saw

2028082 Gliding Table Attachment for models 68, 72 and 74 T.A. Saws

# OPTIONAL ACCESSORIES -

2092010 Stock clamp (For 66 T.A. Saw)
2092011 Large stock clamp (For 66, 68, 72, 74 T.A. Saws)
2040038 Adjustable stock support assembly
2398543\*\* Remote pushbutton station

\*See catalog for motors and controls.

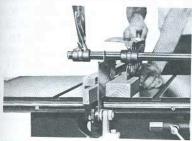
\*\*Standard with factory installed magnetically controlled saws. List as a line item.

# POWERMATIC !

SAFETY FLEX
GUARD AND BLADES

Powermatic Safety Flex . . . a guard so unique it need never be removed from the machine. Guard leaves swing independent of each other such that on uneven or close-to-fence ripping the blade is well guarded. A see-through top enables the operator to follow pre-

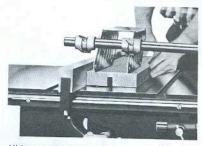
scribed lines accurately. A heavy-duty splitter, with anti-kickback pawls, swings easily out of the way for dado, rabbeting and moulding operations. This guard is easily installed on any Powermatic Tilting Arbor Saw Model.



Independent action of guard leaves permit operator to rip thin stock with protection from the saw blade.



Maximum safety with rabbet or moulding cuts. Protection is provided by swinging guard leaves a see-through visor on top of guard.



Hide away splitter swings out of the way behind saw when not required for dado operations.

# SAFETY GUARD LISTINGS

2250115—Safety Flex Guard complete with splitter and anti-kickback pawls for Model 68, 72 & 74 Saws. 2250117—Safety Flex Guard complete with splitter and anti-kickback pawls for Model 66 Saw. 2250120—Safety Flex Guard complete with splitter and anti-kickback pawls for Model 62 Saw.

# **TILTING ARBOR SAW ACCESSORIES**



HOLLOW GROUND PLANER BLADE #6080044 for #66 Saw #6080051 for #72 Saw #6080132 for #68 Saw



#60 COMBINATION BLADE #6080041 for #66 Saw #6080048 for #72 Saw #6080129 for #68 Saw



RIPSAW BLADE #6080043 for #66 Saw #6080050 for #72 Saw #6080130 for #68 Saw

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice.

Warranty

(SEE INSIDE FRONT COVER CATALOG DE)



# CHOICE OF VARIABLE-SPEED OR FOUR-SPEED MODELS!

Another pace setting achievement of Powermatic® engineering. The Model 95 SCROLL SAW is unsurpassed in quality, features, and all around ruggedness. Designed and produced by popular demand, this 24" (609.60 mm) unit is ideally suited to cabinet, school and pattern shops. Use it as a jig saw, saber saw or filing machine . . . and get more value, more use, and greater accuracy at less cost. Constructed of cast iron and steel, the Model 95 — 24" (609.60 mm) Scroll Saw is engineered to minimize distortion.



BLADE GUIDE—This hardened steel guide and roller assembly maintains perfect alignment and blade support. Note heavy duty spring hold-down. Tits for support on all angle cuts.



LOWER CHUCK—Another POWERMATIC first. This steel chuck guarantees positive grip for all blades.



**DEPTH OF CUT**—Cuts up to 134" (44.45 mm) thick. Will rip to center of 48" (1219.20 mm) panel. Just remove cast iron arm for saber work on large panel.



VARIABLE SPEED—is ideally suited for cutting all materials. Adjustment accomplished through conveniently located hand-wheel. (Customer's option)

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# **FEATURES**

FRAME: Rugged two-piece cast iron base and overarm, precision machined and distortion free. Over-arm removable for use as saber saw.

**GUARD:** Pressed steel belt guard completely houses

DRIVES AVAILABLE: Four speed, Step pulley drive, or

Variable Speed for infinitely variable speeds.

TABLE: Massive 14" x 15" (355.60 mm x 381.00 mm) table of finest cross ribbed grey iron castings, machine-ground to precision tolerance. Table tilts 45° right, 15° left for normal cutting and turns 90° for ripping & saber blade use.

BLOWER: Standard equipped with chip blower which directs a steady stream of air to cutting area, keeping work free of sawdust.

CRANKSHAFT: Ball bearing crankshaft is automatically lubricated by splash system in oil tight crankcase. TRÚNNION: A heavy duty double trunnion guarantees absolute rigidity and positive lock in all positions.

HEAD: A special cast aluminum head assures long life and trouble free operation.

SPRING: A heavy tension spring over the saw blade is, adjustable to blade type and type of cut.

# STANDARD EQUIPMENT

SCROLL SAW: (variable or 4-speed) Pulleys, belt, belt guard, chipblower, 4-way lable, saber blade, 3 scroll saw blades and set of wrenches —Less motor, controls and stand

# MODEL 95 BASIC MACHINES

1950030-24" Scroll Saw with standard equipment, 4-speed). Less: Motor, Controls and Stand.

1950070-24" Scroll Saw with standard equipment for variable speed. Less: Motor, Controls and Stand.

# MOTORS FOR USE WITH MODEL 95 SCROLL SAW

1/3 HP (.249 kw), 60 Hz, 1800 RPM (188.5 rad/s), 115/230v, TEFC, 56 frame.

3 Phase

6470208 — 1/3 HP (.249 kw), 60 Hz, 1800 RPM (188.5 rad/s), 200v, TEFC, 56 Frame 6470215 — 1/3 HP (.249 kw), 60 Hz, 1800 RPM (188.5 rad/s), 230/460v, TEFC. 56 Frame

# CONTROLS FOR USE WITH MODEL 95 SCROLL SAW

1 Phase

2398214 — Pushbutton Switch, 115/230v. 2398378 — Magnetic Controls, 115/230v.

2398490 — Magnetic Controls, 115/230v, w/24v transformer.

3 Phase

2398213-Pushbutton Switch, 200/230/460/575v.

2398215—Magnetic Controls, 200/230/460/575v, w/24v transformer.

2398230-JIC Controls, 200/230/460/575v. (For wall mount only).

2398484—Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100003-Conduit in lieu of standard wiring.

# **OPTIONAL ACCESSORIES**

2085002 — Lower Blade Chuck Assembly. Wt. 1 lb. (.45 kg). 2085003 — Upper Blade Chuck Assembly. Wt. 1 lb. (.45 kg). 2253041 — Saber Blade Guide. Wt. 4 ozs. (.11 kg). 2404001 — Variable Speed Assembly Kit. Wt. 3 lbs. (1.36 kg)

2640007 - Upper Blade Tension Assembly. Wt. 1 lb. (.45 kg)

2759014—Stand. Wt. 41 lbs. (18.6 kg) 3250050—Belt Guard. Wt. 3 lbs. (1.36 kg)

6077011 — V Belt, Variable Drive, 4L350. Wt 8 oz. (.23 kg) 6077013 — V Belt, 4-speed Drive, 4L370. Wt. 8 oz. (.23 kg)

6448005 - Work Lamp. Wt. 10 oz. (.28 kg)

# SPECIFICATIONS

Capacity, Arm to Saw
Thickness of cut
Table size
Table from floor
Overall Height
Width
Length

Step-Speeds	610, 910, 1255, 1725 CSM
Var. Speeds	
Weight Crated, with stand and mo	otor
Weight Crated less stand with mo	otor

edifications, dimensions and design characteristics shown in this catalog are subject to change without notice



GET MAXIMUM USAGE AND VALUE FROM YOUR SCROLL SAW BY SELECTING AND USING THE RIGHT BLADE FOR EVERY JOB!

# **BLADE SELECTION CHART**

STOCK NO.	MATERIAL TO CUT	TYPE OF BLADE	THICK- NESS INCHES	WIDTH INCHES	TEETH PER INCH
6080068	Steel, Iron, Lead, Copper, Aluminum, Pewter, Asbestos, Paper and Felt.	Jig	.020	.070	32
6080067		Jig	.020	.070	20
6080065	Steel, Iron, Lead, Copper, Brass, Aluminum, Pewter, Asbestos and Wood.	Jewelers	.020	.070	15
6080072		Jig	.020	.110	20
6080069	Asbestos, Brake Lining, Mica, Steel, Iron,	Jig	.028	.250	20
6080056	Lead, Copper, Brass, Aluminum and Pewter.	Saber	.028	.250	20
6080061	Plastic, Celluloid, Hard Rubber, Bakelite, Ivory and Wood.	Fret	.010	.070	14
6080058	Plastics, Celluloid, Hard Rubber, Bakelite, Ivory and Wood.	Fret	.017	.043	18
6080059		Fret	.019	.055	12
6080060		Fret	.020	.070	7
6080062		Fret	.020	.110	7
6080071	Wall Board, Pressed Wood, Wood, Lead, Bone, Felt, Paper, Copper, Ivory and Aluminum.	Jig	.020	.110	15
6080070	Hard and Soft Wood.	Jig	.020	.110	10
6080054		Jig	.028	.187	10
6080055		Saber	.028	.187	10
6080057		Saber	.028	.250	7
6080064	Pearl, Pewter, Mica, Pressed	Jewelers	.016	.054	30
6080063	Wood, Sea Shells, Jewelry, Metals,	Jewelers	.016	.054	30
6080066	Hard Leather.	Jig	.020	.070	15

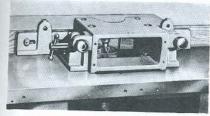
Warranty

(SEE INSIDE FRONT COVER CATALOG DE)



Designed to produce high quality work for furniture, cabinet, reproduction and sash and door plants, the Model 26 Spindle Shaper is a rugged, dependable, multipurpose tool constructed to accommodate four interchangeable spindles and a 1" (25.40 mm) solid spindle for extra heavy duty work. The shaper spindle features a 3" (76.20 mm) vertical adjustment controlled by a convenient front mounted hand wheel. A large 28" x 291/2" (711.20 mm x 749.30 mm) precision ground, cast iron table is mounted on an enclosed steel stand.





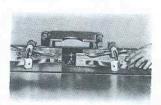
PRECISION FENCE — Fully adjustable or removable for any and all shaping operations, this precision machined fence assembly guarantees rigidity, accuracy and ease of adjustment.



QUILLS — are quickly removed and interchanged by loosening one locking bolt and sliding complete assembly from housing, reducing "set up" time to an absolute minimum.



SAFETY RING GUARD-standard ring guard covers top of spindle and cutter for free-hand shaper Part No. 2250155



HOLDDOWN GUIDES—standard steel work holddown guides eliminate hazardous free hand feeding of stock and assure smooth, accurate form cutting Part No. 2253016



STARTING PIN - A standard accessory, starting pins facilitate easy initial cuts on free-hand shaping. Part No. 3585014.



OPTIONAL SHAPE MAKER-Do repetitive work quickly and easily. Ideal for production of plaques, table tops, chair bottoms, etc.

# POWERMATIC

MODEL

# UNIVERSAL SPINDLE SHAPER

# **FEATURES**

TABLE: 28" x 291/2" (711.20 mm x 749.30 mm) (including one extension wing) is made from grey iron castings, rib reinforced for maximum rigidity. Removable 3", 4 3/16" & 7" (76.20 mm, 106.36 mm & 177.80 mm) inserts make possible the use of any cutter the safe way, undercutting. This feature is especially desirable for Raised Panel Cuts.

BASE: Table is supported by a heavy gauge steel cabinet with clean-out door.

FENCE: The cast iron fence is precision machined and faced with hardwood blocks. Fence may be easily adjusted to any position on table by locking handles, or removed for free-hand shaping. The fences are mounted on a box-type center support that serves as a shavings exhaust chute.

SPINDLE: Mounted in heavy duty precision ball bearings. Spindles available include interchangeable 5/16 (7.94 mm), ½" (12.70 mm) ½" (12.70 mm) Štub and ¾" (19.05 mm). 1" (25.40 mm) Extra long solid.

SPINDLE SPEED: The spindle is driven by a two-speed "V" pulley, for spindle speeds of 7000 & 10,000 RPM (733 rad/s) & 1047 rad/s), the correct speeds for both large and small cutters.

# STANDARD EQUIPMENT

MODEL 26 SHAPER: Fence, dust chute, 1/2" (12.70 mm) and 34" (19.05 mm) interchangeable spindles, 3 table inserts, wrenches, motor cover, arbor pulley, motor pulley and belt, safety ring guard and work hold-down guides. Less: Motor and Controls.

# **BASIC MACHINES**

1260010 - Model 26 Spindle Shaper, with all standard equipment. Less: Motor and Controls.

1260030-Model 26 Spindle Shaper, with all standard equipment except with 1" (25.40 mm) solid spindle in lieu of 1/2 & 1/2 interchangeable spindles. Less: Motor and Controls.

# MOTORS FOR USE WITH MODEL 26 SHAPER

1 Phase 6471100 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 56 frame 6471400 — 1½ HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rads), 115/

230 v, TEFC, 56 frame. 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/3), 115/230v, TEFC, 145T frame. 6471707 -

3 Phase 6471118 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 56 frame. 6471119 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460, TEFC, 56 frame. 6471412 — 1½ HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200,

TEFC, 56 frame.

6471413 - 11/2 HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230 460v, TEFC, 56 frame.

6471706 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230 460v, TEFC, 145T frame.
6471717 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v,

TEFC, 145 T frame.

# CONTROLS FOR USE WITH MODEL 26 SHAPER

# 1 Phase

Magnetic Controls, 115/230v. 2398044 2398155 Pushbutton Switch, 115/230v. Reverse Switch, 115/230v. 2398202

2398485 — Magnetic Controls, 115/230v, w/24v transformer.

\*May be specified with 110v transformer.

# 3 Phase

2398051 --Magnetic Controls, 200/230/460/575v. 2398154 Pushbutton Switch, 200/230/460/575v.

2398230 JIC Controls, 200/230/460/575v. 2398249 Reverse Switch, 200/230/460/575v

 Magnetic Controls, 200/230/460/575v, w/24v transformer.
 Conduit in lieu of Standard Wiring 2398480

9100003

# **OPTIONAL ACCESSORIES**

2024013-1/2" (12.70 mm) Stub Spindle. Wt. 4 lbs (1.8 kg)

2028077—Shape Maker Attachment Pre-1979 (Clockwise Rotation). 2028078-

-Shape Maker Attachment Pre-1979 (Counter Clockwise Rotation).

Rotation).
2028079—Shape Maker Attachment (Clockwise Rotation).
2028080—Shape Maker Attachment (Counter Clockwise Rotation).
2250155—Safety Ring Guard, Wt. 8 lbs. (3.6 kg). (Std. Equip.).
2253016—Work Hold-down Guides. Wt. 5 lbs (2.3 kg). (Std. Equip.).
2471010—Miter Gauge. Wt. 5 lbs (1.8 kg).
2749005—5/16" (7.94 mm) Interchangeable Spindle. 11/8" (28.58 mm) under nut. Wt. 1 lb. (.45 kg).

2749040-34" (19.05 mm) Solid Spindle and Quill Assembly. 31/4" under nut. Wt. 8 lbs (3.6 kg).

1" (25.40 mm) Solid Spindle and Quill Assembly, 4%" (123.82 mm) under nut. Wt. 12 lbs (5.4 kg). 2749038-

34'' (19.05 mm) Interchangeable Spindle. 3'' (76.20 mm) under nut. Wt. 1 lb (.45 kg). 2749003-

-1/2" (12.70 mm) Interchangeable Spindle. 21/4" (57.15 mm) under nut. Wt. 8 oz (.23 kg). 8" x 28" (203.2 mm x 711.20 mm). Table Extension for use

without fences. Wt. 28 lbs (12.7 kg).

-Starting Pins. Wt. 6 oz (.17 kg).

# SPECIFICATIONS

9.30 mm) 03.20 mm) 03.60 mm) 1.60 mm), 04.92 mm)
2.70 mm)
(204.1 kg)

Spindle capacity		27/11/14/00 00
1" (25.40 mm) (u	inder nut solid)	
3/4" (19.05 mm) (	under nut)	
1/2" (12.70 mm) (	under nut	
5/16" (7.94 mm)	(under nut)	11/8'' (28.58 mm)
Spindel travel	Active and the second s	7 000 PPM 8 10 000 RPM
Spindle speeds I	(RPM)	7,000 RPM & 10,000 RPM
		(/ 33 rad/s & 104/ rad/s)
Largest table on	ening	7'' (177.80 mm
Fence size (each	n side)	23/8" (95.25 mm 314.22 mm)
Weight export be	oxed, with motor (32.2 c	u. ft.) (9118 mm)

# **POWERMATIC®**

# SPINDLE SHAPER CUTTERS AND DEPTH COLLARS

Powermatic® Shaper Cutters are select, high-quality, tool-steel, heat treated and carefully ground to retain their sharp cutting edges under long continuous service. Resharpening is easily done by grinding across face of cutting edges.













6178032

6178033

6178034

6178035

6178036

6178037











6178038

6178039

6178040

6178041

6178042













6178043

6178044

6178045

6178048

200	
Cat	Ma
Cat.	No.
6470	0004
6178	50.51

# Description

Shaping Cutter (Set 11 Pcs.) ½" (12.70 mm) Bore (#6178032 thru 6178042) 1/4" (6.35 mm) Tongue Cutter, 1/2" (12.70 mm) 6178032

Bore 6178033 1/4" (6.35 mm) Groove Cutter, 1/2" (12.70 mm)

Glue Joint Cutter, 1/2" (12.70 mm) Bore 6178034 6178035 Screen Mould Cutter, 1/2" (12.70 mm) Bore 6178036 Moulding Cutter, 1/2" (12.70 mm) Bore

6178046

6178047

### Cat. No. Description 6178043 Door Lip, 1/2" (12.70 mm) Bore

Moulding, 1/2" (12.70 mm) Bore 6178044 Moulding, 1/2" (12.70 mm) Bore 6178045 6178046 Radius Edging, 1/2" (12.70 mm) Bore

Moulding, 1/2" (12.70 mm) Bore 6178047 Sash and Door, 1/2" (12.70 mm) Bore 6178048

Cat. No.

# Description

Beading Cutter, 1/2" (12.70 mm) Bore 6178037 6178038 Table Edge Cutter, 1/2" (12.70 mm) Bore Moulding Cutter, 1/2" (12.70 mm) Bore 6178039 6178040 1" (25.40 mm) Straight Face Cutter, 1/2" (12.70 mm) Bore

6178041 1/2" (12.70 mm) Straight Face Cutter, 1/2" (12.70 mm) Bore

6178042 1/4" (6.35 mm) Straight Face Cutter, 1/2" (12.70



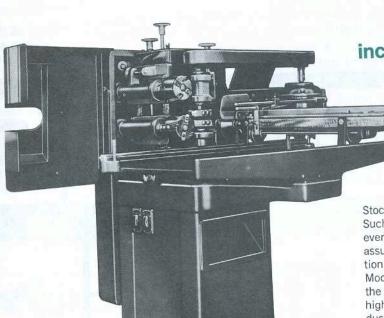


# Warranti

(SEE INSIDE FRONT COVER CATALOG DE)

Description

Cat. No. 1/4" (6.35 mm) wide, 1/2" (12.70 mm) Bore Set 6178049 7/8" (22.22 mm) - 15/16" (23.81 mm) - 1" (25.40 mm) - 11/16" (26.98 mm) - 11/4" (31.75 mm) and 11/6" (28.58).



increase production,

lower costs

Stock and style change-over is so fast and simple. Such complete flexibility cuts operating costs at every turn and superior Powermatic® construction assures many years of precision, trouble-free operation. The comparatively small initial costs makes the Model 2-A Powermatic® Tenoner just as practical for the smaller millwork, cabinet and pattern shop as for high speed production lines of the woodworking industry.

Angle-set high speed tenon knives reduce

Save production time! Optional combina-, tion check rail cutters perform with tenons in a single stock feed.

Fully adjustable cut-off saw can be set quickly to cleanly trim tenon of any length.

Spur-cutters cut ahead of tenon knives preventing burned or ragged shoulders.

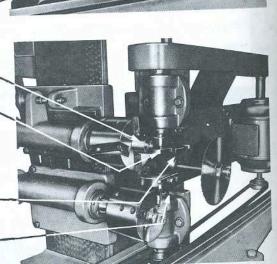
Tenon heads may be easily set to cut offset shoulders on tenons.

Cope heads or check rail cutters screw on threaded cope spindles and seat against machined shoulder to insure perfect alignment. ment.

Check rail cutter or cope head stiles are easily interchanged.

Six-tooth, square check rail slot-cutter on upper cope arbor slots top and bottom stiles accurately.

Pattern-ground cope knives make sash pattern changes fast and simple.



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> TENONER. Cutters, Cut

> > 1280010

6471707

6471706

2398340 2398381

2398131

3109001 3277001 3277002

3277006

3277007

Tenon I Tenon S Cope Sp Cutoff s Maximu

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

TENON

2398489

All specific

# POWERMATIC<sup>®</sup>

MODEL

# SINGLE END **TENONER**

# **FEATURES**

TENON HEADS: Round type, 334" (95.25 mm) in diameter. Both tenon heads may be vertically adjusted. Top tenon head has horizontal adjustment for minor alignment adjustment. Both heads can be instantly vertically adjusted as a unit to cut an identical tenon when changeover to stock of different thickness is made.

TENON HEAD SPINDLES: 1 3/16" (30.16 mm) in diameter. Mounted in sealed ball bearings.

TENON HEAD MOTOR: 2 HP (1.492 kw), 3600 RPM (376.99 rad/s) motor mounted in base powers tenon heads through two double section V-belts.

COPES: (Optional) Equipped with dual tool steel knives. Heads may be independently adjusted vertically and horizontally

COPE HEAD SPINDLES: 34" (19.05 mm) in diameter and mounted in in sealed ball bearings. Spindle ends are threaded to accommodate solid steel cutters (for use of combination, check rail slots, or any style pattern cutters.)

COPE MOTOR: (Optional) 1 HP Double Shaft (.746 kw),

3600 RPM (376.99 rad/s), motor powers cope spindles through V-belt drive.

CUT-OFF SAW: Blade 7" (177.80 mm) in diameter, mounted on shaft equipped with sealed ball bearings. Driven at 5000 RPM (523.60 rad/s) by special V-belt from tenon head motor.

FRAME: Heavy cast iron construction, mounted on cast iron base with heavy reinforced steel side panels

GUARDS: Heavy reinforced welded steel construction. Easily detachable for quick access.

CARRIAGE: Perfectly balanced for finger-tip control. Mounted on double rollers for speed and accuracy. Moves accurately on precision-ground combination vee and flat ways assuring perfect alignment with all cutters.

CONTROLS: Both motors have separate controls for individual operation of tenon or cope heads.

CAPACITY: 3" (76.20 mm) with tenon and cope heads fully open. Maximum tenon 3" (76.20 mm) thick, 3" (76.20 mm) long, 13" (330.20 mm) wide.

# STANDARD EQUIPMENT -

TENONER, Less Copes: Complete with Tenon Heads, knives, shims and Spur Cutters, Cut-off Saw, Belts, Guards and Motor Pulleys. Less: Motor and Controls.

TENONER, With Copes: Complete with Tenon Heads, knives, Shims and Spur Cutters, Cope Heads with one set of blank Knives, Cut-off Saw, Belts, Guards and Motor Pulleys. Less: Motors and Controls.

# **BASIC MACHINES**

1280010 — Model 2-A Single Tenoner, less Copes, with all standard equipment. Less: Motor and Controls.

1280030 - Model 2-A Single Tenoner, with Copes, with all standard equipment. Less: Motor and Controls.

NOTE: TENONERS ARE NOT SOLD WITHOUT MOTORS!

# MOTORS FOR USE WITH MODEL 2-A TENONER

1 Phase, Tenoner Motor 6471707 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 145T frame.

3 Phase, Tenoner Motor

6471706 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC 145T frame.

6471717 - 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145T frame.

3 Phase, Cope Motor (double shafted) 6471120 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s) 200/230/ 460v, TENV, 143T frame.

# CONTROLS FOR USE WITH MODEL 2-A TENONER -

1 Phase

- Magnetic Controls, 115/230v. 2398381

 Pushbutton Switch, 115/230v.
 Magnetic Controls, 115/230v, w/24v transformer. 2398489

3 Phase

2398131 — Magnetic Controls, 200/230/460/575v.

2398201 — Pushbutton Switch, 200/230/460/575v. 2398482 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100002 — Conduit in lieu of Standard Wiring.

Note: Two Electrical Kits required per machine with Copes, 3 phase only

\*May be specified with 110v transformer.

# - OPTIONAL ACCESSORIES

3109001—Spur Cutter, Wt. 8 oz (.23 kg). (4 Required) 3277001—Cope Head, less knives, upper. Wt. 4 lbs (1.8 kg).

Cope Head, less knives, gibs and screws lower. Wt. 4 lbs (1.8 kg).

Tenon Head, less knives, gibs and screws upper. Wt. 15 lbs (6.8 kg).

3277007--Tenon Head, less knives, gibs and screws lower. Wt. 15 lbs (6.8 kg).

3401005—Lower Tenon Knife. Wt. 8 oz (.23 kg). (2 required) 3401006—Upper Tenon Knife. Wt. 8 oz (.23 kg). (2 required) 3401007—Upper Cope Knife. Wt. 4½ lbs (2.04 kg). (2 required) 3401008—Lower Cope Knife. Wt. 4½ lbs (2.04 kg). (2 required) 6077028—Cope Belt (2 required) 4L560. Wt. 8 oz (.23 kg) ea. 6077046—Tenon Belt (2 required) AA75. Wt. 8 oz (.23 kg) ea.

# **SPECIFICATIONS**

Cope Spindles 13" (330.20 mm) wide

Tenon Head ............2 HP (1.492 kw) 3600 RPM (376.99 rad/s) 

Exactingly years of de operation o mortisers a jumping or

FRAME: Construc vibration-free ope

TABLE: Universal mm) back fence. 14" (355.60 mr mounted handwl

Stock is held fi Front-mounted to straight-line mor

STROKE: Maxim lever through li maximum opera

MORTISER: 3/8' Holddowns, Ur

1400040- N

6471404 -

6471414-

2398386 2398495

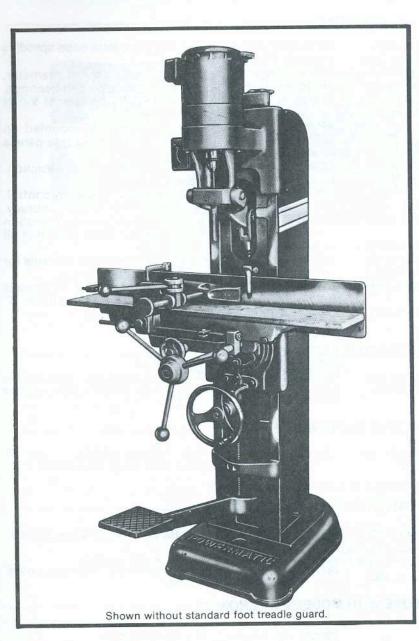
6116007

6116009

Table, lon Tables, ve Fence Chisel-to-Chisel, ce Chuck ca

Table, late

Motor spe

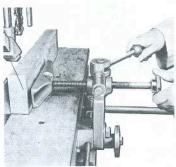


# Powermatic's exclusive construction technique that maximizes machine life

Designed to speed through the most complicated work requirements with clean, crisp cuts every time! Perfectly balanced head precision mounted on a heavy, rigid column assures smooth action without the jumping, pounding or jamming so common in many other mortisers. Day-in, day-out use in hundreds of millwork, pattern and cabinet shops as well as manufacturing operations from coast to coast continues to winhigh acclaim from thousands of experienced and novice operators. No other mortiser is operated easier in continuous production.



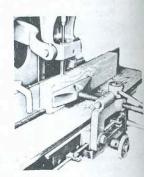
UNIVERSAL TABLE - assures complete flexibility for mortise cuts at any angle. Fast, simple 45° right or left tilting, 14'' (355.60) vertical and 12'' (304.80) longitudinal table adjustment.



QUICK-ACTING **ECCENTRIC CLAMP** — permits fast stock change with complete accuracy in high production operations.



**BUILT-IN FAN** Keeps work clean



SLIDING TABLE RACK — with adjustable stops enables operator to make successive straight-line cuts with utmost precision on the #10 hollow chisel machine.

# POWERMAT

MODEL

# HOLLOW CHISEL MORTISER

Exactingly Powermatic® engineered and built for years of dependable service. Whether in simple shop operation or industrial high production, Powermatic mortisers are famous for precise accuracy without jumping or pounding.

Check each feature carefully for proof of Powermatic® superiority in every type of mortise operation. Compound table with quick-acting stock clamp permits easy, fast and accurate successive cuts at any angle.

# **FEATURES**

FRAME: Constructed of heavy, reinforced castings for extremely rigid support and vibration-free operation.

TABLE: Universal style, 6" x 36" (152.40 mm x 914.40 mm) with 4" (101.60 mm) back fence. Compound rack and pinion unit which tilts 45° right or left with a 14" (355.60 mm) vertical adjustment range operated by convenient, front-mounted handwheel. Lateral handwheel table adjustment 4" (101.60 mm).

Stock is held firmly in position with a quick acting, adjustable eccentric clamp Front-mounted turret wheel operates rack and pinion for full 12" (304.80 mm) straight-line mortising without unclamping work.

STROKE: Maximum depth of cut is 4" (101.60 mm). Stroke is operated by foot lever through linkage which provides for full leverage adjustment. Assures maximum operator production with minimum fatigue.

BITS: Equipped with %" (952, mm) chisel and bit, chuck, 2 chisel bushings and

complete wrench set.

Boring bit is 9'' (228.60 mm) in overall length with a twist of 6'' (152.40 mm). Accommodates soft wood mortise chisels up to 34" (19.05 mm)

MOTOR: Direct drive type, built-in. Choose from either 11/2-HP (1.119 kw) 1-phase (115 or 230-volt) or 3-phase (230 or 460-volt) models for light and medium work requirements, or for extra heavy mortising operations the 2 HP (1.492 kw) 3-phase (230 or 460-volt) motor is recommended.

Motor spindles operate in high-speed ball bearings for years of perfect alignment and trouble-free service. Motor switch is front-mounted for easy operator access.

# STANDARD EQUIPMENT

MORTISER: %" (9.52 mm) chisel and Bit, Key with Key, Eccentric Stock Clamp, Holddowns, Universal Table, Work Stops, 2 Chisel Bushings, Wrench set and

Foot Treadle Guard. Less: Motor and Controls.

# BASIC MACHINE

1400040 - Model 10 Mortiser, with all standard equipment. Less: Motor and Controls.

Note: Not sold less motor.

# MOTORS FOR USE WITH MODEL 10 MORTISER -

1 Phase

6471404 - 11/2" HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 56 frame.

3 Phase

6471414 - 11/2 HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC 56C frame.

6471415 — 1½ HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 56C frame. 6471721 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v,

TEFC, 56C frame.

6471722 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 56C frame.

# CONTROLS FOR USE WITH MODEL 10 MORTISER -

1 Phase

- Pushbutton Switch, 115/230v. 2398386 - Magnetic Controls, 115/230v.

2398495 - Magnetic Controls, 115/230v, w/24v transformer.

3 Phase

2398219 — Pushbutton Switch, 200/230/460/575v. 2398222 — Magnetic Controls, 200/230/460/575v.

2398230 — JIC Controls, 200/230/460/575v: Class 1 only.

2398500 - Magnetic Controls, 220/230/460/575v, w/24v transformer.

9100003 - Conduit in lieu of Standard Wiring.

\*May be specified with 110v transformer.

# **OPTIONAL ACCESSORIES-**

2250091 — Foot Treadle Guard (Floor Mtg)

2250092 - Foot Treadle Guard (Base Mtg.)

2250092 — Foot Ireadle Guard (Base Mtg.)
6116001 — Hollow Chisel, ½" x 4" (6.35 mm x 101.60 mm).
6116002 — Hollow Chisel, ½" x 4" (7.94 mm x 101.60 mm).
6116003 — Hollow Chisel, ¾" x 4" (9.52 mm x 101.60 mm).
6116004 — Hollow Chisel, ¾" x 4" (11.11 mm x 101.60 mm).
6116005 — Hollow Chisel ½ x 4 (12.70 mm x 101.60 mm).
6116007 — Hollow Chisel, ¾" x 4" (15.88 mm x 101.60 mm).
6116009 — Hollow Chisel, ¾" x 4" (19.05 mm x 101.60 mm).

 $\begin{array}{l} 6220003 - \text{Hollow Chisel Drill Bit } 14\text{''} \times 9\text{''} \text{ (6.35 mm} \times 228.60 mm).} \\ 6220004 - \text{Hollow Chisel Drill Bit, } 5\text{/}_{16}\text{''} \times 9\text{''} \text{ (7.94 mm} \times 228.60 mm)} \\ 6220005 - \text{Hollow Chisel Drill Bit, } 36\text{''} \times 9\text{''} \text{ (9.52 mm} \times 228.60 mm)} \\ 6220006 - \text{Hollow Chisel Drill Bit, } 7\text{/}_{16}\text{''} \times 9\text{''} \text{ (11.11 mm} \times 228.60 mm)} \\ 6220007 - \text{Hollow Chisel Drill Bit, } 12\text{''} \times 9\text{''} \text{ (12.70 mm} \times 228.60 mm)}. \\ 6220009 - \text{Hollow Chisel Drill Bit, } 36\text{''} \times 9\text{''} \text{ (15.88 mm} \times 228.60 mm)}. \\ 6220011 - \text{Hollow Chisel Drill Bit, } 34\text{''} \times 9\text{''} \text{ (19.05 mm} \times 228.60 mm)}. \\ \end{array}$ 

### SPECIFICATIONS -

Table	6"	x 3	6"	(152.	40	mm x	914.40	mm)
Table, lateral travel						4''	(101.60)	mm)
Table, longitudinal travel						.12"	(304.80)	mm)
Tables, vertical adjustment						.14"	(355.60)	mm)
Fence								
Chisel-to-table top, maximum.								
Chisel, center-to-back stop, ma								
Chuck capacity								
Motor speed				360	00 F	RPM (	376.99 1	ad/s)

Maximum stock width
Range of depth stop4" (101.60 mm)
Maximum boring depth4" (101.60 mm)
Maximum bit size½" (12.70 mm) shank, 1½" (38.10 mm)
Chisel shank hole diameter
Chisel bushings shank sizes5%" (15.88 mm) & 34" (19.05 mm)
Weight, domestic crated
Weight, export boxed.
(82.4 cu. ft.)



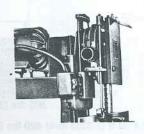
BIG CAPACITY . . . TO SPEED PRODUCTION

Here is the ruggedness, versatility and outstanding performance required for every type of mortising operation . . . big or small. The massive balanced sliding head of the Powermatic® Model 15 Chain Saw Mortiser assures smooth as velvet action which means superb production accuracy with minimum effort for any operator . . . veteran or novice.

Universal table offers increased flexibility . . . so easy to adjust for any type of cut you desire. Advanced safety features and low operating cost mean extra dollar value and extra production in every shop or plant.



RIGID CHIPBREAKER assures smooth, clean, splinter-free cuts on #15 chain saw mortisers.





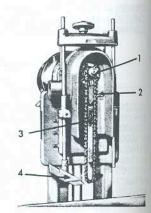
Shown without standard foot treadle guard.

QUICK-ACTING ECCENTRIC CLAMP permits fast stock change with complete accuracy in high production operations.

SLIDING HEAD is spring counter-balanced on heavy, rigid machined column with convenient foot pedal control for safe, easy operation.



CHAIN TENSION ADJUSTMENT is quick and easy. Helps make chain bar and sprocket last much longer. The most important adjustment in mortiser operation.



# SIMPLIFIED MORTISE HEAD MECHANISM

- Built-in chipblower
- Oiler for positive slide lubrica-
- Block-mounted mortise bar for easy adjustment.
- 4. Adjustable chipbreaker

ings for Mounte vibratio TABLE mm) wi and pir (355.60)conven laterally wheel. Stock

FRAME

adjusta handle mm) sti STROK Stroke which i duction HEAD: Runs o

MORTIS Stock C

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6471400 6471707

6471118

2250092

2490004 2490005

2490006

Other N

Table Table, I Table, I Table V Fence Chain-t Chain ( Maximu

All spec

# **FEATURES**

FRAME: Constructed of heavy, reinforced iron castings for extreme rigid support and perfect alignment. Mounted on heavy cast iron base to eliminate annoying vibration.

TABLE: Universal style, 6" x 36" (152.40 mm x 914.40 mm) with 4" (101.60 mm) back fence. Compound rack and pinion unit which tilts 45° right or left with a 14" (355.60 mm) vertical adjustment range operated by convenient, front-mounted hand-wheel. Table may be laterally adjusted up to 4" (101.60 mm) with handwheel.

Stock is held rigidly in position with a quick-acting, adjustable eccentric clamp. Front-mounted turret handle operates rack and pinion for full 12" (304.80 mm) straight line mortising without unclamping work. STROKE: Maximum depth of cut is 6" (152.40 mm). Stroke is easily controlled by foot lever through linkage which provides full leverage adjustment. Speeds production and reduces operator fatigue.

HEAD: Precision built of cast iron with adjustable gibs. Runs on extra long, precision machined ways.

SPINDLE: 1 3/16" (30.16 mm) in diameter, mounted in sealed ball bearings. Spindle is driven with shaft coupled directly to motor. A built-in, spindle-mounted fan keeps work clean and free from dust and chips. CHAIN: Equipped with 38" x 11/2" (9.52 mm x 38.10 mm)

chain, bar and sprocket mortise set as standard equipment. May be fitted with mortise sets from 1/4" x 34'' (6.35 mm x 19.05 mm) to 56'' x 3'' (15.88 mm x 76.20 mm) (available at extra cost).

LUBRICATION: Automatic oiler assembly assures constant oil application to bar slide while machine is in operation to insure long chain life.

MOTOR: 1 HP (.746 kw), 3-phase motor is sufficient for all light mortising operations, up to 3/8" (9.52 mm). For heavier mortising, up to  $\frac{5}{8}$ " (15.88 mm), a 2 HP (1.492 kw) motor is required.  $\frac{1}{2}$  HP (1.119 kw) and 2 HP (1.492 kw) motors are available either 1- or 3-phase.

# STANDARD EQUIPMENT

MORTISER: %" x 11/2" (9.52 mm x 38.10 mm) Mortise set, Eccentric Stock Clamp, Work Holddowns, Chipbreaker, Universal Table, Work Stops, Wrench set, Chipblower, Automatic Oiler and Foot Treadle Guard. Less: Motor and Controls.

1320010 — Model 15 Chain Mortiser with standard equipment for 1 & 11/2 HP (.746 kw & 1.119 kw) motors. Less: Motor and 1320020 - Model 15 Chain Mortiser with standard equipment for 2 HP (1.492 kw) motors. Less: Motor and Controls.

### MOTORS FOR USE WITH MODEL 15 MORTISER

### 1 Phase

11/2 HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 6471400 -

230v, TEFC, 56 frame. 6471707 — 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 145T frame.

3 Phase

6471118-1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 56 frame.

6471119 - 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 56 frame.

6471412 - 11/2 HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s) 200v, TEFC, 56 frame.

6471413 - 11/2 HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/

460v, TEFC, 56 frame. 6471706—2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 145T frame. 6471717—2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145T frame.

# CONTROLS FOR USE WITH MODEL 15 MORTISER

# 1 Phase

2398220 - Pushbutton Switch, 115/230v. 2398386 Magnetic Controls, 115/230v.

2398495 -Magnetic Controls, 115/230v, w/24v transformer.

3 Phase 2398219 -Pushbutton Switch, 200/230/460/575v.

2398222 — Magnetic controls, 200/230/460/575v. 2398230 -JIC Controls, 200/230/460/575v: Class 1 only.

2398500 - Magnetic Controls, 200/230/460/575v, w/24v trans-

9100003 - Conduit in lieu of Standard Wiring.

# \*May be specified with 110v transformer.

2250091 — Foot Treadle Guard (Floor Mtg)

2250092 Foot Treadle Guard (Base Mtg) - 1/4" x 3/4" x 3" (6.35 mm x 19.05 mm x 76.20 mm) Mortise 2490004

set including chain, bar and sprocket. Wt. 1 lb (.45 kg) %" x %" x 3" (9.52 mm x 19.05 mm x 76.20 mm) Mortise 2490005 set including chain, bar and sprocket. Wt. 1 lb (.45 kg)

x 31/2" (6.35 mm x 25.40 mm x 88.90 mm) Mor-2490006 tise set including chain, bar and sprocket. Wt. 1 lb (.45

# OPTIONAL ACCESSORIES

2490007 — 36" x 11/2" x 41/2" (9.52 mm x 38.10 mm x 114.30 mm) Mortise set including chain, bar and sprocket. Wt. 11/4 lbs. (.57 kg). ½" x 1½" x 5" (12.70 mm x 38.10 mm x 12700 mm) Mor-

2490008 tise set including chain, bar and sprocket. Wt. 11/2 lbs. (.68 ka).

Other Mortise sets available. Write factory for information.

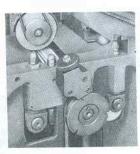
# SPECIFICATIONS

Table		6" x	36"	(152.40 x	914.40	mm)
Table, Lateral Travel				4''	(101.60	mm)
Table, Longitudinal Travel				12"	(304.80	mm)
Table Vertical Adjustment				14"	(355.60)	mm)
Fence	4''	x 36"	(101	.60 mm x	914.00	mm)
Chain-to-Table Top, Maxin	num			14"	(335.60)	mm)
Chain Center-to-Back Stor	o, Maxim	um		4"	(101.60)	mm)
Maximum Stock Width				14"	(335.60	mm)

Range of Depth Stop
Maximum Cutting Depth6" (152.40 mm)
Maximum Usable Mortise Set 5%" x 3" (15.88 mm x 76.20 mm)
Minimum Usable Mortise Set14" x 34" (6.35 mm x 19.05 mm)
Standard Mortise Set Furnished 36" x 11/2" (9.52 mm x 38.10 mm)
Motor Speed
Weight, Domestic Crated



Pictured with optional knife grinding and jointing



Knife Grinder and Jointer (optional) mounted on the main frame of the Planer. Positive indexing feature shown, assures positive locking of the blade in position for sharpening.





One-piece cast iron frame

keeps perfect alignment.



Built for Heavy Work-Loads—Top rollers and pressure bar adjustments are fully visible and can be adjusted without removing guards. Positive clutch to start or stop feed rolls.

# Smoother Surfacing Saves Finishing Time

Smaller shops everywhere applaud the features of this mighty mite of the Powermatic® planer line. Though small in size, cabinet, school, pattern and light-duty millwork shops have found the Model 100 completely adequate for the most precise requirements.

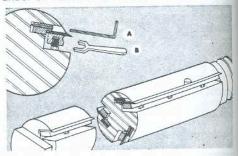
Powermatic® planers, this low-cost model is proving its dependable superior performance year-in and year-out in every type of shop.

The unique chipbreaker construction and perfectly synchronized operation of cutterhead and feed rollers assure virtually gap-free surfacing for a wide variety of stocks at maximum speed. The extra size 12" x 24" (304.80 mm x 609.60mm) one-piece bed is the longest available on any 12" (304.80) planer and assures greater infeed and outfeed support of long stock for more accurate surfacing.

See how fast the Model 100 will start paying for itself in your shop with faster precision production.



The latest addition to this popular Planer is a new Knife grinding and jointing attachment available as an option. The new Model 100 Planer is pre-drilled for accepting the grinding attachment, making the addition or removal of this unit possible in a matter of moments. This attachment now appears on the following page under OPTIONAL ACCESSORIES.



Jackscrews Speed Accurate Knife Setting — a standard

Set and secure all cutterhead knives in as little as half the time. Adjust knife support jackscrews (A) with Allen wrench and pressure-lock knife safety shim (B) with end wrench. Cutterhead mounted in over-size sealed ball bearings. Precision ground and balanced.

piece ca perfect BED: 12 one-pie heavy satin sr Conv

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MODEL steel kr

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\*NOT fo

Bed Feed Table Maxin Stock Wides Short Cutte

# **FEATURES**

FRAME: Precision machined from extra heavy onepiece cast iron. All bearing housings are line bored for perfect bearing alignment.

BED: 12" x 24" (304.80 mm x 609.60 mm), the longest one-piece bed of all 12" (304.80 mm) planers. Built of heavy rib-reinforced cast iron, precision ground to satin smoothness for perfect finishing

Convenient hand-wheel adjusts bed through full 5" (1.59 mm) range, with 1/16" (1.59 mm) movement for each complete turn. Adjacent front-mounted gauge is calibrated for quick, easy reading.

CUTTERHEAD: Safety-type, milled from medium carbon steel and fitted with 3 high-speed knives. Mounted nsealed ball bearings, the entire cutterhead unit may be lifted free by removing feed drive pulley and two locking screws from flange mounting.

Operating speed is 4340 SFM (1322 mm/s), making 16,000 cuts-per-minute (72 knife cuts per inch (2.835 knife cuts per mm). See Knife Adjustment feature on previous page.

FEED ROLLS: Corrugated infeed roller and smooth outfeed roller are 2" (50.80 mm) in diameter and driven with extra heavy pitch gears. 1" (25.40 mm) diameter leed roller journals are mounted in 3" (76.20 mm) shaft

bearings for longer bearing life. Feed roll pressure springs are top mounted over roller and fully visible for quick adjustment.

PRESSURE BAR: Features extra wide foot and is mounted extremely close to cutterhead for perfect outfeed control. Easy to adjust from either end.

CHIPBREAKER: Mounted adjacent to cutting circle for top quality finishing. Accurately machined foot is extra wide for longer wear.

POWER FEED CONTROL: Handy clutch level to start and stop feed instantly without stopping power. 18 feet-per-minute feed rate at 5300 RPM of cutterhead.

STOCK CAPACITY: Surfaces stock up to 12" (304.80 mm) wide and from 1/16" (1.59 mm) to 5" (127.00 mm) thick. Stock length can be as short as 71/2" (190.50 mm) POWER: 2 HP (1.492 kw) motor is adequate for light and medium work; 3 HP (2.238 kw) motor is recommended for heavy-duty operation. Motor is furnished with 2-grove drive pulley.

FEED DRIVE: Positive action V-belt drive assures smooth, trouble-free stock feed. Feed problems associated with gear transmissions are eliminated.

# STANDARD EQUIPMENT

MODEL 100 - 12" PLANER: Stand, set of 3 high speed M-2 tool steel knives, sealed ball bearing cutterhead, knife setting gauge,

jack screws, cutterhead pulley, set of wrenches, motor pulley, belt and swivel type motor base. Less: Motor and Controls.

# **BASIC MACHINES**

100016—Complete Model 100 Planer, with all standard equipment, Less: Motor and Controls.

# MOTORS FOR USE WITH MODEL 100 PLANERS

1 Phase

d

el

6471707 - 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 145T frame.

M72013-3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 182T frame.

3 Phase

871706—2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 145T frame.

6471717 - 2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 145T frame.

6472026 — 3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 182T frame.

6472027 — 3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 182T frame.

# CONTROLS FOR USE WITH MODEL 100 PLANERS

1 Phase

2398383 - Pushbutton Switch, 115/230v.

398385 - Magnetic Controls, 115/230v.

398486 - Magnetic Controls, 115/230v, w/24v transformer.

3 Phase

200/230/460/575v. Magnetic Controls, 200/230/460/575v. 2399204 - Pushbutton Switch, 200/230/460/575v. 2398230 — JIC Controls, 200/230/460/575v

2398481 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003—Wired in Flexible Metal Conduit in lieu of Standard Wiring.

(3 HP motors require minimum of magnetic control.)

# OPTIONAL ACCESSORIES -

230002 — Bed and Feed Roll Gauge. Wt. 1½ lbs (.68 kg). 230007 — Cutterhead Gauge. Wt. 1 lb (.45 kg).

255010-Grinder and Joining Attachment, with indexing mechanism, Wt. 90 lbs (40.8 kg)

NOT for use on model 100 Planners made prior to 1972

2292018 — Shaving Hood. Wt. 15 lbs (6.8 kg) 2759019 — Stand. Wt. 78 lbs (35.4 kg) 6427003 — Set of 3 High Speed, heat treated M-2 Tool Steel Knives. Wt. 1 lb (.45 kg)

# **SPECIFICATIONS**

Bed	1 x 609 60	mm)
and non-biameter (illieed and olitteed)	2" /50 00	
maximum depth of Ctil	1/.11 /0 00	30 m
Stock thickness range		
Widest Stock	(304.80 )	mm)
Cutterhead (3-knife) cutting arc	2 (190.50 r	mm)
	78 (79.38)	mm)

Knife size 1/8" x 7/8" x 121/4" Rate of feed Power recommended for light a Power recommended for heavy Weight, net, with stand	2 cuts per inch (2.835 inch per mm) 
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# **IPOWERMATIC**

Q100

# 12" PLANER

# Pictured with optional dusthood and sound curtain.

# "THE QUIET ONE"

In order to comply with user and Federal Government demands for planer noise reduction, Powermatic Engineering has done it again! Determined to avoid the complications of sharpening and replacing knives in spiral type cutterheads, this fantastic NEW single surface planer still utilizes the straight knife slot, maintaining simple knife installation and sharpening through use of the regular knife grinding and jointing attachment.

Major noise reduction has resulted from this new stagger mount (patented) blade arrangement, and the addition of curtains of accoustical material at entrance and exit areas serve to contain sounds generated within the machine, again reducing the noise pressure.

Smaller shops everywhere applaud the features of this mighty mite of the Powermatic planer line. Though small in size, cabinet, school, pattern and light-duty millwork shops have found the Model Q100 completely adequate for the most precise requirements.

Incorporating many features of the larger Powermatic planers, this low-cost model is proving its dependably superior performance year-in and year-out in every type of shop.

The unique chipbreaker construction and perfectly synchronized operation of cutterhead and feed rollers assure virtually gap-free surfacing for a wide variety of stocks at maximum speed. The extra size 12" x 24" (304.80mm x 609.60mm) one-piece bed is the longest available on any 12" (304.80mm) planer and assures greater infeed and outfeed support of long stock for more accurate surfacing.

### The Quiet Cutterhead

An exclusive feature with Powermatic effectively reduces the noise level of this machine in both idle and cutting conditions. Stagger mounted knives provide a quiet cutting action WITH-OUT use of a spiral cutterhead. High Speed Steel Knives (standard equipment) may be sharpened in the cutterhead through use of a regular Knife Grinding and Jointing Attachment. It is NOT necessary to remove either knives or cutterhead to sharpen.



(Optional) Shaving Hood and Sound Curtain — Designed to further reduce noise levels by containing sound within machine. May be ordered with machine if dust collecting system is available.



Convenient Bed-Adjustment Hand-Wheel
—Acme-thread screws which operate in ball thrust bearings activates bed. Easy-to-read thickness gauge. One-piece cast iron frame keeps perfect alignment.

SEE PAGE 32 FOR DETAILED DRAWINGS OF THE STAGGER MOUNTED KNIFE CUT-TERHEAD piece perfect BED: one-p heavy satin

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MODE high-sp

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2230002 2230007 2258010

> Bed ... Feed R Table F Maximus Stock t Widest Shortes Cutterh

# **FEATURES**

FRAME: Precision machined from extra heavy onepiece cast iron. All bearing housings are line bored for perfect bearing alignment.

BED: 12" x 24" (304.80 mm x 609.60 mm) the longest

one-piece bed of all 12" (304.80 mm) planers. Built of heavy rib-reinforced cast iron, precision ground to satin smoothness for perfect finishing.

Convenient hand-wheel adjusts bed through full 5" (127.00 mm) range, with 1/16" (1.59 mm) movement for each complete turn. Adjacent front-mounted gauge is calibrated for quick easy reading.

CUTTERHEAD: Safety-type, milled from medium caron steel and fitted with 18 high-speed steel knife segments, stagger mounted to create a spiral cutting concept. This exclusive design reduces noise during planing operations through more but smaller bites as knives contact material surface. Cutterhead is mounted in sealed ball bearings requiring no lubrica-

New Jack Screws adjust blades down as well as up, thereby holding blade in cutterhead until screw is removed; an added safety feature to help prevent knives from being thrown from head if loose.

FEED ROLLS: Corrugated infeed roller and smooth outfeed roller are 2" (50.80 mm) in diameter and driven with extra heavy gears. 1" (25.40 mm) diameter feed roller journals are mounted in 3" (76.20 mm) shaft bearings for longer bearing life. Feed roll pressure springs are top mounted over roller and fully visible for quick adjustment.

PRESSURE BAR: Features extra wide foot and is mounted extremely close to cutterhead for perfect outfeed control. Easy to adjust from either end.

CHIPBREAKER: Mounted adjacent to cutting circle for top quality finishing. Accurately machined foot is extra wide for longer wear.

POWER FEED CONTROL: Handy clutch lever to start and stop feed instantly without stopping power, 15 feet per minute (76.20 mm/s) feed rate at 3600 RPM.

STOCK CAPACITY: Surfaces stock up to 12" (304.80 mm) wide and from 1/16" to 5" (1.59 mm to 127.00 mm) thick. Stock length can be as short as 71/2" (190.50 mm) POWER: 2 HP (1.492 kw) motor is adequate for light and medium work; 3 HP (2.238 kw) motor is recom-

mended for heavy-duty operation. Motor is furnished with a 2-groove drive pulley.

FEED DRIVE: Positive action V-belt drive assures smooth, trouble-free stock feed. Feed problems associated with gear transmissions are eliminated.

# STANDARD EQUIPMENT

MODEL Q100 - 12" PLANER: Complete with stand, set of 18 hat-speed steel knives, sealed ball bearing cutterhead, knife setting

gauge, jack screws, cutterhead and motor pulley, drive belt, motor base, set of wrenches. Less: Motor and Controls.

### BASIC MACHINES

1000090 - Complete Model Q100 Planer, with all standard equipment. Less: Motor and Controls.

# MOTORS FOR USE WITH MODEL 100 PLANERS

1 Phase

6471707-2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/

230v, TEFC, 145T frame. 8472013 – 3 HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 182T frame. (Requires Magnetic Control)

3 Phase 6471706—2 HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 145T frame. 2HP (1.492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v,

TEFC, 145T frame.

-2HP (1,492 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 182T frame. (Requires Magnetic Control)

-3HP (2,238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 182

Tframe. (Requires Magnettc Control)

# CONTROLS FOR USE WITH MODEL 100 PLANERS

1 Phase

2398383—Pushbutton Switch, 115/230v. (for 2HP motors only) 2398385—Magnetic Controls, 115/230v.

 Magnetic Controls, 115/230v, w/24v transformer. 3 Phase

2398185 - Magnetic Controls, 200/230/460/575v.

2398204—Pushbutton Switch, 200/230/460/575v. (for 2HP motors only)

2398230—JIC Controls, 200/230/460/575v: Class 1 only. \*2398481 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100003 - Conduit in lieu of Standard Wiring.

May Be Specified With 110v Transformer.

(3 HP motor requires minimum of magnetic control)

# **OPTIONAL ACCESSORIES**

Diamond Wheel for Grinding carbide knives.

2230002—Bed and Feed Roll Gauge, Wt. 1½-lb. (.68 kg) 2230007—Cutterhead Gauge, Wt. 1 lb. (.45 kg) 2230010—Grinder and Jointing Attachment, with indexing mechanism. (For use with HIGH SPEED STEEL KNIVES only.) Wt. 90 lbs. (40.8 kg). Order

2393010-Set of 18 high-speed steel knives. 2393015—Set of 18 Carbide tipped knives 2397045—Shaving Hood and Sound Insulation kit. 9100006—Carbide knives in lieu of HSS. 6900031—Diamond wheel for use on Carbide knives.

# **SPECIFICATIONS**

Bed	m)
Feed Roll Diameter (infeed and outfeed)	m)
Table Holl Diameter	m)
Maximum depth of cut	m)
Stock thickness range	m)
Widest stock	m)
Shortest planable stock (butted)	m)
Cutterhead cutting arc	m)

Knife-cuts-per-inch
Power recommended for light and medium work2HP (1.492 kw) Power recommended for heavy work3Hp (2.238 kw) Weight, net with stand

# First to Offer Quik-Set Table Roll Adjustment as Standard Equipment

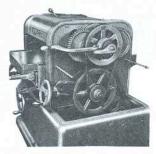


The two outstanding features characteristic of fine surfacing machines, weight and strength, are standard in the heavy duty production Planer the only machine in its price range guaranteed to take a 1/2 (12.70mm) cut. Engineered and built to highest quality standards, this tool features: massive work table, ground to micrometer tolerances. Per manent alignment and wear adjustment is provided by four machined vertical ways and gibs. "Quik-Set" table roll at justment eliminates friction be tween table surface and male rial planed. Raise or lower rolls to your own standards higher for rough cutting, lower for finishing. Truly an industrial machine priced within the budget of Vocational and Technical School Shops.



Roll Adjustment Standard Equipment

Knife Grinder and Jointer (optional) mounts permanently to main Planer frame. Ideally suited for precision sharpening of knives without removal from the head. Heavy 5¼" (133.35 mm) wide guide bar prevents chatter of the jointing head.



Belted Feed Drive Assembly is simple and trouble free. A combination of variable speed pulleys, V-belts, and heavy pitch gears provide smooth, dependable, feed rates without use of expensive and troublesome transmissions and gear-boxes.



"Quick-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adjustments.



Feed Speed Adjustable from 15 FPM to 37 FPM (76.20mm/s to 187.96 mm/s) with variable speed pulley. Sets quickly for every stock or finish requirement.

FRAME: Priron. Extra support. On cast iron based: 16" x machined valignment. thread screen convenients.

Convenie (152.40 mm calibrated CUTTERHI ground an treated Msealed ball lifted free screws fro

feed Rol diameter, yield. Driv oversize m

solid PR terhead ar

MODEL 160 Knives, Knif

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Bed .... Cutterhea Recomme

Knives, 3

Feed rolle Bed rolle Variable

Knife cut Maximur

# **FEATURES**

FRAME: Precision machined from extra heavy cast iron. Extra wide side panels with gibs offer rigid bed support. One-piece 38" x 28" (965.20 mm x 711.20 mm) cast iron base.

BED: 16" x 311/2" (406.40 mm x 800.10 mm) accurately machined with extra heavy rib-reinforcing for perfect alignment. Bed raises and lowers on large acmethread screws mounted on enclosed thrust bearings. Convenient hand-wheel adjusts bed through full 6' (152.40 mm) range. Adjacent front-mounted gauge is calibrated for quick, easy reading.

CUTTERHEAD: Safety-type. Milled slots, precision ground and balanced, fitted with 3 high-speed, heatfreated M-2 tool steel knives. Mounted in over-size sealed ball bearings, the entire cutterhead unit may be lifted free by removing drive pulley and three locking screws from flange mounting.

FEED ROLLS: Upper feed rolls 2 3/16" (55.56 mm) diameter, milled from solid steel. Have 5/8" (15.88 mm) vield. Driven by V-belts from cutterhead spindle to oversize machined gears.

SOLID PRESSURE BAR: Mounted concentric to cutterhead and fitted extremely close to knife-cutting circle. The bar has extra wide foot for long wear and can be adjusted for perfect alignment.

SOLID CHIPBREAKER: Swings concentric to cutterhead and mounted just forward of the knife-cutting circle. Extra wide, accurately machined foot assures longer wear and top quality finish.

POWER FEED CONTROL: Variable speed pulley affords a complete range of feed from 15 to 37 feet per minute (76.20 mm/s to 187.96 mm/s).

STOCK CAPACITY: Surfaces stock up to 16" (406.40 mm) wide and from 1/8" to 6" (3.18 mm to 152.40 mm) thick.

DRIVES: Belted drive (Model 160-B cutterhead is driven by V-belts from motor mounted on the side of machine.

POWER: 3 HP (2.238 kw) motor is recommended for light and medium work, such as pattern shops, schools, etc. 5 HP (37.30 kw) motor is recommended for heavier requirements and production work. 1-or 3-phase motors available.

GRINDING AND JOINTING ATTACHMENT: (Optional). Mounted on extra heavy 51/4" (133.35 mm) bar, precision ground for extreme accuracy. Grinder and jointer may be easily removed from permanently mounted grinder bar when not in use. 1/4 HP (.186 kw), 110 V. motor.

# STANDARD EQUIPMENT

MODEL 160-16" PLANER 3 high-speed, heat treated M-2 Tool Steel Knives, Knife Setting Gauge, Jack Screws, Cutterhead Pulley, Motor Mount Base, Set of Wrenches, Motor Pulley, Belts and Quik-set Table Roll Adjustment, Less: Motor and Controls.

### BASIC MACHINES

1600120-Model 160, BELTED DRIVE 16" x 6" (406.40 mm x 152.40 mm) Single Surface Planer, with all standard equipment. Less Motor and

1600140—Same as 1600120 except with sectional infeed roll and Chipbreaker.

### MOTORS FOR USE WITH MODEL 160 PLANERS

1 Phase 3HP (2.238kw), 60 Hz 3600RPM (376.99 rad/s), 115/230v, TEFC, 182T frame.

- 5HP (3.730 kw), 60 Hz,3600RPM (376.99 rad/s), 115/230v, 6472328 TEFC, 184T frame.

6472026 - 3HP (2.238kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v, TEFC, 182T frame.

6472027 - 3HP (2.238kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 182T frame. 6472319 — 5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v,

TEFC, 184T frame.

6472320 — 5EPC, 1641 frame. 6472320 — 5EPC, 3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 184T frame. 6472507 — 7½HP (5.595 kw), 60 Hz, 3600RPM (376.99 rad/s), 230/ 460v, TEFC, 213T frame.

6472512 — 7½HP (5.595kw), 60 Hz, 3600RPM (376.99 rad/s), 200v. TEFC, 213T frame.

# CONTROLS FOR USE WITH MODEL 160 PLANERS-

1 Phase

Magnetic Controls, 115/230v.

Magnetic Controls, 115/230v. w/24v transformer. 3 Phase

2398186 - Magnetic Controls, 200/230/460/575v.

2398230 - JIC Controls, 200/230/460/575v: Class 1 only.

\*2398498 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100002 - Condiut in lieu of Standard Wiring.

\*May Be Specified With 110v Transformer.

# - OPTIONAL ACCESSORIES

2230002 — Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg) 2230007 — Cutterhead Gauge. Wt. 1 lb (.45 kg). 2258005 — Heavy Duty Knife Grinding and Jointing Attachment with indexing mechanism. (Specify Belted or Direct Drive.) Wt. 90 lbs (40.8 kg).

2292019 — Shaving Hood (6" (152.40 mm) outlet size) Wt. 15 lbs (6.8

kg)

2393004 - Extra set of Knives (3 high speed, heat treated M-2 Tool Steel) Wt. 21/2 lbs (1.13kg).

2397061 — Kit, Conversion, sectional chipbreaker and infeed roller. (Retro-fit.)

3250015 - Belt Guard for 3600 RPM (376.99 rad/s) Motor. 3717026 - 2-Grove B-section Motor Pulley for 3600 RPM (376.99 rad/s) Motor.

# SPECIFICATIONS

Knives, 3, high speed steel ..... to 37FPM (187.96mm/s)  Motors recommended for: 

# First to Offer Quick-Set Table Roll Adjustment as Standard Equipment!!



"THE QUIET ONE"

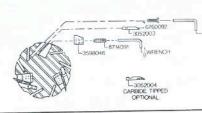
In order to comply with user and Federal Government demands for Planer noise reduction, Powermatic Engineering has done it again! Determined to avoid the complications of sharpening and replacing knives in spiral type cutterheads, this fantastic NEW single surface planer still utilizes the straight knife slot, maintaining simple knife installation and sharpening through use of the regular grinding and jointing attachment.

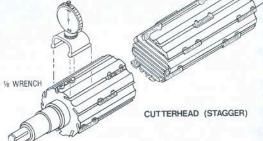
Major noise reduction has resulted from the new stagger mount (patented) blade arrangement, and the addition of curtains of accoustical material at entrance and exit areas serve to contain sounds generated within the machine, again reducing the noise level pressure.

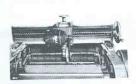
Shown with optional knife grinding and jointing attachment and dusthood and sound curtain.

"THE QUIET ONE" cutterhead knives are set, secured and adjusted in a minimum of time.

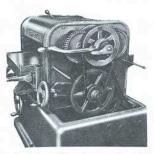
Each blade is inserted, locked or adjusted with individual jack screws, retainer plugs and lock screws. Remove or replace individual blades easily and quickly.







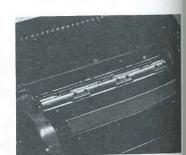
Knife Grinder and Jointer — (optional). Ideally suited for precision sharpening of knives without removal from the head. Heavy 54' (133.35mm) wide guide bar prevents chatter of the jointing head.



Belted Feed Drive Assembly — is simple and trouble free. A combination of variable speed pulleys, V-belts, and heavy pitch gears provide smooth, dependable, feed rates without use of expensive and troublesome transmissions and gear-boxes.



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adjustments.



The Quiet Cutterhead — an exclusive feature with Powermatic effectively reduces the noise level of this machine in both idle and cutting conditions. Stagger mounted knives provide a quiet cutting action WITHOUT use of a spiral cutterhead. High-Speed Steel Knives (standard equipment) may be sharpened in the cutterhead through use of the regular Knife Grinding and Jointing attachment. It is NOT necessary to remove either knives or cutterhead to sharpen.

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT.

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BED: mach align acme

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MODE

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1600130

647201 647232

647202 647202

2398189

239818

2230002 2230007 2258005

2393011

Bed . . . Cutterh Recom Belte Knives, Feed ro Bed rol Variabl

Maximus Stock to Widest

# FEATURES

FRAME: Precision machined from extra heavy cast iron. Extra wide side panels with gibs offer rigid bed support. One piece 38" x 28" (965.20 mm x 711.20 mm) cast iron base.

BED: 16" x 311/2" (406.40mm x 800.10mm) accurately machined with extra heavy rib-reinforcing for perfect alignment always. Bed raises and lowers on large acme-thread screws mounted on enclosed thrust

Convenient hand-wheel adjusts bed through full 6" (152.40 mm) range. Adjacent front-mounted gauge is calibrated for quick easy reading.

CUTTERHEAD: Safety-type, milled from medium carbon steel and fitted with 24 High-Speed steel knife segments, stagger mounted to create a spiral cutting concept. This exclusive design reduces noise during planing operations through more but smaller bites as knives contact material surface. Cutterhead is mounted in sealed ball bearings requiring no lubrica-

New Jack Screws adjust blades down as well as up thereby holding blade in cutterhead until screw is removed; an added safety feature to help prevent knives from being thrown from cutterhead.

New blade retainers are plug type that the centrifugal force of the turning cutterhead tend to wedge tighter.

CHIPBREAKER: Swings concentric to cutterhead and mounted just forward of the knife-cutting circle, solid or sectional.

POWER FEED CONTROL: Variable speed pulley affords a complete range of feed from 15 to 37 feet per minute (76.20 mm x 187.96 mm).

STOCK CAPACITY: Surfaces stock up to 16" (406.40 'mm) wide and from 1/8" to 6" (3.18 mm to 152.40 mm) thick.

DRIVES: Belted drive cutterhead is driven by V-belts from motor mounted on the side of machine.

POWER: 3HP (2.238 kw) motor is recommended for light and medium work, such as pattern shops, schools, etc. 5HP (3.730 kw) motor is recommended for heavier requirements and production work. 1 or 3-phase motors available.

# STANDARD EQUIPMENT

MODEL Q160 PLANER: Complete with 24 high-speed steel knives, sealed ball bearing cutterhead, knife setting gauge, jack screws,

cutterhead and motor pulley, 2 drive belts, Quik-set table roll adjustment, motor base, set of wrenches, belt guard. Less: Motor and Controls.

# BASIC MACHINES

1600130—Complete Model Q160, 16" Planer with all standard equipment. Less: Motor and Controls.

1600150-Same as 1600130 except w/sectional infeed roll and chipbreaker.

# -MOTORS FOR USE WITH MODEL 160 PLANERS -

6472013 -

3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 182T frame. 5HP (3.730kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, 6472328 -

TEFC, 184T frame. 3 Phase

6472026 — 3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 182T frame.
6472027 — 3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v,

TEFC, 182T frame.

6472319 — 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 184T frame.
6472320 — 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 184T frame.
6472507 — 7½HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 213T frame.

6472512 — 7½HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 213T frame.

# -CONTROLS FOR USE WITH MODEL 160 PLANERS -

1 Phase

2398189 — Magentic Controls, 115/230v. 2398494 — Magnetic Controls, 115/230v, w/24v transformer. 3 Phase

2398186 - Magnetic Controls, 200/230/460/575v.

2398230 — JIC Controls, 200/230/460/575v: Class 1 only 2398498 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100002 - Conduit in lieu of Standard Wiring.

\*May Be Specified With 110v Transformer.

# OPTIONAL ACCESSORIES

2230002—Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg)
2230007—Cutterhead Gauge. Wt. 1 lb (.45 kg).
2258005—Heavy Duty Knife Grinding and Jointing Attachment with Indexing
Mechanism. For use with HIGH-SPEED STEEL KNIVES only. Wt. 90 lbs (40.8 kg)—order Diamond wheel for grinding carbide knives. 2393011—Set of 24 High-Speed Steel Knives.

2393016—Set of 24 Carbide Tipped Knives.

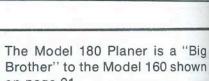
2397040—Shaving Hood and Sound Insulation Kit.

2397040—Straving mood and South Insulation Rt.
2397061—Kit, Conversion, Sectional Chipbreaker and Infeed Roller. (Retro-Fit)
3250015—Belt Guard for 3450 RPM Motor Wt. 5 lbs (2.3 kg).
9100007—Carbide knives in lieu of H-SS.
6900031—Diamond Grinding wheel for use on carbide knives.

# - SPECIFICATIONS

| Recommended cutterhead speed, | 3600 SFM (18.288 m/s) | Belted drive | 3600 SFM (18.288 m/s) | Rnives, Size | 3/16" x 1" x 21/4" (4.76 mm x 25.40 mm x 57.15 mm) | Feed rolls | 23/16" (55.56 mm) | Bed rollers | 2" (50.80 mm) | Variable speed feed range | 15 FPM (76.20 mm/s) to 37FPM (187.96 mm/s) | Maximum depth of cut | 1/2" (12.70 mm) | Stock thickness range | 1/8" (3.18 mm) to 6" (152.40 mm) | Widest planable stock | 16" (406.40 mm) Recommended cutterhead speed,

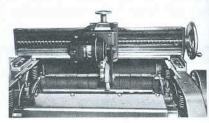
Shortest planable stock, butted	01.60 mm) 330.20 mm)
Motors recommended for: Light & medium work 3HP (2.238 kw) to 5HP	(3.730 mm)
Weight, export boxed with motor (63.9 cu it (1.606 limit)	90 kg) App.
Weight, net, less motor	(499.0 kg)





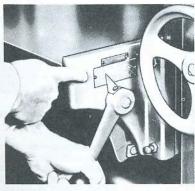
on page 31.
The capacity is increased to plane material 18" x 6" (457.20 mm x 152.40 mm). It is even more ruggedly constructed to handle this heavier work load with the same assurance of top performance.

With the same but proportionately larger features and accessories, here is a machine that takes its place in industry for a wide variety of planing requirements. Unexcelled for school applications.

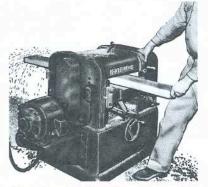


Knife Grinder and Jointer (optional) mounts permanently to the main frame. Ideally suited for precision sharpening of knives without removal from head. Heavy 51/4" (133.35mm) wide guide bar prevents chatter of the jointing head.

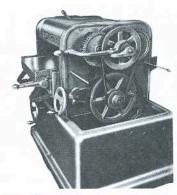
Quik-Set Table Roll Adjustment Standard Equipment



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adjustments.



Feed Speed Adjustable from 15 to 37FPM (76.20mm/s to 187.96mm/s) with variable speed pulley. Sets quickly for every stock or finish requirement.



Belted Feed Drive Assembly is simple and trouble free. A combination of variable speed pulleys, V-belts, and heavy pitch gears provide smooth dependable feed rates without use of expensive and troublesome transmissions and gear boxes.

1041.40 gibs to s BED: machine mm). B screws I CUTTER mm) cu treated slots, is duty bal FEED F diamete vield. D oversize SOLID terhead extra wi ends fo

FRAME: one-pied

> MODEL 1 Steel Kni

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6472026

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> 2230002 2230007 2258005

2292020

Bed ... Cutterhe Recomn Belted Knives,

Feed roll Variable

Knife cu All spec

# — FEATURES -

FRAME: Exceptionally heavy cast iron frame with one-piece cast iron base, 32" x 41" (812.80 mm x 1041.40 mm). Frame has extra wide side panels with gibs to support planer bed.

BED: Heavy, substantially ribbed, accurately machined. Table size, 18" x 32" (457.20 mm x 812.80 mm). Bed raises and lowers on large acme-thread screws mounted on enclosed thrust bearings.

CUTTERHEAD: 3 knife, safety type, with 4" (101.60 mm) cutting circle, fitted with 3 high speed, heat treated M-2 Tool Steel knives. Cutterhead has milled slots, is precision balanced and is mounted in heavyduty ball bearings.

FEED ROLLS: Upper feed rolls 23/16" (55.56 mm) diameter, milled from solid steel. Have 5%" (15.88 mm) yield. Driven by V-belts from cutterhead spindle to oversize machined gears.

SOLID PRESSURE BAR: Mounted concentric to cutterhead and fitted close to knife cutting circle. Bar has extra wide foot for long wear. Can be adjusted on both ends for perfect alignment.

CHIPBREAKER: The chipbreaker swings concentric to the cutterhead and fits very close to the knifecutting circle, solid or sectional.

RATE OF SPEED ADJUSTMENT: A complete range from 15 to 37 feet per minute (76.20 mmx 187.96 mm) is offered with the use of variable speed pulley.

DRIVES: Cutterhead is driven with V-belts from motor mounted on the side of machine. Cutterhead speed, 4800 RPM (502.65 rad/s).

KNIFE GRINDING AND JOINTING ATTACHMENT: The Model 180 knife grinding and jointing attachment is mounted on an extra heavy 51/4" (133.35 mm) bar, precision ground for accuracy. The grinder bar is mounted in a permanent position on the machine and grinder or jointer are easily removed from bar when not in use.

# — STANDARD EQUIPMENT -

MODEL 180 - 18" PLANER: 3 high-speed, heat treated M-2 [ool Steel Knives, sealed Ball Bearing Cutterhead, Knife setting Gauge,

Jack Screws, Cutterhead Pulley, Motor Mount Base, Motor Pulley, Belts, set of Wrenches and Quik-set Table Roll Adjustment. Less: Motor and Controls.

# BASIC MACHINES

1800050-Model 180, BELTED DRIVE 18" x 6" (457.20 mm x 152.40 mm) Single Surface Planer with all standard equipment. Less Motor and

1800170—Same as 1800050 except with sectional Infeed roll and Chipbreaker.

# - MOTORS FOR USE WITH MODEL 180 PLANER -

# 1 Phase

- 6472013 3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 182T frame.
- 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v, TEFC, 184T frame.
- 3 Phase
- -3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 182T frame.
- 3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200 v, TEFC, 182T frame.
- 6472319 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 184T frame.
  6472320 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200 v, TEFC, 184T frame.
  6472507 7½HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 213T frame.
  6472512 7½HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 213T frame.

# CONTROLS FOR USE WITH MODEL 180 PLANER -

# 1 Phase

- 2398189 Magnetic Controls, 115/230v. 2398494 Magnetic Controls, 115/230v, w/24v transformer.
  - \*May be specified with 110v transformer.

- 2398186 Magnetic Controls, 200/230/460/575v.
- 2398230 JIC Controls, 200/230/460/575v: Class 1 only.
- \*2398498 Magnetic Controls, 200/230/460/575v, w/24v transformer.
- 9100002 Conduit in lieu of standard wiring.

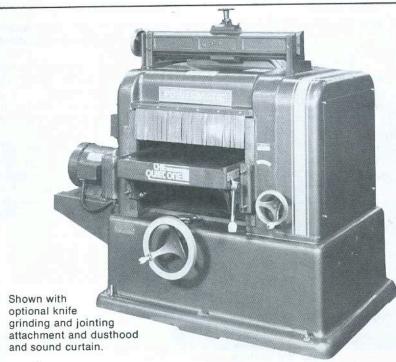
# - OPTIONAL ACCESSORIES -

- 2230002 Bed and Feed Roll Gauge. Wt. 1 lb .45 kg.) 2230007 Cutterhead Gauge. Wt. 1 lb (.45 kg).
- 2258005 Heavy Duty Knife Grinding and Jointing Attachment with indexing mechanism. Wt. 90 lbs (40.8 kg). 2292020 Shaving Hood (6" (152.40 mm) outlet size). Wt. 15 lbs
- (6.8 kg).
- 2393005 Extra set of Knives, 3 highspeed, heat treated M-2 Tool Steel. Wt. 2½ lbs (1.1 kg).
- 2397062 Kit, Conversion, Sectional Chipbreaker and Infeed Roller. (Retro-Fit)
- 3250015 Belt Guard for 3600 RPM (376.99 rad/s) Motor. Wt. 6 lbs (2.7 kg).
- 3717026 2-Groove B-section Motor Pulley for 3600 RPM (376.99 rad/s) Motor. Wt. 3 lbs (1.4 kg).

### SPECIFICATIONS

- .....18" x 32" (457.20 mm x 812.80 mm) Recommended cutterhead speed
- Belted drive . . . . Knives, 3 high speed steel

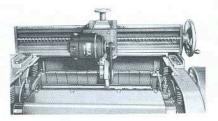
- Motors recommended for:
- Light and medium work ......3HP (2.238 kw) to 5HP (3.730 kw)
- Weight, export crated, with motor (63.9 cu ft (1.808 mm)
- All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice.



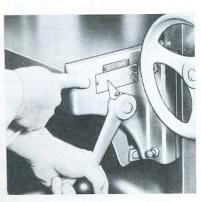
The Quiet Cutterhead — an exclusive feature with Powermatic effectively reduces the noise level of this machine in both idle and operating conditions. Stagger mounted knives provide a quiet cutting action WITHOUT use of a spiral cutterhead. High-Speed Steel Knives (standard equipment) may be sharpened in the cutterhead through use of the regular Knife Grinding and Jointing Attachment. It is not necessary to remove either knives or cutterhead to sharpen.

In order to comply with user and Federal Government demands for Planer noise reduction, Powermatic Engineering has done it again! Determined to avoid the complications of sharpening and replacing knives in spiral type cutterheads, this fantastic NEW single surface planer still utilizes the straight knife slot, maintaining simple knife installation and sharpening through use of the regular grinding and jointing attachment.

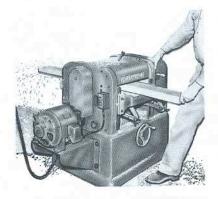
Major noise reduction has resulted from this new stagger mount (patented) blade arrangement, and the addition of curtains of accoustical material at entrance and exit areas serve to contain sounds generated within the machine, again reducing the noise level pressure.



Knife Grinder and Jointer (optional) mounts permanently to the main frame. Ideally suited for precision sharpening of knives without removal from head. Heavy 51/4" (133.35mm) wide guide bar prevents chatter of the jointing head.



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adjustments.



Feed Speed Adjustable from 15 to 37 feet per minute (76.20 mm to 187.96 mm) with variable speed pulley. Set quickly for every stock or finish requirement.



Belted Feed Drive Assembly is simple and trouble free. A combination of variable speed pulleys, V-belts, and heavy pitch gears provide smooth dependable feed rates without use of expensive and troublesome transmissions and gear-boxes.

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

FRAME one-pie 1041.40 gibs to BED: H chined. Bed rai mounte CUTTE bon ste segmer concep planing knives mounte tion. New Ja thereby moved: from be

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Bed ... Cutterhe Recomm Belted Knives, S Feed roll Bed rolle Variable

Maximu

# POWERMATIC<sup>®</sup>

# 18" PLANER

# **FEATURES**

FRAME: Exceptionally heavy cast iron frame with one-piece cast iron base, 32" x 41" (812.80 mm x 1041.40 mm). Frame has extra wide side panels with ibs to support planer bed.

BED: Heavy, substantially ribbed, accurately machined. Table size, 18" x 32" (457.20 mm x 812.80 mm). Bed raises and lowers on large acme-thread screws

mounted on enclosed thrust bearings.

CUTTERHEAD: Safety-type, milled from medium carbon steel and fitted with 27 High-Speed steel knife segments, stagger mounted to create a spiral cutting concept. This exclusive design reduces noise during planing operations through more but smaller bites as knives contact material surface. Cutterhead is mounted in sealed ball bearings requiring no lubrication.

New Jack Screws adjust blades down as well as up thereby holding blade in cutterhead until screw is removed; an added safety feature to help prevent knives from being thrown from cutterhead.

New blade retainers are plug type that the centrifugal force of the turning cutterhead, tend to wedge tighter.

FEED ROLLS: Upper feed rolls 2 3/16" (55.56 mm) diameter, milled from solid steel. Have %" (15.88 mm) yield. Driven by V-belts from cutterhead spindle to oversize machined gears.

SOLID PRESSURE BAR: Mounted concentric to cutterhead and fitted close to knife cutting circle. Bar has extra wide foot for long wear.

CHIPBREAKER: The chipbreaker swings concentric to the cutterhead and fits very close to the knifecutting

circle. Solid or sectional.

RATE OF SPEED ADJUSTMENT: A complete range from 15 to 37 feet per minute (76.20 mm x 187.96 mm) is offered with the use of variable speed pulley.

DRIVES: Cutterhead is driven with V-belts from motor mounted on the side of the machine. Cutterhead speed, 3600 SFM (18.288 m/s).

### STANDARD EQUIPMENT

MODEL Q180 PLANER: Complete with 27 high-speed Steel Knives, sealed ball bearing cutterhead, knife setting gauge, jack screws,

cutterhead and motor pulley, 2 drive belts, Quik-set table roll adjustment, motor base, set of wrenches, belt guard. Less: Motor and Controls.

# **BASIC MACHINES**

1800160-Model Q180 Belt Driven Planer with all standard equipment. Less: Motor and Controls.

1800180—Same as 1800160 except with sectional infeed roll and chipbreaker.

# MOTORS FOR USE WITH MODEL 180 PLANER

1 Phase

3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/ 230v, TEFC, 182T frame. 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v,

TEFC, 184T frame.

3Phase 6472026 -3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 182T frame.

6472027 - 3HP (2.238 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 182T frame.

6472319 - 5HP (3.730 kw), 60 Hz, 3600 RPM 376.99 rad/s), 230/460v, TEFC, 184T frame.

5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v. 6472320

TEFC, 184T frame. 7½HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 213T frame. 6472507

6472512 -71/2HP (5.595 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200 v. TEFC, 213T frame.

# CONTROLS FOR USE WITH MODEL 180 PLANER

1 Phase

2398189 - Magnetic Controls, 115/230v.

2398494 — Magnetic Controls, 115/230v, w/24v transformer.

\*May Be Specified With 110v Transformer

3 Phase

2398186 — Magnetic Controls, 220/230/460/575v.
2398230 — JIC Controls, 200/230/460/575v: Class 1 only.
\*2398498 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100002 -Wired in flexible metal conduit in lieu of standard wiring.

# **OPTIONAL ACCESSORIES -**

2230002—Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg). 2230007—Cutterhead Gauge. Wt. 1 lb (.45 kg).

2258005—Heavy Duty Knife Grinding and Jointing Attachment with indexing mechanism. Wt. 90 lbs (40.8 kg) For use with high speed steel knives. Order Diamond wheel for carbide knives.

2393012—Extra set of Knives (27 high speed, heat treated M-2 Tool Steel) Wt. 21/2 lbs (1.13 kg).

2392017—Set of 27 carbide tipped knives

2397047—Set of 27 Carbide tipped knives.
2397041—Shaving Hood and Sound Insulation Kit.
2397062—Kit, Conversion, Sectional Chipbreaker and Infeed Roller. (Retro-Fit)
3250015—Belt Guard for 3600 RPM (376.99 rad/s) Motor.
3717026—2 Grove B-section Motor Pulley for 3600 RPM (376.99 rad/s) Motor.
9100008—Carbide knives in lieu of HSS.
6900031—Diamond Grinding Wheel for Carbide knives.

#### **SPECIFICATIONS**

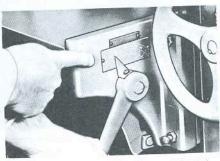
Bed
Belted drive
Knives, Size 3/16" x 1" x 21/4" (4.76 mm x 25.40 mm x 57.15mm)
Feed rollers
Bed rollers
Variable speed food range
Maximum depth of cut

Stock thickness range 1/8" (3.18 mm) to 6" (152.40 mm)
Widest planable stock
Shortest Planable stock, butted4" (101.60 mm)
Shortest planable stock, not butted
Motors recommended for:
Light and medium work 3HP (2.238 kw) to 5 HP (3.730 kw)
Heavy duty work
Weight, domestic crated, with motor1255 lbs (569.3kg) App.
Weight, export crated, with motor (63.9 cu ft (1.808 mm)

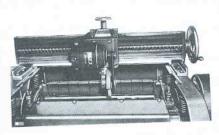


School, Millwork and Pattern Shops, as well as high production plants, have discovered that the Powermatic® 20" Planer is unsurpassed for dependable, precision performance in a wide variety of planing requirements. More weight, strength and individual desirable features make the model #221, truly the outstanding value in its class.

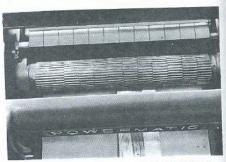
Model 221-B Belted Drive Shown with optional knife grinding and jointing attachment.



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adiustments.



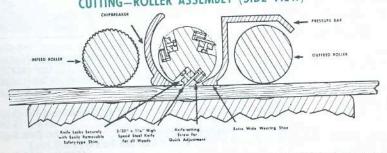
Knife Grinding and Jointing Attachment (Optional) Keeps knives with a perfect edge al-ways! Permanently mounted, extra heavy 6" (152.40 mm) grinder bar is precision ground for smooth, accurate operation. Grinder is belt driven by 1/3 HP (.249 kw) 1-phase, 115 Volt motor. Grinder and Jointer are easily removed from bar when not in use.



Sectional Infeed Roll corrugated 4" (101.60 mm) diameter, 1" (25.40 mm) sintered nickel steel sections mounted on milled alloy steel spline shaft. Reversible without damage. Each section has independent yield ¼" (6.35 mm), necessary in running strip stock of varying thickness without dangerous kickback.



# CUTTING-ROLLER ASSEMBLY (SIDE VIEW)





Proper use of optional Micrometer Knife setting gauge will maintain equal knife height, assuring a smooth, even planed surface. Check knife height with Dial Indicator immediately upon receipt of your new machine. Knives are set approximately .125" above cutterhead surface. When knives are ground or a new set installed, care should be taken to re-set to original height.

FRAME: Pre with gibs of BED: 20 1/8" heavy rib-re and lowers CUTTERHE with 3 high-(104.78 mr FEED ROLL with mounti Feed rolls fi **Outfeed Ro** Infeed Roll: Table Rolls PRESSURE knife cutting

> MODEL 22 Tool Steel Gauge, Ja

mounted ju

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6472328

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FOR JIC (

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2292021 2393006

Cutterhead Cutting circ Cutterhead Knives, 3 h

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# FEATURES

FRAME: Precision machined from extra heavy cast iron. Extra wide side panels

att gibs offer rigid bed support and perfect alignment.

160: 20 ½ x 40" (511.18 mm x 1016.00 mm), accurately machined with extra heavy no-reinforcing for perfect alignment and maximum strength. Bed raises nd lowers on large acme-thread screws, mounted on enclosed thrust bearings. with a head solvers, included on enclosed thrust bearings. With the wind significant and balanced, fitted with a high-speed, heat treated M-2 Tool Steel knives, 5/32" x 1¼" x 20" (3.97 m) x 31.75 mm x 508.00 mm). Mounted in over-size, sealed ball bearings. 4½" 104.78 mm) cutting circle.

FED ROLLS: Milled from solid steel. Extra large, 4" (101.60 mm) in diameter with mounting yield of 1/4" (6.35 mm). Mounted in sealed-for-life ball bearings.

ted folls fully reversible on 3 phase current only.

Outleed Roll: Smooth, 4" (101.60 mm) diameter, solid type.

Initiated Roll: Corrugated, 2" (50.8 mm) sectional type standard, factory installed.

Table Rolls: Two, adjustable 234" diameter.

PRESSURE BAR: Mounted concentric to cutterhead and fitted extremely near

CHIPBREAKER: Sectional, factory installed. Swings concentric to cutterhead and mounted just forward of the knife-cutting circle.

POWER FEED CONTROL: Variable from 20 to 50 feet per minute (101.60 mm/s to 254.00 mm/s). Driven by 1 HP (.746 kw) totally enclosed motor mounted in base. Controlled by side mounted instantly reversing drum switch.

STOCK CAPACITY: Surfaces stock up to 20" (508.00 mm) wide and from 1/6" (3.18 mm) to 8" (203.20 mm) thick.

DRIVE: Belted drive (Model 221-B) cutterhead is driven by V-Belts from motor mounted on the side of the machine.

mounted on the side of the machine.

ELECTRICALS: Machine standard equipped with magnetic controls protecting both feed and drive motor. With this safety feature, both motors shut off instantly in the event of overload, low voltage and power failure. Motors will not restart until activated by operator.

# STANDARD EQUIPMENT

MODEL 221 - 20" PLANER: Set of 3 high-speed, heat treated M-2 Tool Steel Knives, Sealed Ball Bearing Cutterhead, Knife setting Gauge, Jack Screws, Cutterhead Pulley, Sectional Infeed Rolls and

Chipbreaker, Motor Mount Base, 1 HP (.746 kw) Feed Drive Motor, set of Wrenches, Quik-Set Table Roll Adjustment, Motor Pulley, Belts and Belt Guard. Less: Motor and Controls.

# BASIC MACHINES

1220090—Model 221, BELTED DRIVE 20'' x 8'' (508.00 mm x 203.20 mm) Single Surface Planer, with all standard equipment. 3 Ph infeed Motor. Less: Cutterhead Motor and Controls

1220190—Model 221, Belted drive 20" x 8" (508.00 mm x 203.20 mm) Single Surface Planer, with all standard equipment. 1 phase infeed motor. Less: Cutterhead Motor and Controls.

# MOTORS FOR USE WITH MODEL 221 PLANERS -

1 Phase Cutterhead Motors 6472328 -

5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 230v, TEFC, 184T frame.

3 Phase Cutterhead Motors

5HP (3.730kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 184T frame.

5HP (3.730kw), 60 Hz, 3600 RPM (376.99 rad,s), 200v, TEFC, 213T frame.

6472507 — 71/2HP (5.595kw), 60 Hz, 3600 RPM (376.99 rad /s), 230/460v, TEFC, 213T frame.

6472512 -71/2HP (5.595kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC 213T frame.

6472604 ---10HP (7.460kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/

460v, TEFC, 215T frame. 6472606 — 10HP (7.460kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 215T frame.

Infeed Motors included with Basic Machine. Specify voltage.

# **CONTROLS FOR USE WITH MODEL 221 PLANERS**

# 1 Phase

2398502 — Magnetic Controls, 115/230v. 2398503 — Magnetic Controls, 115/230v, w/24v transformer.

### 3 Phase

2398195 -Magnetic Controls, 200/230/460/575v.

2398501 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100002 - Conduit in lieu of standard wiring.

# FOR JIC CONTROLS, PLEASE CONSULT FACTORY

# **OPTIONAL ACCESSORIES -**

2230002 - Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg).

2230007 - Cutterhead Gauge. Wt. 1 lb (.45 kg).

2258006 -Knife Grinding and Jointing Attachment. Wt. 100 lbs (45.4 kg).

Shaving Hood, 6" (152.40mm) outlet. Wt. 25 lbs (11.3 kg). Set of 3 High-speed, heat treated M/2 Tool Steel Knives. Wt. 31/2 lbs (1.6 kg)

3250064 - Belt Guard for 3600RPM (376.99 rad/s) Motor. Wt. 10 lbs (4.5kg)

3717012--3 Groove B Section 5.45" (138.43 mm) Pulley for 3600 RPM (376.99 rad/s) Motor. Wt. 6 lbs. (2.7kg).

# **SPECIFICATIONS**

Cutting circle Cutterhead speed belted drive Knives, 3 high-speed steel Feed rollers Bed rollers Variable speed feed range	
Knife-cuts per minute belted driv Maximum depth of cut	20 to 50 FPM (101.60 mm/s to 254.00 mm/s) 14,400

Stock thickness range
Light & medium work
1/2.TO 111 HD /5 EGE km to 7 400 km
Weight aumestic crated with motor
83.3 cu ft (2.3588 m3)
Weight, export boxed, with motor
93.1 cu ft (2.6366 m3)

# **IPOWERMATIC**

**Q221** 

# 20" PLANER

Totally Enclosed Fan Cooled Motor Standard

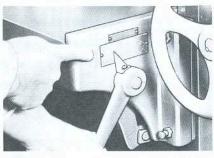


"THE QUIET ONE"

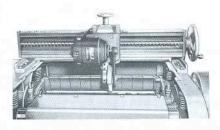
In order to comply with user and Federal Government demands for Planer noise reduction, Powermatic Engineering has done it again! Determined to avoid the complications of sharpening and replacing knives in spiral type cutterheads, this fantastic NEW single surface planer still utilizes the straight knife slot, maintaining simple knife installation and sharpening through use of the regular grinding and jointing attachment.

Major noise reduction has resulted from this new stagger mount (patented) blade arrangement, and the addition of curtains of accoustical material at entrance and exit areas serve to contain sounds generated within the machine, again reducing the noise level pressure.

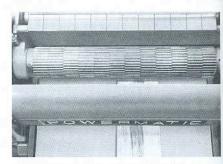
Shown with optional knife grinding and jointing attachment and dusthood and sound curtain.



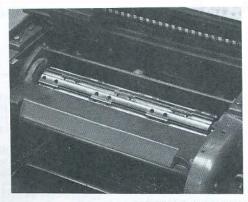
"Quik-Set" feature offers level controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. Quik-Set eliminates friction and constant under-the-table roll adjustments.



Knife Grinding and Jointing Attachment (Optional) Permanently mounted, extra heavy 6" (152.40 mm) grinder bar is precision ground for smooth, accurate operation. Grinder is belt driven by 1/3 HP (.249 kw) 1-phase, 115 Volt motor. Grinder and Jointer are easily removed from bar when not in use. Must use diamond wheel to grind carbide knives.



Sectional Infeed Roll corrugated 4" (101.60 mm) diameter, 2" 50.8 mm) cast iron sections mounted on milled alloy steel spline shaft. Reversible without damage. Each section has independent yield of 14" (6.35 mm), necesisary in running strip stock of varying thickness without dangerous kickback.



The Quiet Cutterhead — an exclusive feature with Powermatic effectively reduces the noise level of this machine in both idle and cutting conditions

Stagger mounted knives provide a quiet cutting action WITHOUT use of a spiral cutterhead. High-Speed Steel Knives (standard equipment) may be sharpened in the cutterhead through use of the regular Knife Grinding and Jointing attachment. It is not necessary to remove either knives or cutterhead to sharpen.

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

FRAME: side pand BED: 20 with extr strength mounted

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diameter for-life b only. Infeed R

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# POWERMATIC<sup>®</sup>

# 20" PLANER

# FEATURES

FRAME: Precision machined from extra heavy cast iron. Extra wide side panels with gibs offer rigid bed support and perfect alignment. BED: 201/6" x 40" (511.18mm x 1016.00mm), accurately machined with extra heavy rib-reinforcing for perfect alignment and maximum strength. Bed raises and lowers on large acme-thread screws, mounted on enclosed thrust bearings.

CUTTERHEAD: Safety-type, milled from medium carbon steel and fitted with 30 High Speed Steel Knife segments, stagger mounted to create a spiral cutting concept. This exclusive design reduces noise evel during planing operations through more but smaller bites as knives contact material surface. Cutterhead is mounted in sealed ball bearings requiring no Jubrication.

New Jack Screws adjust blades down as well as up, thereby holding blade in cutterhead until screw is removed; an added safety feature to help prevent knives from being thrown from head if loose. New blade Retainers are plug type that tighten from centrifugal

force of turning cutterhead.

FEED ROLLS: Milled from tool steel. Extra large, 4" (101.60mm) in diameter with mounting yield of  $\frac{1}{4}$ " (6.35mm). Mounted in sealed-for-life ball bearings. Feed rolls fully reversible on 3 phase current

Infeed Roll: Corrugated, 2" (50.8 mm) sectional type standard, fac-

Outfeed Roll: Smooth 4" (101.60mm) diameter, solid type with two adjustable, 2%" (69.85mm) table idler rollers.

TABLE ROLLS: Two, fully adjustable 23/4" diameter.

PRESSURE BAR: Mounted concentric to cutterhead and fitted extremely near knife cutting circle.

CHIPBREAKER: 2" (50.8 mm) ductile iron, sectional type with independent 3/8" (9.52 mm) yield. Sections are mounted on a steel bar just forward of the knife cutting circle and swing concentric to the cutterhead

POWER FEED CONTROL: Variable from 20 to 50 feet per minute (101.60mm/s to 254.00mm/s). Driven by 1HP (.746kw) totally enclosed motor mounted in base. Controlled by side mounted instantly reversing drum switch.

STOCK CAPACITY: Surfaces stock up to 20" (508.00mm) wide and from 1/8" (3.18mm) to 8" (203.20mm) thick.

DRIVES: Belted drive cutterhead is driven by V-Belts from motor mounted on the side of machine.

**ELECTRICALS:** Machine standard equipped with magnetic controls protecting **both** feed and drive motor. With this safety feature, **both** motors shut off instantly in the event of overload, low voltage and power failure. Motors will not restart until activated by operator.

# - STANDARD EQUIPMENT -

MODEL Q221, 20" BELT DRIVEN PLANER: Complete with set of 30 High Speed Steel Knives, sealed ball bearing cutterhead, knife setting gauge, jack screws, cutterhead and motor pulley, drive belts,

sectional infeed roll and chipbreaker, motor mount base, 1HP feed drive motor, Quik-Set table roll adjustment and belt guard. Less: Main Drive Motor and Controls.

# BASIC MACHINES

1220300—Model Q221, 20" Belt Driven Planer with all standard equipment, 3 Ph feed drive motor. Less: Main Drive Motor and Controls.

1220320 - Model Q221, 20" Belt Driven Planer with all standard equipment, 1 Ph feed drive motor. Less: Main Drive Motor and Controls.

# MOTORS FOR USE WITH MODEL 221 PLANERS

1 Phase Cutterhead Motors

-5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 230v, TEFC, 184T frame.

3 Phase Cutterhead Motors

5HP (3.730kw), 60,Hz, 3600RPM (376.99 rad/s), 230/460v, — 5HP (3.730kw), 60, Hz, 3600RPM (376.99 rad/s), 200, 400, TEFC, 184T frame.

— 5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 184TC frame.

6472507 — 7½HP (5.595kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v, TEFC, 213T frame.
6472512 — 7½HP (5.595kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 213T frame.
6472604 — 10HP (7.460kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v, TEFC, 215T frame.
6472606 — 10HP (7.460kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 215T frame.

Infeed Motors included with Basic Machine, Specify voltage.

# CONTROLS FOR USE WITH MODEL 221 PLANERS

1 Phase

2398502 — Magnetic Controls, 115/230v. 2398503 — Magnetic Controls, 115/230v, w/24 transformer.

FOR JIC CONTROLS, PLEASE CONSULT FACTORY

3 Phase

2398195 — Magnetic Controls, 200/230/460/575v. - 2398501 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100002 — Wired in flexible metal conduit in lieu of standard wiring.

\*May be specified with 110v transformer.

# OPTIONAL ACCESSORIES

2230002—Bed and Feed Roll Gauge, Wt. 1 lb (.45 kg). 2230007—Cutterhead Gauge, Wt. 1 lb (.45 kg). 2258006—Knife Grinding and Jointing Attachment. For use with HIGH SPEED STEEL KNIVES. Order diamond wheel for carbide knives. Wt. 100 lbs

(45.4 kg). 2393013—Set of 30 High Speed Steel Knives. 2393018—Set of 30 Carbide Tipped Knives.

2397042—Shaving Hood and Insulation Kit.
3250064—Belt Guard. Wt. 10 lbs (4.5 kg).
3717012—3-Grove B-Section 5.45" (138.43 kg) Pulley for 3600 RPM (376.99)
Motor. Wt. 6 lbs (2.7 kg).
9100009—Carbide knives in lieu of HSS.
6900031—Diamond grinding wheel.

# - SPECIFICATIONS

 
 Bed
 .201/8" x 40" (511.18mm x 1016.00mm)

 Cutterhead
 .3%" (98.42mm)

 Cutting circle
 .4½" (104.76mm)

 Cutterhead speed
 .3600SFM (18.288 m/s)

 Knives, Size
 .3/16" x 1" x 2½" (4.76mm x 25.40mm x 57.15mm)

 Feed rollers
 .4" (101.60mm) dia.

 Bed rollers
 .2¾" (69.85mm) dia.

 Variable speed feed range
 .20FPM (101.60mm/s) to 50FPM (254.00mm/s)

 Maximum depth of cut
 .½" (12.70mm)

 Stock thickness range
 .½" (3.18mm) to 8" (203.20mm)
 

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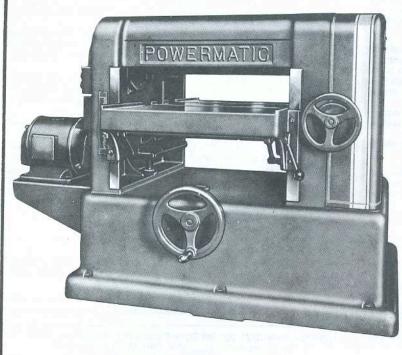
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Model 225-B, Belted Drive

# Adjust from rough to semi-finished stock in a second!

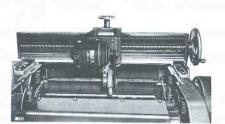
big, rugged . . . for cabinetry and high production accuracy

Regardless of the stock, from heavy, structural laminates to finished glued panels... the Powermatic\* 24" planer has proved highly dependable for unerring accuracy and extremely smooth surfacing qualities.

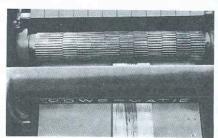
In finer cabinet work, the precision performance of this planer cuts finishing time to the bare minimum. Its big capacity assures a maximum range of flexibility as important for the smaller shop as it is for the larger industrial operation.



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. If you are tired of the "push-pull" planing method. Quik-Set eliminates friction and constant under-the-table roll adjustments.



Knife Grinding and Jointing Attachment (Optional) Keeps knives with a perfect edge always! Permanently mounted, extra heavy 6" (152.40 mm) grinder bar is precision ground for smooth, accurate operation. Grinder is belt driven by 1/3 HP (.248 kw); 1-phase, 115 Volt motor. Grinder and Jointer are easily removed from bar when not in use.



Sectional Infeed Roll corrugated 4" (101.60 mm) diameter, 2" (50.8 mm) cast iron sections mounted on milled alloy steel spline shaft. Reversible without damage. Each section has independent yield of ¼" (6.35 mm), necessary in running strip stock of varying thickness without dangerous kickback.



Knife Indexer

Quick acting plunger type indexing locks cutterhead securely for grinding knives. Predetermined and pre-set stops properly position knife.



Variable Feed Control

Hand wheel is easy to reach, easy to set. Adjusts rate of feed from 20 to 100FPM (101.60mm/s to 508.00mm/s).

# FEATURES

FRAME: Precision machined from extra heavy cast ron. Extra wide side panels with gibs offer rigid bed support and perfect alignment. One-piece base.

BED: 24" x 48" (609.60 mm x 1219.20 mm), accurately machined with extra heavy rib reinforcing for perfect alignment and maximum strength. Surface precision ground from a one-piece casting. Bed raises and lowers on large acme-thread screws mounted on enclosed thrust bearings.

Convenient handwheel adjusts bed through full 8"

(203.20 mm) range.

CUTTERHEAD: Safety-type, milled slots, precision ground and balanced, fitted with 4 high-speed heat reated M-2 tool steel knives, 5/32" x 1/4" x 24" (3.97 mm x31.75 mm x 609.60 mm). Mounted in over-size, sealed ball bearings. 43%" (111.12 mm) cutting circle.

Infeed Roll: Corrugated 4" (101.60 mm) diameter, 2" (50.8 mm) cast iron sections mounted on milled alloy steel spline shaft. Reversible without damage to springs on 3 phase motors only.

Outfeed Roll: Smooth, 4" (101.60 mm) diameter solid

TABLE ROLLS; Two adjustable, 4" (101.60 mm) diameter, power driven rolls.

PRESSURE BAR: Mounted concentric to cutterhead

and fitted extremely near knife-cutting circle. The bar has extra wide foot for long wear.

CHIPBREAKER: 2" (50.8 mm) ductile iron, sectionaltype with independent 1/4" (6.35 mm) yield. Sections are mounted on a steel bar just forward of the knife-cutting circle and swing concentric to the cutterhead.

POWER FEED CONTROL. Variable speed pulley affords complete range of feed from 20 to 100 feet per minute (101.60 mm/s to 508.00 mm/s). Driven with 11/2 HP (1.119 kw) totally enclosed motor mounted in machine base.

POWER: 5 HP (3.730 kw) motor is recommended for light and medium work loads. For extra heavy and high production requirements, the 71/2 to 15 HP (5.59 kw to 11.190 kw) motor is recommended.

ELECTRICALS: Machine standard equipped with magnetic controls protecting both feed and drive motor. With this safety feature both motors shut off instantly in the event of overload, low voltage or power failure. Motors will not restart until activated by the operator.

# STANDARD EQUIPMENT-

MODEL 225 - 24" PLANER: Set of 4 high-speed, heat treated M-2 Tool Steel Knives, 4-Knife round Cutterhead mounted in sealed ball bearings, Knife setting Gauge, Jack Screws, Cutterhead Pulley, Sectional Infeed Rolls and Chipbreaker, Motor Mount Base, 11/2 HP Feed Drive Motor, set of Wrenches, Motor Pulley, Belts and Belt Guard. Less: Cutterhead Motor and Controls.

# **BASIC MACHINES**

1240040 -- Model 225, BELTED DRIVE 24" x 8" (609.60mm x 203.20 mm) Single Surface Planer, with all standard equipment and 3 Phase Infeed Motor. Less: Cutterhead Motor and Controls.

1240110 - Model 225, DIRECT DRIVE 24" x 8" (609.60mm x 203.20 mm) Single Surface Planer, with all standard equipment and 3 Phase Infeed Motor. Less: Cutterhead Motor and Controls.

1240130 - Model 225, BELTED DRIVE 24" x 8" (609.60mm x 203.20mm) Single Surface Planer, with all standard equipment and 1 Phase Infeed Motor. Less: Cutterhead Motor and Controls.

1240150 - Model 225, DIRECT DRIVE 24" x 8" (609.60mm x 203.20mm) Single Surface Planer, with all standard equipment and 1 Phase Infeed Motor. Less: Cutterhead Motor and Controls.

# CONTROLS FOR USE WITH MODEL 225 PLANERS

# 1 Phase

2398502 - Magnetic Controls, 115/230v.

2398503 — Magnetic Controls, 115/230v, w/24v transformer.

### 3 Phase

2398195 — Magnetic Controls, 200/230/460/575v.

2398501 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 910002 — Conduit in lieu of Standard Wiring.

May be specified with 110v control.

(FOR JIC CONTROLS, PLEASE CONSULT FACTORY)

# **OPTIONAL ACCESSORIES**

2068001 - Cutterhead Brake. Wt. 6 lbs (2.7 kg).

2230002 — Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg). 2230007 — Cutterhead Gauge. Wt. 1 lb (.45 kg). 2258007 — Knife Grinding and Jointing Attachment. Wt. 105 lbs (47.6 kg).

- Shaving Hood, 8" (203.20mm) cutlet. Wt. 30 lbs (13.6 kg). 2292022 -

2393008 — Set of 4 high-speed, heat treated M-2 Tool Steel Knives. Wt. 51/2 lbs (2.5kg).

Belt Guard for 3600 RPM (376.99 rad/s) Motor. Wt. 10 lbs 3250064 -

3717012 - 3 Groove B-Section 5.45" (138.43mm) Pulley for 3600 RPM (376.99 rad/s) Motor. Wt. 6 lbs (2.7 kg).

# MOTORS FOR USE WITH MODEL 225 PLANERS

1 Phase Cutterhead Motors

6472328 — 5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 230v, TEFC, 184T frame.

3 Phase Cutterhead Motors

6472319 — 5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v 184T frame.

6472320 — 5HP (3.730kw), 60 Hz, 3600RPM (376.99 rad/s), 200v, TEFC, 184T frame.

6472507 — 7½HP (5.595kw), 60 Hz, 3600RPM (376.99 rad/s), 230/460v, TEFC, 213T frame. 6472512 — 7½HP (5.595kw) 60 Hz, 3600RPM (376.99 rad/s), 200v,

213T frame.

6472604 — 10HP (7.460kw), 60 Hz, 3600RPM (376.99 rad/s) 230/460v, TEFC, 215T frame.

6472606 — 10HP (7.460kw), 60 Hz, 3600RPM (376.99 rad/s), 200v. TEFC, 215T frame.

6472702 — 15HP (11.190kw), 60 Hz, 3600RPM (376.99 rad/s), 200, TEFC, 254T frame.

6472703 — 15HP (11.190kw), 60 Hz, 3600 RPM (376.99 rad/s) 230/460v, TEFC, 254T frame.

(15HP Motor Available on Belted Drives Only)

Infeed Motors included with Basic Machines. Specify voltage.

# **SPECIFICATIONS**

Bed
Cutterhead
Recommended cutterhead speed, belted drive
Knives (4), high-speed steel
Feed rollers
Heed rollers
Knife-cuts-per-minute, 19,200 belted drive 14,400

1	
	Maximum depth of cut         ½' (12.70mm)           Stock thickness range         ½" (3.18mm) to 8" (203.20mm)           Widest planable stock         24" (609.60mm)           Shortest planable stock, butted         4" (101.60mm)           Shortest planable stock, not butted         13" (330.20mm)
	Motors recommended for: Light and medium work5HP (3.730kw) to 7½HP (5.595kw) Heavy duty work10HP (7.460kw) to 15HP (11.190kw) Weight, export boxed, less motor (92.1 cu ft (2.6083m3)
	Weight, export boxed, with motor (123.8 cu ft (3.506m3)
	Weight, domestic crated, with motor

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# "THE QUIET ONE"

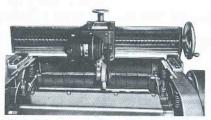
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Major noise reduction has resulted from this new stagger mount (patented) blade arrangement, and the addition of curtains of accoustical material at entrance and exit areas serve to contain sounds generated within the machine, again reducing the noise level pressure.

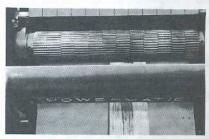
Shown with optional knife grinding and jointing attachment and dusthood and sound curtain.



"Quik-Set" feature offers lever controlled table roll height adjustment from 0" to .040" (1.02 mm) at a touch. If you are tired of the "push-pull" planing method. Quik-Set eliminates friction and constant under-the-table roll adjustments.



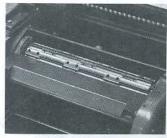
Knife Grinding and Jointing Attachment (Optional) Keeps knives with a perfect edge always! Permanently mounted, extra heavy 6" (152.40 mm) grinder bar is precision ground for smooth, accurate operation. Grinder is belt driven by 1/3 HP (.248 kw), 1-phase, 115 Volt motor. Must use diamond wheel to grind carbide knives.



Sectional Infeed Rolls are corrugated, 4" (101.60 mm) diameter, 2" (50.8 mm) cast iron sections mounted on milled alloy steel spline shaft. Reversible without damage. Each section has independent yield of ¼" (6.35 mm), necessary in running strip stock of varying thickness without dangerous kickback.



(Optional) Shaving Hood and sound curtain kit designed to further reduce noise levels by containing sound within machine. Order with machine if dust collecting system is available.



ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

The Quiet Cutterhead — An exclusive feature with Powermatic effectively reduces the noise level of this machine in both idle and cutting conditions. Stagger mounted knives provide a quiet cutting action WITHOUT use of a spiral cutterhead. High Speed Steel Knives (standard equipment) may be sharpened in the cutterhead through use of the regular Knife Grinding and Jointing attachment.

# **FEATURES**

FRAME: Precision machined from extra heavy cast iron. Extra wide side panels with gibs offer rigid bed support and perfect alignment. One-piece base.

BED: 24" x 48" (609.60 mm x 1319.20 mm), accurately machined with extra heavy rib-reinforcing for perfect alignment and maximum strength. Surface precision ground from a one-piece casting. Bed raises and lowers on large acme-thread screws mounted on thrust bearings.

CUTTERHEAD: Safety-type, milled from medium carbon steel and fitted with 36 High Speed Steel Knife segments, stagger mounted to create a spiral cutting concept. This exclusive design reduces noise during planing operation through more but smaller bites as knives contact material surface. Cutterhead is mounted

in sealed ball bearings requiring no lubrication.

New Jack Screws adjust blades down as well as up, thereby holding blade in cutterhead until screw is removed; an added safety feature to help prevent knives from being thrown from head if loose.

New BLADE RETAINERS are plug type that the centrifugal force of the turning

cutterhead tend to wedge tighter Infeed Roll: Corrugated 4" (101.60 mm) diameter, 2" (50.8 mm) cast iron sections mounted on milled alloy steel spline shaft. Reversible without damage to springs on 3 phase motors only.

Outfeed Roll: Smooth 4" (101.60 mm) diameter solid type

TABLE ROLLS: Two, adjustable, 4" (101.60 mm) diameter, power driven rolls. PRESSURE BAR: Mounted concentric to cutterhead and fitted extremely near knife-cutting circle. The bar has extra wide foot for long wear.

CHIPBREAKER: 2'' (50.8 mm) ductile iron, sectional-type with independent (6.35 mm) yield. Sections are mounted on a steel bar just forward shafife-cutting circle and swing concentric to the cutterhead.

POWER FEED CONTROL: Variable speed pully affords complete range of a from 20 feet per minute (101.60 mm/s) to 100 feet per minute (508.00 m Driven with 11/2 HP (1.119 kw) totally enclosed motor mounted in machine to

POWER: 5 HP (3.730 kw) motor is recommended for light and medium in loads. For extra heavy and high production requirements, the 71/2 to 15 HP 55 kw to 11.19 kw) motor is recommended.

ELECTRICALS: Machine standard equipped with magnetic controls protein both feed and drive motor. With this safety feature, both motors shut off insafe in the event of overload, low voltage or power failure. Motors will not restate activated by the operator.

Noise leve on your b chine into available tion to di decibels



Kit include ings, and includes a mounting

\*NOTE: Thes cutterhead s

"THE

For Mod

2397046 cutte beari 2397055 -

For Mod

2397047 inclu knive 2397048

inclu kniv 2397056

For Mo

2397049 incl

kniv

2397050 incl

2397057

For Mo

2397051 incl kniv 2397052

inc kni 2397058

# STANDARD EQUIPMENT

MODEL Q225, 24" PLANER - Complete with set of 36 High Speed Steel Knives, sealed ball bearing cutterhead, knife-setting gauge, jack screws, sectional infeed roll and chipbreaker, motor mount base, 11/2HP (1.119 kw) feed drive motor, set of wrenches, motor pulley, belts and guard. (on belt drive models). Less: Cutterhead Motor and Controls.

# **BASIC MACHINES**

1240160 - Model Q225, 24" Belt Driven Planer complete with all standard equipment and 11/2HP (1.119kw), 3 Ph feed drive motor. Less: Cutterhead Motor and Controls.

Motor Q225, '24" Belt Driven Planer complete with all standard equipment and 1½HP (1.119kw), 1 Ph feed drive motor Less: Cutterhead Drive Motor and Controls.

1240180 - Model Q225, 24" Direct Drive Planer complete with a standard equipment and 11/2HP (1.119kw), 3 Ph feet drive motor.

Less: Cutterhead Drive Motor and Controls. Model Q225, 24" Direct Drive Planer complete with all standard equipment and 1½HP (1.119kw), 1 Ph feel 1240190 drive motor Less: Cutterhead Drive Motor and Controls.

# CONTROLS FOR USE WITH MODEL 225 PLANERS -

#### 1 Phase

2398502 -Magnetic Controls, 115/230v

2398503 Magnetic Controls, 115/230v, w/24v transformer.

2398195 - Magnetic Controls, 200/230/460/575v.

2398501 — Magnetic Controls, 200/230/460/575v, w/24v transformer 9100002 — Conduit in lieu of Standard Wiring.

(FOR JIC CONTROLS, PLEASE CONSULT FACTORY) \*May be specified with 110v transformer.

# MOTORS FOR USE WITH MODEL 225 PLANERS

# 1 Phase Cutterhead Motors

6472328 5HP (3.730 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230v, TEFC, 184T frame. 3 Phase Cutterhead Motors

6472319 - 5HP (3.730kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, 184T frame. 6472320 -

5HP (3.730kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 184T frame.

TEFC, 184T frame.

— 7½HP (5.595kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, TEFC, 213T frame.

— 7½HP (5.595kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 213T frame. 6472507 -

6472512 -

6472604 - 10Hp (7.460kw), 60 Hz, 3600 RPM (376.99 rad/s), 230 460v, TEFC, 215T frame.

- 10HP (7.460kw), 60 Hz, 3600RPM (376.99 rad/s), 200 6472606

6472702

TEFC, 215T frame.

15HP (11.190kw), 60 Hz, 3600 RPM (376.99 rad/s), 200, TEFC, 254T frame.

15HP (11.190kw) 60 Hz, 3600 RPM (376.99 rad/s), 230 460v, TEFC, 254T frame. 6472703 (15HP Motor available on Belted Drives Only)

Infeed Motors included with Basic Machines. Specify voltage

### **OPTIONAL ACCESSORIES**

2068001-Cutterhead Brake. Wt. 6 lbs (2.7 kg) -Bed and Feed Roll Gauge. Wt. 1 lb (.45 kg) -Cutterhead Gauge. Wt. 1 lb (.45 kg).

Knife Grinding and Jointing Attachments. For use with HIGH SPEED STEEL KNIVES. Order diamond wheel for carbide knives. Wt. 105 lbs (47.6 kg). 2393014—Set of 36 High Speed Steel Knives

2393019-Set of 36 Carbide Tipped Knives 2397043-Shaving Hood and Insulation Kit.

3250064—Belt Guard, Wt. 10 lbs (4.5 kg). 3717012—3-Grove B-Section 5.45" (138.43 mm) Pulley. Wt. 6 lbs (2.7 kg)

9100010-Carbide knives in lieu of HSS.

6900031-Diamond Grinding Wheel

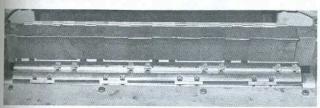
# - SPECIFICATIONS

Bed	
Recommended cutterhead speed	A TANK A STATE OF STA
Recommended cutterhead speed, belted drive direct drive	3600 SFM (18.288 m/s)
Knives Size3/16" x 1" x 21/4" (4.	76mm x 25 40mm x 57 15mm)
Feed rollers	4" (101.60mm)
Bed rollers	4" (101.60mm)
Variable speed feed range20	
Maximum depth of cut	

8	ATTOMS —
	Stock thickness range
	Motors recommended for:
	Light and medium work5HP (3.730kw) to 7½HP (5.595kw) Heavy duty work10HP (7.460kw) to 15HP (11.190kw)
	Weight, export boxed,
	less motor (92.1 cu ft (2.6083 m3)
	Weight, export boxed,
	with motor (123.8 cu ft (3.506 m3)
	Weight, domestic crated, with motor 2885 lbs (1308.6kg) App

# "THE QUIET ONE" RETROFIT KIT FOR STANDARD PLANERS

Noise levels too high on your Powermatic Planer? OSHA on your back? . . . . Then transform your present machine into a "Quiet One". Special conversion kits are now available containing all parts necessary for field installation to drastically reduce planer noise . . . 10 to 12 decibels or more.



Kit includes cutterhead knives, jack screws, knife retainers, bearings, and couplings or pulleys, belts as required. Shaving hood kit includes accoustical barrier lined hood plus barrier curtains and mounting hardware.

NOTE: These kits are not designed to fit old direct Drive Planers where motor and cutterhead shaft are the same. Consult Factory.

# "THE QUIET ONE" RETROFIT KIT LISTINGS

#### For Model 100 Planer

ed

2397046 — Conversion kit for Model 100 Planers, including cutterhead with stagger mounted, high speed steel knives and bearings.

2397055 - Shaving Hood and Curtain kit for Model 100 Planer.

#### For Model 160 Planer

2397047 — Conversion kit for DIRECT DRIVE Model 160 Planers, including cutterhead with stagger mounted, high speed steel knives, bearings and special flexible coupling.

2397048 — Conversion kit for BELT DRIVEN Model 160 Planers, including cutterhead with stagger mounted high speed steel knives, bearings, drive belts and pulleys as required.

2397056 — Shaving Hood and Curtain kit for Model 160 Planers.

# For Model 180 Planer

2397049 — Conversion kit for DIRECT DRIVE Model 180 Planers, including cutterhead with stagger mounted high speed steel knives, bearings and special flexible coupling.

2397050 — Conversion kit for BELT DRIVEN Model 180 Planers, including cutterhead with stagger mounted high speed steel knives, bearings, drive belts and pulleys as required.

2397057 - Shaving Hood and Curtain kit for Model 180 Planers.

# For Model 221 Planer

2397051 — Conversion kit for DIRECT DRIVE Model 221 Planers, including cutterhead with stagger mounted high speed steel knives, bearings and special flexible coupling.

2397052 — Conversion kit for BELT DRIVEN Model 221 Planers, including cutterhead with stagger mounted high speed steel knives, bearings, drive belts and pulleys as required.

2397058 - Shaving Hood and Curtain kit for Model 221 Planers.

Only the cutterhead conversion kit is required if you have NO dust collecting system. If your shop is equipped with dust collecting facilities, then order the cutterhead AND shaving hood kits. The addition of the shaving hood and curtain kits will further reduce the noise level.



# For Model 225 Planer

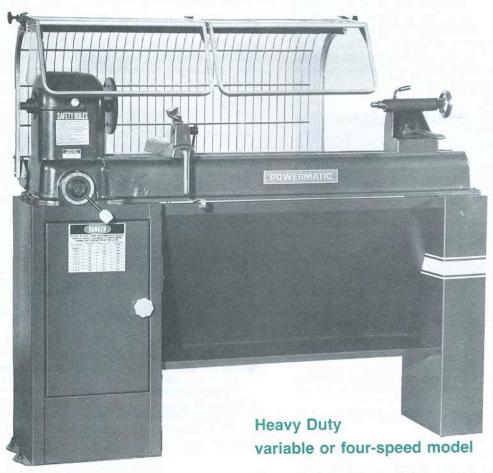
2397053 — Conversion kit for DIRECT DRIVE Model 225 Planers, including cutterhead with stagger mounted high speed steel knives, bearings and special flexible coupling.

2397054 — Conversion kit for BELT DRIVEN Model 225 Planers, including cutterhead with stagger mounted high speed steel knives, bearings, drive belts and pulleys as required.

2397059 — Shaving Hood and Curtain kit for Model 225 Planers.







From cabinet and school shops to industrial high production, the Powermatic® 45 is acclaimed superior in its field! The big one-piece cast iron bed and rugged reinforced steel cabinet base assure vibrationfree performance on every job.

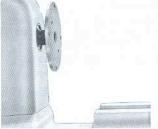
For wood turning, metal spinning, or both . . . large or small job precision performance is simple in record time, with safety.



Instant Set Speed Control is easy to read without stooping or bending. Large calibrations for fast, accurate setting.



Constant, Smooth Cutting Precision assured through non-slip drive mechanism. Cutting tool cuts freely and evenly with minimum effort.



Choice of Straight or Gap Bed. 12" (304.80mm) stock capacity over straight bed. 16" (406.40mm) stock capacity over gap.

Wood Turning Lathe Guard is made in two sections and moveable left to right — or right to left to provide maximum operator protection.

2250123 .....guard



CAPACIT bed: 16" between BED: One ing, rib-re rigidity. S HEADST drive fro rad/s) or 3000 RP 314.16 r extra lar operatio SPINDL wheel. ground Accurat for No.

> MODEL (304.80m

for easy

1450250 1450260

647070

23981 23981 23981

\*May

Ove Swi Wid Var

All

For Slow Start Feature-Magnetic controls with special slow start feature. Specify phase desired (See page 50)

# **FEATURES**

CAPACITY: Swing 12" (304.80 mm) over straight lathe bed; 16" (406.40 mm) over gap bed. 39" (990.60 mm) between centers.

BED: One-piece construction of finest grey iron casting, rib-reinforced for perfect alignment and maximum rigidity. Standard bed length 59" (1498.60 mm).

HEADSTOCK: Available with built-in variable speed drive from 330 to 2100 RPM (34.56 rad to 219.91 rad/s) or with four-speed drive of 600, 1100, 1800 & 3000 RPM (62.83 rad/s, 115.19 rad/s, 188.50 rad/s & 314.16 rad/s). Drive pulley spindle mounted between extra large sealed for life-ball bearings for smoother operation at any speed.

SPINDLE: 60-stop type with steel plunger-type index wheel. Machined from carbon steel and precision ground for perfect running alignment and balance. Accurately milled 1" (25.40 mm)-8 thread nose is bored for No. 2 Morse Taper. Locking pin holds spindle rigid for easy faceplate removal.

TAILSTOCK: 1" (25.40 mm) tailstock spindle is bored for a No. 2 Morse Taper. The center may be easily removed by using the large hand-wheel and tailstock screw.

MOTOR DRIVE: Motor is mounted in lathe cabinet with wide V-belt and two variable sheaves (in variable speed model) or multiple mounted inverse pulleys in fourspeed model). Drive fully accessible through cover at top of lathe head and cabinet door.

LATHE BASE: Ruggedly built of heavy-gauge, reinforced steel. Designed for complete vibration-free operation. Large hinged door for quick access to motor and tool storage area in base. Full length chip deflec-

MOTOR SWITCH: Pushbutton type mounted away from exposed operational area to prevent accidental engagement. Slow start standard on variable speed models.

# STANDARD EQUIPMENT

MODEL 45 LATHE: One 6" (152.40 mm) Tool Rest, one 12" (304.80mm) Tool Rest, one Cup Center, one Spur Center, one Faceplate Wrench, one 7" (177.8 mm) Face Plate, one Center Drift Rod, Index Wheel, Tool Support, Tailstock Wrench, Motor Base, V-belt, Motor Pulley and Guard. Less: Motor and Controls.

# BASIC MACHINES

- 1450250 - Model 45 Gap Bed Lathe, with all standard equipment. 4-speed
- 1450260 Model 45 Straight Bed Lathe, with all standard equipment. 4-speed.
- 1450270 Model 45 Gap Bed Lathe, with all standard equipment. Variable Speed and Slo start. (Magnetic Controls only!)
- Model 45 Straight Bed Lathe, with all standard equip-1450280 ment. Variable speed and Slo start. (Magnetic Controls only!)

# MOTORS FOR USE WITH MODEL 45 LATHES

1 Phase

6470700 3/4HP (.56kw), 60 Hz, 1800 RPM (188.5 rad/s), 115/230v, TEFC, 56 frame.

3 Phase 34HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/s), 575v, TEFC, 56 frame. 6470702 -

%HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/s), 230/460v, TEFC, 56 frame. %HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/s), 200v, TEFC, 56 frame. 6470707 -

6470712 -

# CONTROLS FOR USE WITH MODEL 45 LATHES

1 Phase

2398114 - Pushbutton Switch, 115/230v.

2398144 — Magnetic Controls, 115/230v.

2398152—Magnetic Controls, 115/230v, w/24v transformer.

3 Phase

Pushbutton Switch, 200/230/460/575v.

2398150—Magnetic Controls, 200/230/460/575v, w/24v transformer. 2398151—Magnetic Controls, 200/230/460/575v.

9100003—Conduit in lieu of standard wiring.

\*May be specified with 110v Transformer.

Optional Accessories-(See Page 52)

### SPECIFICATIONS

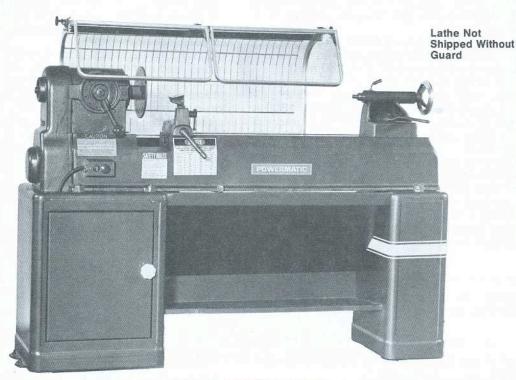
Overall Length	)
Distance between centers	)
Swing over bed	)
Swing over gap	()
Width of gap	()
variable Speed range330RPM (34.56 rad/s) to 2100 RPM (219.91 rad/s	(
Tailstock Quill travel	)
Spindle, inboard and outboard 1" (25.40mm)	
8 Thread	9

Step pulley, four speed drive600 (62.83 rad/s), 1100 (115.19 rad/s), 1800 (188.50 rad/s), 3000 RPM (314.16 rad/s)
Motor recommended
Height of bed from floor
540 IDS (244 9KQ) ADD.

# POWERMATIC

MODEL

# 12" LATHE



# **EXTRA HEAVY DUTY**

The Model 90 Wood turning lathe is available in a straight or gap bed version with one of three speed ranges, 215-1375 RPM (22.5 - 144.0 rad/s) for large diameter wood turning, 330 - 2100 RPM (34.6 - 219.9 rad/s) for general purpose turning or, 460 - 3000 RPM (48.2 - 314.2 rad/s) for metal spinning. The position of the speed control handle determines the spindle RPM (rad/s) within each infinite variable speed range available. All machines are equipped with a variable speed range which gives quick and precise RPM (rad/s) settings and the ability to change speeds while under power. This system eliminates the inconveniences of step cone pulley drives. Select the speed best suited for the operation without compromise. This high performance drive is built with a ruggedness that will meet all requirements.



The Model 90 Lathe Drive System is a double reduction drive from the motor, through a jackshaft, to the headstock spindle. Isolation of the motor mount and the use of a jackshaft combine to minimize vibration.



Exclusive on the Model 90! A 5-position limit stop to enforce pre-set speeds. An asset to the school instructor who insists on good safety practices, or the foreman who pre-selects the Lathe speeds for his operators.



Choice of Straight or Gap Bed. 12" (304.80mm) stock capacity over straight bed, 17" (431.80mm) stock capacity over gap.

CAPAC 17" (43 full 38" BED: C casting maximu HEADS vide inf the bas SPINDI ground Spindle for No. 11/8" -8 Lock

— Cent

remova machin switch

1 — Tails 1 — Safe 1 — Face

1900310

1900330

6471022

2398474

Overall Distance Inboard Outboa Swing of Swing of Tailstoo Width of

#### - FEATURES

CAPACITY: Swing 12" (304.80 mm) over straight bed; 17" (431.80 mm) over gap bed. Standard bed affords [ull 38" (965.20 mm) between centers.

BED: One-piece construction from finest grey iron casting, rib-reinforced for perfect alignment and maximum rigidity. Standard length: 60" (1524.00 mm). HEADSTOCK: Has built-in variable speed drive to provide infinite variation covering the full speed range of the basic machine.

SPINDLE: Machined from carbon steel and precision ground for perfect running alignment and balance. Spindle nose is threaded 1½" (38.10 mm)-8 and bored for No. 2 Morse Taper. Outboarded end is threaded 11/8" -8 (28.58 mm) for outboard face plate.

Locking pin holds spindle rigid for easy face plate removal. Spindle cannot be accidentally locked while machine is in operation . . . speed range control and switch must be in "OFF" position.

TAILSTOCK: The 1%" (34.92 mm) tailstock spindle is bored for No. 2 Morse Taper. Center may be easily removed by using the large hand-wheel and tailstock screw.

MOTOR DRIVE: The motor bracket is isolation mounted in the top of the storage compartment in the left pedestal. The TEFC motor belt drives the jackshaft on which the driving variable speed sheave is mounted. This shaft in turn, belt drives the spindle. Drive and motor are readily accessible for service or replacement.

LATHE BASE: Wide-stance pedestal base with streamlined design. No sharp corners. Constructed from extra heavy gauge reinforced steel for perfectly rigid operation in permanent or temporary installation. MOTOR SWITCH: Activated only by variable speed

control cam. Lathe can be started only at slow speed.

1-7" (177.8 mm) Faceplate

# STANDARD EQUIPMENT

- 1-Center Drift Rod
- 1-Tool Support Base
- 1- Tailstock Wrench
- 1-Safe Stop Speed Limiter 1-Faceplate Wrench
- 1 6" (152.40 mm) Tool Rest 1 — 12" (304.80 mm) Tool Rest
- 1 Cup Center
- 1 Spur Center
- 1 3" (76.20 mm) Faceplate
- 1 Motor Pulley
- 1 Set Allen Wrenches
- 1 Guard
- 1 Combination Faceplate and
  - Handwheel

# **BASIC MACHINES**

- 1900310 Model 90 Gap Bed Lathe, with all standard equipment, 330 2100 RPM (34.6 219.9 rad/s). Less: Motor and Controls.
- 1900320 Model 90 Straight Bed Lathe, with all standard equipment, 330 2100RPM (34.6 219.9 rad/s). Less: Motor and Controls.
- 1900330 Model 90 Gap Bed Lathe, with all standard equipment, 460 3000RPM (482.0 314.2 rad/s). Less: Motor and Controls.
- 1900340 Model 90 Straight Bed Lathe, with all standard equipment, 460 3000 RPM (482.0 314.2 rad/s). Less: Motor and Controls.
- 1900350 Model 90 Gap Bed Lathe, with all standard equipment, 215 1375 RPM (22.5 144.0 rad/s). Less: Motor and Controls.
- 1900360 Model 90 Straight Bed Lathe, with all standard equipment, 215 1375 RPM (22.5 144.0 rad/s). Less: Motor and Controls.

# MOTORS FOR USE WITH MODEL 90 LATHES

1 Phase

6471022 — 1HP (.746 kw), 60 Hz, 1800 RPM (188.5 rad/s), 115/230v, TEFC, 56 frame.

- 3 Phase
- 6471036 1HP (.746 kw), 60 Hz, 1800 RPM (188.5 rad/s), 200v, TEFC, 56 frame.
- 6471037 1HP (.746 kw), 60 Hz, 1800 RPM (188.5 rad/s), 230/460v. TEFC, 56 frame.

# CONTROLS FOR USE WITH MODEL 90 LATHES

1 Phase

2398474 — Magnetic Controls, 115/230v.

· 2398476 - Magnetic Controls, 115/230v, w/24v transformer.

- 3 Phase
- 2398473 Magnetic Controls, 200/230/460/575v.
- 2398475 Magnetic Controls, 200/230/460/575v, w/24v. transformer.
- 9100003 Conduit in lieu of Standard Wiring.

\*May be ordered with 110v transformer.

Optional Accessories-(See Page 52)

# **SPECIFICATIONS**

Overall length	 	67" (	1701.80 mm)
Distance between centers	 	38"	(965.20 mm)
Inboard spindle (8 thread)	 	11/2	" (38.10mm)
Outboard spindle (8 thread)	 	11/8'	' (28.58 mm)
Swing over bed	 	12"	(304.80 mm)
Swing over gap	 	17"	(431.80mm)
Tailstock Quill travel	 	43/8"	(111.12 mm)
Width of gap	 	51/4"	(133.35 mm)

General Purpose Turning330 - 2	100 RPM (34.56 - 219.91 rad/s)
Metal Spinning	000 RPM (48.17 - 314.16 rad/s)
Large Diameter Wood Turning	
	375 RPM (22.50 - 144.00 rad/s)
Height of bed from floor	

Height of bed from floor	36" (914.40 mm)
Weight, net with stand	550 lbs (249.4 kg)
Weight, domestic crated with stand	623 lbs (282.5kg)
Export boxed with stand (55.2 cu ft)	755 lbs (342.4 kg)

# **POWERMATIC®**

# LATHE ACCESSORIES

#### SPECIAL HIGH PERFORMANCE TURNING TOOLS

Require less tool care than standard tools. 6829019 For #45 and #90 Lathe, wt. 4 lbs (1.8kg)

#### TOOL SUPPORT BASE:

For use when making extra long turnings requiring 24" (609.60mm) tool support.

2063011 -For #45 and #90 Lathe, wt. 12 lbs (5.4kg).

#### **OUTBOARD TURNING STAND**

Floor stand with offset tool holder for turning pieces larger than 12" (304.80mm) diameter. 2759009 - For #45 and #90 Lathe, wt. 75 lbs (34.0kg).

**FACE PLATE** #90 #45 3" (76.20 mm) R.H. face plate 2 lbs (.9kg) ....3193005 3193001 (101.60 mm) R.H. face plate 2 lbs (.9kg) . ....3193004 3193003 (177.8 mm) R. H. face plate 3½ lbs. (1.58 kg) 3193035 3193034 81/2" (215.90 mm) Outboard face plate ....3193010 3193016



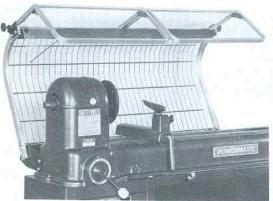
SLOW SPEED CONVERSION KIT

2250123 - For Model 45 & 90.

LATHE GUARD

(330-2100 RPM)

(Model 90 only) Pre-1960 .2397037 330 to 2100 RPM



#### CHUCKS .....#90 and #45

3'' (76.20 mm) screw chuck, threaded. 1 lb (.45 kg) (Model 90 only 2085004 (12.70 mm) three-jaw chuck ........6118013 No. 2 Taper Arbor, 11/2-lbs (.7 kg) .......6023003

TOOL SUPPORTS #90 and #45

Right angle tool support 3 lbs. (1.3 kg) .3658007 (152.40 mm) tool support 1½-lbs (.7 kg) .3658010 1½-lbs (.7 kg) .3658010 12" (304.80 mm) tool support 2 lbs (.9 kg) ..3658009 Contour tool support 3658021 24" (609.60 mm) tool support 5 lbs (2.3 kg) .2659007 5 lbs (2.3 kg) .2658007 (304.80 mm) Metal spinning tool rest 3 lbs (1.3 kg) . . . . . .2397063 Offset tool support 3 lbs (1.3 kg) ......2658003 Less: Base

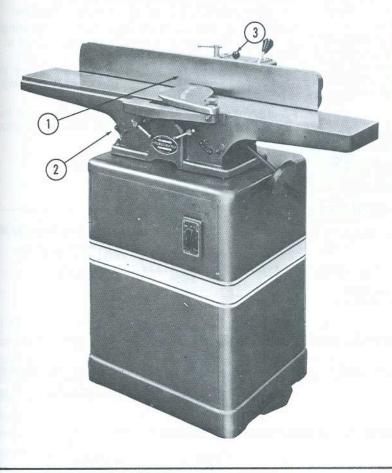
CENTERS: ....#90 and #45

Ball bearing tailstock center 1 lb (.45 kg) (25.40 mm) spur center, 4 oz (.1 kg) ...2084001 34'' (19.05 mm) cup center, 4 oz (.1 kg) ...6112002



The Wood turning Lathe Guard is designed for operator safety. Made in two sections and moveable left to right or right to left, protection is afforded the outboard faceplate by moving the left section of the guard to the extreme left. For protection of the inboard faceplate. this section is moved to the extreme right. Full work range protection is afforded by using both guard sections in the extreme right position.

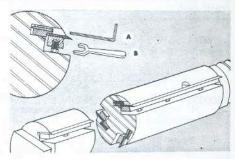
# 48" PRODUCTION TABLE STANDARD EQUIPMENT



# RUGGED, DYNAMIC CHAMPION

Here is one of the most versatile of all Powermatic® machines... equally adaptable for industrial, student training or home workshop use. Built with the strength and rigidity of much larger units, this Powermatic 6" Jointer is light enough to be moved quickly anywhere . . . from the production line to the building site. Smart, streamlined design is free of dust-catching corners and crevices . . . saves shop clean-up time!

# SPEEDS ACCURATE KNIFE-SETTING



Superior Powermatic Cutterhead a standard feature. Set and secure all cutterhead knives in as little as half the time. Adjust knife support jack-screws (A) with Allen wrench and pressure-lock knife safety shim (B) with end-wrench. Cutterhead mounted in over-size sealed ball bearings. Precision ground and balanced.



"Skew" or Shear Cutting is easily accomplished by swiveling fence. This practice especially desirable on materials such as curly maple, cherry and fir.



Adjustable Outfeed Table. Simplifies alignment of Cutterhead with outfeed table. Cuts knife adjustment time in half. (See page 58 for #150 Gage listing).



3

Extra Large Center-Mounted Fence plunger-locks at 90° with automatic stops at 45° right and left. Positive quick-lock in any other position. Glides easily and locks across full table width, completely guarding cutterhead at rear of fence.



Positive Fence Hold-Down Clamp.
Adjust fence to desired angle and lock the hold-down clamp. Fence will then maintain rigid horizontal alignment with the table.



# **FEATURES**

TABLES: Fully adjustable infeed and outfeed tables are precision mounted on dove-tailed ways to form extra long 48" (1219.20mm) bed. Both tables raise and lower accurately with convenient hand-wheel. Infeed table has extra long extension rest for rabbeting.

FENCE: Over-size center-mounted fence maintains perfect alignment and rigidity when locked in any position. Tilts and positively locks at any angle from 45° left to 45° right, with plunger-type lock at 90°. Positive stops at 45° right and left. Adjustable to full width of tables.

CUTTERHEAD: Controlled Chip jack-screw type with speedy, accurate knife adjustment. Equipped with 3 high speed, heat treated M-2 tool steel knives and rugged cutterhead of the finest carbon steel, precision ground and balanced. Features a full 3" (76.20 mm) cutting arc and quiet running with a minimum of grain pull out.

All basic parts cast iron or steel, none die cast.

Rigid, reinforced cabinet-type steel base with built-in dust

Extra long table extension rest for rabbeting.

Bed is close-tolerance ground for perfect alignment.

Mounted in over-size dust-sealed ball bearings for perfect performance in continuous operation at 5000 RPM (523.6 rad/s).

DRIVE: Non-slip V-belt for utmost efficiency in any work load range. Drive, motor and switch completely enclosed in base.

POWER REQUIREMENTS: For average and heavier stock and work volume, a 34 HP (.560 kw) 1-phase or 3-phase motor is recommended.

# STANDARD EQUIPMENT

JOINTER: set of 3 heat treated M-2 high speed tool steel knives, arbor pulley, center mounted fence, cutterhead guard, motor pulley, belt and wrenches, less: Stand, motor and controls. (NOTE: Belt and motor pulley supplied for 3600 RPM motor).

# **BASIC MACHINES**

1500030 - Model 50, 6" (152.40 mm) Jointer with all standard equipment. Less: Motor, controls and enclosed steel stand.

# MOTORS FOR USE WITH MODEL 50 JOINTER

### 1 Phase

3/4HP (.560kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, 6470801 -TEFC, 56 frame.

#### 3 Phase

<sup>3</sup>/<sub>4</sub>HP (.560kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 56 frame. 6470809 -

3/4HP(560 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, 6470810 -TEFC, 56 frame.

# CONTROLS FOR USE WITH MODEL 50 JOINTER

#### 1 Phase

- Magnetic Controls, 115/230v. 2398369 — Pushbutton Switch, 115/230v.

2398487 — Magnetic Controls, 115/230v, w/24v transformer.

\*May be specified with 110v transformer.

Magnetic Controls, 200/230/460/575v. 2398118 -

JIC Controls, 200/230/460/575v 2398230 -

Pushbutton Switch, 200/230/460/575v. 2398371 -

Magnetic Controls, 200/230/460/575v, w/24v transformer. 2398435 Conduit in lieu of standard wiring. 9100003 -

2230001-Quick Set Knife	Gauge	Wt.	2 lbs (.9 kg)
2307076—Cutterhead retro	kit controlled chip, 6	" Wt.	6 lbs (2.7 kg)

Cutterhead retro kit, controlled chip, 6

...Wt. 63 lbs (28.6kg)

# 6427001-3 Heat treated M-2 high speed tool steel knives

..Wt. 1 lb (.45 kg) 6807033-Motor Pulley 3600 RPM (376.99 rad/s)

3.50" (88.90 mm) diameter. (Specify bore) .....

# **SPECIFICATIONS**

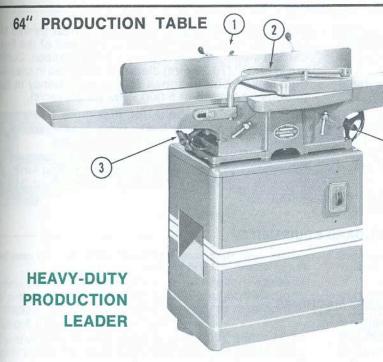
OPTIONAL ACCESSORIES

able	mm) mm)
(nives (3) H.S. steel	mm)
Speed of head (recommended). 5000 RPM (523.6 if (nife-cuts-per-minute). 15	,000 mm)
Maximum rabbeting cut 0" up to ½" x 6" (12.70 mm x 152.4 Fence size overall 4" (101.60 mm) x 34½" (876.30	HIIIII

Fence tilt, right or left Height, less stand	14 (000.00 11111)
Motor recommended	
Weight, domestic crated, with stand & motor	290 lbs (131.5 kg) App.
Weight, domestic crated, less stand	190 lbs (86.2 kg) App.

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice

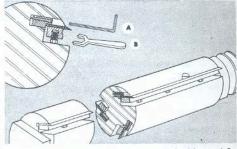
64



This big-capacity Powermatic® 8" Jointer slashes costs and saves time on thousands of jobs daily in hundreds of production lines, sash and door plants, pattern and cabinet shops throughout the nation. An extremely powerful model, the mammoth 64" bed accommodates extra long stock requirements. Cutterhead guard has swing-away action for quick conversion to rabbeting operations.

Totally Enclosed Fan Cooled Motor Standard

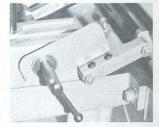




Superior Powermatic Cutterhead A standard feature! Set and secure all cutterhead knives in as little as half the time. Adjust knife support jack-screws (A) with Allen wrench and pressure-lock knife safety shim (B) with end-wrench. Cutterhead mounted in over-size sealed ball bearings. Finest carbon steel.

Powermatic® Knife-setting Gauge, Page 58.







Extra Large Center-Mounted Fence plunger-locks at 90° with automatic stops at 45° right and left. Positive quick-lock in any other position. Glides easily and locks across full table width, or is removable for planing wide stock.



Exclusive Swing Away Guard remains attached to machine during rabbet operations.



Adjustable Outfeed Table. Simplifies alignment of cutterhead with outfeed table. Cuts knife adjustment time in half. (See page 8-6 for #150 Gage listing).



Quick, Sure Table Adjustments on precision dovetailed ways are easy to make, easy to read. Adjustable gibs compensate for wear, guarantee alignment. Lever-lock prevents table slippage during operation.

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice.

### FEATURES -

TABLES: Fully adjustable infeed and outfeed tables are mounted on dove-tailed ways to form king-size capacity 64" (1625.60mm) table surface. Both tables are quickly and accurately raised and lowered with convenient hand-wheel. For rabbeting, infeed table has extra long extension rest.

FENCE: Full length, self-aligning fence locks rigidly in any position. Tilts and positively locks at any angle. Plunger-type lock at 90°. Positive stops at 45° right and left. Single lever adjustment to full width of tables. Cutterhead at rear of fence fully guarded in all fence

CUTTERHEAD: Controlled chip, quiet running jackscrew type with speedy, accurate knife adjustment. Equipped with 3 high speed, heat treated M-2 tool steel knives and rugged cutterhead of the finest carbon steel, precision ground and balanced. Cutting arc is full 3" (76.20 mm) diameter mounted in over-size dust-sealed ball bearings for high efficiency in continuous operation at 5,000 RPM (523.6 rad/s).

DRIVE: Non-slip V-belts for maximum performance even under extremely heavy work load. Drive, motor, and switch completely enclosed in base.

POWER REQUIREMENTS: Designed for average heavy and extra heavy work loads requiring 3/4HP (.560 kw), 1HP (.746 kw) 11/2HP (1.119kw), 1 or 3-phase motor

# STANDARD EQUIPMENT -

JOINTER: Set of 3 high speed, heat treated M-2 tool steel knives, 2 groove arbor pulley, center mounted fence, cutterhead, guard, motor pulley, belts and wrenches. Less: Stand motor and controls. (NOTE: Belts and motor pulley supplied for 3600 RPM (376.99 rad/s).

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# **BASIC MACHINES**

1610030 - Model 60, 8" (203.20mm) Jointer with all standard equipment. Less: Motor, controls, and enclosed steel stand.

# MOTORS FOR USE WITH MODEL 60 JOINTERS

1 Phase

<sup>3</sup>4HP (.560 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 56 frame. 6470801 -

6471100 -

-1HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 56 frame. -1½HP (1.119kw), 60 Hz, 3600 RPM (376.99 rad/s), 115/230v, TEFC, 56 frame. 6471400 -

3/4HP (.560kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v, TEFC, 56 frame. 6470809 -

3/4HP (.560kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v, 6470810 -TEFC, 56 frame.

6471118 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200v. TEFC, 56 frame. 6471119 — 1 HP (.746 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/460v.

TEFC, 56 frame.
6471412 — 1½HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 200 v.
TEFC, 56 frame.

6471413 — 1½HP (1.119 kw), 60 Hz, 3600 RPM (376.99 rad/s), 230/ 460v, TEFC, 56 frame.

# CONTROLS FOR USE WITH MODEL 60 JOINTERS

1 Phase

2398336 - Magnetic Controls, 115/230v. Pushbutton Switch, 115/230v. 2398369

\*2398487 — Magnetic Controls, 115/230v, w/24v transformer.

\*May be specified with 110v transformer.

3 Phase 2398118 -Magnetic Controls, 200/230/460/575v.

2398230 — JIC Controls, 200/230/460/575v.

2398371 — Pushbutton Switch, 200/230/460/575v. \*2398435 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003 — Conduit in lieu of Standard Wiring

# - OPTIONAL ACCESSORIES -

2230001 - Quick Set Knife Gauge ... .Wt. 2 lbs (.9 kg) 2397077—Cutterhead retro kit, controlled chip, 8" Wt. 8 lbs (3.6 kg) 2759011—Jointer Stand only ... ..Wt. 65 lbs (29.5 kg) 6427002-3 heat treated M-2 high speed tool steel knives ......Wt. 1 lb (.45 kg)

### **SPECIFICATIONS**

Table ....... 8½" x 64" (215.90mm x 1625.60 mm) Knives (3) .......1/8" x 3/4" x 8" (3.18 mm x 19.05 mm x 203.20 mm) Maximum rabbeting cut ..0" up to 1/2" x 8" (12.70mm x 203.20mm)

Fence size overall .......4" x 341/2" (101.60mm x 876.30 mm) Weight, domestic crated, with stand ..................400 lbs (181.4kg) Weight, domestic crated, with stand and motor ...440 lbs (199.5 kg)

# NEW, QUICK WAY TO SET KNIVES ACCURATELY





Anyone can set jointer knives or bed rollers speedily and precisely with this easy-to-use gauge. Variations are micrometer calibrated and are easy to read on this foolproof measuring instrument.

If you've ever had to make settings by "guess", you quickly found out how important accurate positioning

is . . . in outfeed and infeed efficiency as well as the cutterhead itself.

Avoid poor machine performance. Install every new or resharpened blade in perfect cutting position . . . adjust bed rollers fast and sure for top feed performance. 2230001 — wt. 2 lbs. (.9kg)

# **POWERMATIC**

MODEL 30-B

# BELT AND DISC SANDER



# POWERMATIC'S LATEST ADDITION TO A RESPECTED LINE OF SANDERS

The Powermatic Model 30-B Combination Belt and Disc Sander is a step in the direction of pollution control with optional Dust Collector. The 30-B Sander can be used for both wood and metal sanding, and, with its own dust collection system, eliminates the necessity of a separate dust control unit. Dust disposal is easily accomplished with the removable drawer.

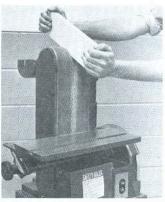
Rugged cast iron construction virtually eliminates vibration of all contour, angle and flat sanding jobs.

The standard tilting table (45° down or 15° up) and the swing away end guard (for easy access to the countour sanding surface), along with the optional tilting fence and miter gauge, permit rapid set-ups without the need for special tools.

Improve the quality of your work with a dust free environment!



Optional miter attachment for straight and angular sanding.



Swing Away end guard permits convenient contour sanding.



Removable tilting table (15° up 45° down) can be used with either disc or belt.



Optional sliding and tilting fence for straight and angular sanding.

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# POWERMATIC

# BELT AND DISC SANDER

## FEATURES -

TILTING TABLE: Big 7" x 141/4" (117.8 mm x 438.2 mm) tilting table is slotted for accurate miter gauge attachment. Easy to tilt and lock at any angle from 0° to 45° down or 15° up. Change easily from belt to disc opera-

DRUMS: 41/2" (114 mm) in diameter, both drums are mounted in big sealed ball bearings for extra smooth operation and years of trouble free service. Idler drum accurately maintains belt tension. Easy-to-reach belt

controls assure positive and accurate alignment.

BELT: Accommodates 6" x 48" (152 mm x 1219 mm)

belt. Entire belt assembly may be quickly adjusted for operation at 4 positions from horizontal to vertical. Outer belt guard may be swung away for contour or

edge sanding. 2850 SFM (14.48 m/sec).

SANDING DISC: Full size 12" (304.8 mm) disc is more than ample for most sanding and polishing operations. Dynamically balanced for vibration-free performance. 2400 RPM.

GUARDS: Only the moving sanding surfaces are exposed. All other moving parts, including belt assembly

are completely guarded.

TRUNNION: Extremely heavy duty construction assures complete table rigidity at all times.

DUST COLLECTOR: The optional Dust Collector stand is self-contained. 300 CFM to help meet OSHA requirements. No hoses to clog or burn. 20 sq. ft. of filter area, external shaker and clean out drawer are added features.

# STANDARD EQUIPMENT

Model 30B Belt and Disc Sander: Interchangeable, tilting table, belt and disc guards, exhaust outlets, work stop, sanding belt, disc, arbor pulley, set of wrenches, belt and motor pulley. Less: Motor, Controls and Stand.

### BASIC MACHINE

1300131 - Model 30 B Belt and Disc Sander with all standard equipment. Less: Motor, Controls and Stand.

#### MOTORS

6471301 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/s), 115/230v, TEFC, 145T frame.

3 Phase

6471304 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/s), 230/ 460 TEFC, 145T frame.

6471317 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/s), 575v,

TEFC, 145T frame. 6471322 — 1½ HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/s), 200v, TEFC, 145 T frame.

#### CONTROLS -

1 Phase 2398528 - Manual Switch, 115/230v.

2398530 — Magnetic Controls, 115/230v. 2398532—Magnetic Controls, 115/230v w/24v transformer.

3 Phase 2398230 — JIC Controls, 200/230/460/575v. 2398529 — Manual Switch, 200/230/460/575v. 2398531 — Magnetic Controls, 200/230/460/575v. \*2398533 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003-Conduit in lieu of standard wiring.

\*May Be Specified With 110v Transformer

# OPTIONAL ACCESSORIES

2093002-Stand w/Dust Collector

2195002—Stant W.Dust Collector 2195004—Fence assembly. Wt. 14 lbs (6.36 kg). 2195020—Non tilting fence assy. Wt. 2 lbs (.92 Kg) 2471010—Miter gauge. Wt. 3½ lbs. (1.59 kg). 2759039—Stand Assembly w/o Dust Collector 2797134—Table Assembly. Wt. 22½ lbs (10.22 kg).

3127012—Sanding disc, less flange 6012001—1 pint disc cement. Wt. 1 lb. (.46 kg)

6078001 - Metal sanding aluminum oxide belt, 100 grit, fine. Wt. 8 ozs. (.23 kg)

6078002-Metal sanding aluminum oxide belt, 50 grit, coarse. Wt. 8 ozs. (.23

6078003—Wood sanding garnet belt, 80 grit, fine. Wt. 8 ozs. (.23 kg). 6078004—Wood Sanding garnet belt, 40 grit, coarse. Wt. 8 ozs. (.23 kg). 6206001—Wood sanding disc, 80 grit, fine. Wt. 8 ozs. (.23 kg). 6206002—Wood sanding disc, 40 grit, coarse, Wt. 8 ozs. (.23 kg). 6206003—Metal sanding aluminum oxide disc, 100 grit, fine. Wt. 8 ozs. (.23 kg).

Metal sanding alumnium oxide disc. 50 grit, coarse. Wt. 8 ozs. (.23

-Replacement filter (after July 1980). 3038003-

# SPECIFICATION

Speed Belt	
Belt	011 4011 (450 v 4010 mm)

 Size
 6" x 48" (152 mm x 1219 mm)

 Support Table Under Belt
 6½" x 14½" (165 mm x 368 mm)

 Working height in horizontal position
 37½" (952.5 mm)

Disc 

Table 

Size	` x	63%'	(114 mm x 162 mm) 17" (431.8 mm)
------	-----	------	-------------------------------------



# FEATURES -

TILTING TABLE: Big 7" x 171/4" (177.8 mm x 438.2 mm) tilting table is slotted for accurate miter gauge attachment. Easy to till

and lock at any angle from 0° to 45° out or 15° in. **DRUMS:** 4½" (114.3 mm) in diameter, both drums are mounted with sealed ball bearings for extra smooth operation and years of trouble free service. Idler drum accurately maintains belt tension. Easy-to-reach belt controls assure positive and accurate align-

BELT: Accommodates 6" x 48" (152 mm x 2438 mm) belt. Entire belt assembly may be quickly adjusted for operation at 4 positions from horizontal to vertical. Outer belt guard may swung away for contour on edge sanding.

GUARDS: Only the moving sanding surfaces are exposed. All other moving parts, including belt assembly, are completely guarded. Belt assembly guard has dust duct opening.

TRUNNION: Extremely heavy duty construction assures complete table rigidity at all times.

DUST COLLECTOR: The optional Dust Collector stand is selfcontained. 300 CFM to help meet OSHA requirements. No hoses to clog or burn. 20 sq ft. of filter area, external shaker and clean out drawer are added features.

#### STANDARD EQUIPMENT

BELT SANDER: 2-way tilting table, guards, arbor pulley, exhaust outlet, work stop, sanding belt, set of wrenches, motor pulley and belt. Less: Motor, Controls

# BASIC MACHINE \_

1330111 - Model 33-B Belt Sander with all standard equipment. Less: Motor, Controls and Stand.

# MOTORS

6471301 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/sec), 115/230v, TEFC 145T frame.

3 Phase

6471304 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.46 rad/sec), 230/460v, TEFC, 145T frame.

Disc San Less: Mo

1350032

6470700

6471022

6471306

6470702

239812

239820

239834

\*239848

239813

239820

212400 247101 275900

312701 601200

### CONTROLS \_

1 Phase

2398528 - Manual Switch, 115/230v. 2398530 — Magnetic Controls, 115/230v.

2398532—Magnetic Controls, 115/230v w/24v transformer.

\*May Be Ordered With 110v Transformer

3 Phase

2398230 - JIC Controls, 200/230/460/575v

2398529 - Manual Switch, 200/230/460/575v

2398531 — Magnetic Controls, 200/230/460/575v. \*2398533 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100003 - Conduit in lieu of standard wiring.

# OPTIONAL ACCESSORIES

2093002—Stand w/dust collector 2195004—Tilting Fence assembly. Wt. 14 lbs. (6.36 kg).

2195020—Non tilting fence assy. Wt. 2 lbs (.92 kg) 2471010—Miter Gauge. Wt. 3½ lbs. (1.59 kg).

2759039-Stand Assembly w/o dust collector

-Metal standing aluminum oxide belt, 100 grit, fine. Wt. 8 ozs. (.23

6078002-Metal sanding aluminum oxide belt, 60 grit, coarse. Wt. 8 ozs. (.23

6078003-Wood sanding garnet belt, 80 grit, fine. Wt. 8 ozs. (.23 kg).

6078004—Wood sanding garnet belt, 40 grit, coarse. Wt. 8 ozs. (.23 kg). 3038003—Replacement filter (after July 1980).

# SPECIFICATIONS .

Belt speed	2850 SFM (14.48 m/s)
Standing belt	48" (152 mm x 2438 mm)
Belt drum	' (114.3 mm x 161.9 mm)
Table	
Table Tilt	
Distance between drum centers	17" (431.8 mm)

Dimensions

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

# POWERMATIC

# 12" DISC SANDER



Optional Miter Gauge fitted in table slot, and tilting table make compound mitering operations extremely accurate and simple to perform. An absolute necessity in the pattern shop!



De-burring Operations for all metals and plastics are done quickly, accurately and safely.

# -FEATURES -

**TILTING TABLE:** Extra-wide 7" (178 mm x 171/4" (438 mm) tilting table is slotted for accurate miter gauge attachment. Easy to tilt and securely lock at any angle 0° to 45° down 15° up.

GUARD: Only the moving disc surface is exposed. All other moving parts are completely guarded.

TRUNNION: Finest heavy-duty construction for smooth and easy tilting operation and extreme table rigidity in any locked position.

**DRIVE:** Sanding Disc is mounted directly on motor driveshaft. 3/4 HP (.559 kw) or 11/2 HP (1.11 kw), 1 or 3-phase motor available.

SANDING DISC: full size 12" (304.8 mm) disc satisfies most sanding and polishing operations supplied with garnet disc (for wood, plastic, light metals, etc.) or Aluminum oxide disc (for heavy ferrous metals). Specify disc type. 1800 RPM (188.5 rad/sec).

#### STANDARD EQUIPMENT

Disc Sander: 2-way tilting table, disc, guard, exhaust outlet and 1 sanding disc. Less: Motor and Controls.

### - BASIC MACHINES -

1350032 - 12" (304.8 mm) Disc Sander with all standard equipment & stand. Less: Motor and Controls.

#### MOTOR

-¾ HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 115/ 230v, TEFC, 56 frame. 8470700 -

1 HP (.75 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 115/230v. TEFC, 56 frame.

6471306 - 11/2 HP (1.12 kw), 60 Hz, 1800 RPM, 115/230 TEFC, 56 frame.

3 Phase <sup>3</sup>/<sub>4</sub> HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 575v, TEFC, 56 frame. 6470702

6470707 — ¾ HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 230/ 460v. TEFC, 56 frame. 6470712 — ¾ HP (.56 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 200v,

TEFC, 56 frame.

- 1 HP (.75 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 200 v, TEFC, 56 frame. - 1 HP (.75 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 230/460v, TEFC, 56 frame. 6471036

6471037 -TEFC, 56 frame.

- 11/2 HP (1.12 kw), 60 Hz, 1800 RPM (188.5 rad/sec), 230/ 6471324 -460v. TEFC, 56 frame.

#### CONTROLS -1 Phase

Manual Switch, 230v.

2398200 - Manual Switch, 115v. 2398340

Magnetic Controls, 115/230v.
 Magnetic Controls, 115/230v, w/24v transformer.

3 Phase

Magnetic Controls, 200/230/460/575v. 2398201 — Manual Switch, 200/230/460/575v.

2398230 — JIC Controls, 200/230/460/575v

\*2398482 — Magnetic Controls, 200/230/460/575v, w/24v transformer.

9100003 - Conduit in lieu of standard wiring.

# \*May Be Ordered With 110v Transformer OPTIONAL ACCESSORIES

2124007—Disc assembly with Flange and set screws. Wt. 5 lbs (2.27 kg). 2471010—Miter gauge, Wt.  $3\frac{1}{2}$ -lbs. (1.59 kg). 2759003—Steel floor stand, totally enclosed. Wt. 50 lbs. (22.7 kg).

3127012-Sanding disc, less flange

6012001-1 Pint disc cement. Wt. 1 lb (.45 kg)

6206002—Garnet Disc for wood, 12" (304.8 mm) diameter, 40 grit, coarse. Wt. 8 ozs. (.23 kg).

Aluminum oxide disc for metal, 12" (304.8 mm) diameter, 50 grit,

coarse. Wt. 8 ozs. (.23 kg). -300 CFM self powered dust collector (115v single phase).

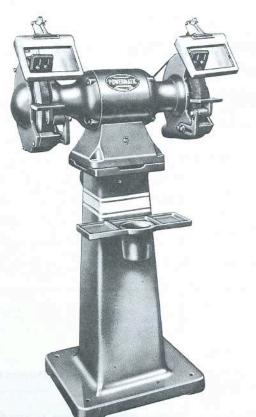
# SPECIFICATIONS -

Floor Model:
Width1734'' (451 mm)
Height
Front to Rear
Motor recommended34 HP (.56 kw)
or 11/2HP (1.12 kw) 1 or 3 phase
Motor arbor

Table	7" (78 mm) x 171/4" (438 mm)
Table tilt	45° down 15° up.
Sanding dis	c12" (304.8 mm)
Weight, dor less stand	nestic crated, i105 lbs. (47.7 kg)
Weight, dor	nestic crated, d206 lbs. (93.5 kg)

# PEDESTAL AND BENCH GRINDERS

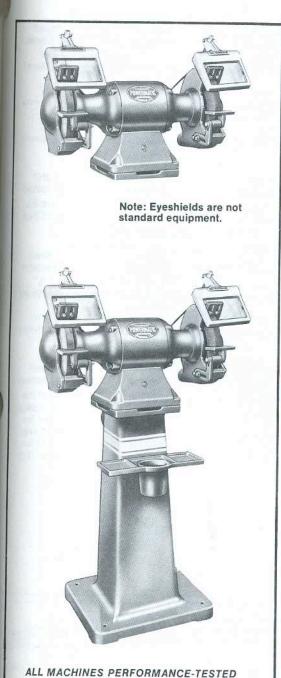
Another HIGH PERFORMANCE machine that symbolizes Professional Craftsmanship





ASSURANCE OF PERFORMANCE

9 MODELS FOR PRECISION GRINDING



BEFORE SHIPMENT NOT SOLD WITHOUT EYE SHIELDS

# ASSURANCE OF PERFORMANCE 9 MODELS FOR PRECISION GRINDING

# - FEATURES -

TOOL RESTS: Easy to adjust and lock at all vertical and lateral angles for full flexibility.

SHAFTS: Mounted in over-size sealed ball bearings for smooth, dependable performance.

GUARDS: Heavy-gauge steel construction. Easy to remove for wheel changing,

SPARK SHIELDS: For safety and visibility. Easily adjustable to wear of wheels. (These are not eyeshields.)

MOTOR: Totally enclosed for long life and maximum safety. ½HP (3.73 kw); ¾HP (.560kw), 1HP (.746 kw) and 2HP (1.492 kw), 1 or 3-phase available.

When ordering specify voltage.

# STANDARD EQUIPMENT

MODEL 2100 BENCH GRINDER: Steel Guards, 2 Spark Deflectors, 2 Adjustable Tool Rests, 2 Grinding Wheels (1 fine, 1 coarse), Toggle Switch in base and Cord. Totally Enclosed Motor. (As selected from options below.)

### - STANDARD MACHINES

- 1210010—Bench Grinder, with all standard equipment and totally enclosed ½ HP (.373 kw), 1 Phase, 115 or 230 volt (specify), 1800 RPM (188.50 rad/s) Motor.

  1210020—Bench Grinder, with all standard equipment and totally enclosed ½ HP (.373 kw), 2 Phase, 230 cm 450 volt (creative), 4800 RPM (188.50 rad/s) Materials

- 1210020 Bench Grinder, with all standard equipment and totally enclosed ½ HP (.373 kw), 3 Phase, 230 or 460 volt (specify), 1800 RPM (188.50 rad/s) Motor.

  1210030 Bench Grinder, with all standard equipment and totally enclosed ½ HP (.373 kw), 1 Phase, 115 or 230 volt (specify), 3600 RPM (376.99 rad/s) Motor.

  1210040 Bench Grinder, with all standard equipment and totally enclosed ½ HP (.373 kw), 3 Phase, 230 or 460 volt (specify), 3600 RPM (376.99 rad/s) Motor.

  1210050 Bench Grinder, with all standard equipment and totally enclosed ¾ HP (.560 kw), 1 Phase, 115 or 230 volt (specify), 3600 RPM (376.99 rad/s) Motor.

  1210060 Bench Grinder, with all standard equipment and totally enclosed ¾ HP (.560 kw), 3 Phase, 230 or 460 volt (specify), 3600 RPM (376.99 rad/s) Motor.

  1210070 Bench Grinder, with all standard equipment and totally enclosed 1 HP (.746 kw), 1 Phase, 115 or 230 volt (specify), 1800 RPM (188.50 rad/s) Motor.

  1210080 Bench Grinder, with all standard equipment and totally enclosed 1 HP (.746 kw), 3 Phase, 230 or 460 volt (specify), 1800 RPM (188.50 rad/s) Motor.

  1210140 Bench Grinder, with all standard equipment, totally enclosed 2 HP (1.492 kw), 3 Phase, 200, 230 or 460 volt (specify), 1800 RPM (188.50 rad/s) Motor.

  1210140 Bench Grinder with all standard equipment, totally enclosed 2 HP (1.492 kw), 3 Phase, 200, 230 or 460 volt (specify), 1800 RPM (188.50 rad/s) Motor.

FOR FLOOR STANDS, OPTIONAL ACCESSORIES AND CONTROLS (SEE PAGE 66)

# POWERMAT

# PEDESTAL AND **BENCH GRINDERS**

# SPECIFICATIONS

			Distance		
Model	Power	Speed	between	Wheel	Shaft
No.	Rating	RPM	Wheels	Diameter	Diameter
1210010 & 20	½HP	1800RPM	151/2''	7'' x 1''	5/8''
N.T.A. T.C. (70 TUTE)	(.373kw)	(188.50 rad/s)	(393.70mm)	(177.80mm x 25.40mm)	(15.88mm)
1210030 & 40	1/2HP	3600RPM	151/2"	7'' x 1''	5/8''
	(.373kw)	(376.99 rad/s)	(393.70mm)	(177.80 mm x 25.40 mm)	(15.88 mm)
1210050 & 60	3/4HP	3600 RPM	161/2"	8'' x 1''	5/8''
	(.560 kw)	(376.99 rad/s)	(419.10mm)	(203.20mm x 25.40 mm)	(15.88mm)
Weight:		1/2HP	3/4HP	1HP (.746kw)	2HP (1.492kw)
		(.373kw)	(.560kw)		276 lbs
Domestic crated, bench mod	el	71 lbs (32.2kg)	109 lbs (49.4kg)	140 lbs (63.5kg)	(125.2kg)
			Distance		Oh a#
Model No.	Power Rating	Speed RPM	Between Wheels	Wheel Diameter	Shaft Diameter
1210070 & 80	1HP	1800RPM	18''	10'' x 1''	7/8''
	(.746 kw)	(188.50 rad/s)	(475.20mm)	(254.00mm x 25.40mm)	(22.22mm)
1210140	2HP	1800RPM	23¾	12" x 2"	11/4"
The second secon	(1.492 kw)	(188.50 rad/s)	(603.25 mm)	(304.8mm x 50.80mm)	(31.75mm)
WEIGHT:		½HP	3/4HP	1HP	2HP
		(.373kw)	(.560kw)	(.746kw)	(1.492kw)
Domestic crated, pedestal m	odel	197 lbs	206 lbs	250 lbs	487 lbs
0.000 mm		(89.3kg)	(93.4kg)	(113.4kg)	(220.9kg)
Export boxed, bench model		71 lbs	115 lbs	152 lbs	261 lbs
and the second s		(32.2kg)	(52.2kg)	(68.9kg)	(118.4kg)
Export boxed, pedestal mod	el	186 lbs	266 lbs	319 lbs	557 lbs (252.6kg)
TO SEE WAY		(84.4 kg)	(120.6kg)	(144.7kg)	(252.6Kg)

# CONTROLS

2398134—Magnetic Controls, 115/230v. \*2398493—Magnetic Controls, 115/230v, w/24v transformer.

2398129-Magnetic Controls, 200/230/460/575v.

2398230—JIC Controls, 200/230/460/575v; \*2398497—Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003—Conduit in lieu of Standard Wiring.

\*May be specified with 110v transformer.

# **OPTIONAL ACCESSORIES** -

—Steel Pedestal, complete with Tool Rest and Water Pot for ½; ¾, 1 HP (.373, .560, .746 kw) grinders. Wt. 54 lbs (24.5 kg)
—Cast Iron Pedestal, complete with Tool Rest and Water Pot, for 2 HP (1.492 kw) grinders. Wt. 100 lbs (45.4 kg)
—Grinding Wheel Dresser. Wt. 1½-lbs. (.7 kg)
—Set of (2) Shatterproof Eyeshields.
—Set of (2) Shatterproof Eyeshields, illuminated type. Wt. 2½-lbs (1.1 kg)

6805001-

kg) -Set of (2) 12" x 2" (304.80 mm x 50.80 mm) Grinding Wheels. (1 coarse, 1 fine.) Wt. 19½-lbs (8.8 kg)

6028006—Grinding Wheel Dresser (carbide wheels.) Wt.  $1\frac{1}{2}$ -lbs (.7 kg) 6900020—Carbide Wheel  $1\frac{1}{2}$ !  $\times$  6''  $\times$  1'' (38.10 mm  $\times$  152.40 mm  $\times$  25.40 mm face, 60 grit. Wt.  $2\frac{1}{2}$ -lbs (1.1 kg) 6900025—Carbide Wheel  $1\frac{1}{2}$ !  $\times$  6''  $\times$  1'' (38.10 mm  $\times$  152.40 mm  $\times$  25.40 mm face, 120 grit. Wt.  $2\frac{1}{2}$ -lbs (1.1 kg)

239

239

25 25

60 68 68

69

# POWERMATIC

# GRINDER **ACCESSORIES**





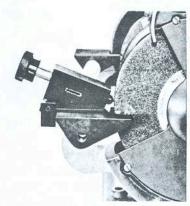
Shatter Resistant, illuminated eyeshields for 2100 grinders only. Part No. 6805002

Powermatic Shatter Resistant Eyeshields, either plain or illuminated, are designed to give extra protection for the operator's eyes.

# NO GRINDER SOLD WITHOUT THEM!

Eyeshields are fully adjustable both horizontally and vertically, permitting tilt or adjustment which allows them to be positioned at any angle desired.

This precision, adjustable diamond grinding wheel dresser reduces grinding time, increases the performance of cutting tools and grinders, and restores the true balance of the wheel. Rotation of spindle with angle on tool keeps diamond sharp for long life.



Adjustable friction on spindle, for fine adjustment to feed diamond in or out. No set screws or nuts to lock or unlock spindle each time diamond is fed in or out. Part No. 6028005. For 2100 Only.



Sliding bracket is adjustable for different sizes of grinders and tool rests. Sides of grinding wheels may be dressed by moving bracket to fit side of tool rest. Bracket fits in "T"-slot of carbide tool grinder. Part No. 6028006. For 2200 Only.

#### CONTROLS FOR USE WITH MODEL 2100 & 2200 GRINDERS

1 Phase

2398134-Magnetic Controls, 115/230v.

2398493 -Magnetic Controls, 115/230v, w/24v transformer.

2398129-Magnetic Controls, 200/230/460/575v.

2398230—JIC Controls, 200/230/460/575v. \*2398497—Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003—Conduit in lieu of Standard Wiring.

\*May be specified with 110v transformer.

# OPTIONAL ACCESSORIES — MODEL 2100 & 2200

-Steel Pedestal, complete with Tool Rest and Water Pot for  $\frac{1}{2}$ ;  $\frac{3}{4}$ , 1 HP (.373, .560, .746 kw) grinders. Wt. 54 lbs (24.5 kg)

2588002 Cast Iron Pedestal, complete with Tool Rest and Water Pot, for 2 HP

6805001-

-Cast non Pedestal, complete with foot hest and water Pot, for 2 HP (1.492 kw) grinders. Wt. 100 lbs (45.4 kg) -Grinding Wheel Dresser. Wt. 1½-lbs. (.7 kg) -Set of (2) Shatter resistant Eyeshields. -Set of (2) Shatter resistant Eyeshields, illuminated type. Wt. 2½ lbs 6805002-

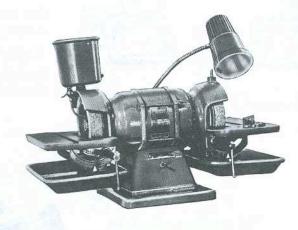
(1.1 kg) Set of (2) 12'' x 2'' (304.80 mm x 50.80 mm) Grinding Wheels. (1 coarse, 1 fine.) Wt. 191/2 lbs (8.8 kg)

6028006—Grinding Wheel Dresser (carbide wheels.) Wt. 11/2-lbs (.7 kg)

-Carbide Wheel 1½1' x 6'' x 1'' (38.10 mm x 152.40 mm x 25.40 mm) face, 60 grit. Wt. 2½-lbs (1.1 kg) 6900020-

-Carbide Wheel 1½" x 6" x 1" (38.10 mm x 152.40 mm x 25.40 mm) face, 120 grit. Wt. 2½-lbs (1.1 kg)





# SAVES TIME . . . CUTS COSTS . . .

Production costs go down when a Powermatic® Model 2200 Carbide Grinder is included in any shop that does grinding or lapping of carbide tipped, steel or stellite cutting tools. There's no need to lose valuable production time while a tool is sent out for sharpening. Now the machinist can conveniently perform his own sharpening tasks with a minimum of time. It's ideal for the high production shop and can be conveniently placed near the production machines.

ALL MACHINES PERFORMANCE-TESTED BEFORE SHIPMENT

# STANDARD EQUIPMENT -

MODEL 2200 CARBIDE GRINDER: Grooved; Tilting Cast Iron Tables, Drain-off Water Pans, Manual Reversing Toggle Switch in base, Cord and Adjustable Work

Lamp. Totally Enclosed Motor. (as selected from options below.) Less Stand.

### STANDARD MACHINES -

1210100 — Bench Grinder, with all standard equipment and reversible ½HP (.373kw), 1 Phase, 115 volt, 3600 RPM (376.99 rad/s) motor. (Wheels not furnished.)

1210110 — Bench Grinder, with all standard equipment and reversible, ½HP (.373kw), 3 Phase, 230/460 volt (specify), 3600 RPM (376.99 rad/s) motor. (Wheels not furnished.)

# **OPTIONAL ACCESSORIES** -

2588001 — Steel Pedestal, complete with Tool Rest and Water Pot, for ½, ¾, 1HP (.373, .560, .746kw) grinders. Wt. 54 lbs (24.5kg)

6900020 — Silicon Carbide Wheel, 1½" x 6" (38.10mm x 152.40 mm), 60 Grit. Wt. 2½ lbs (1.1 kg).
6900025 — Silicon Carbide Wheel, 120 Grit. Wt. 2½ lbs (1.1kg).

# SPECIFICATIONS -

Motor .....single phase, capacitor type, ½HP (.373kw) reversible, 60 Hz, 3600 RPM (376.99 rad/s) Motor .....three phase, heavy-duty squirrel cage type, ½HP (.373kw),

137

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Fil

CI

# POWERMATIC!

# SHOP MAID DUST COLLECTOR



1370000

Stand alone dust collector, complete with 1/2 horsepower, single phase, 110 volt motor, pushbutton switch, and cord and plug set.

#### **FEATURES**

- \* The Shop Maid is a compact dust collector with the efficiency of over 300 cubic feet of air per minute. It removes dust, grit and chips quickly and easily.
- \* Lightweight and portable to move easily from machine to machine.
- \* The filter is heat glazed felt with multi-pockets and a reinforced clamping collar. It helps to remove everything from chalk to large chips.
- \* A foot operated filter shaker is standard. This provides a quick and efficient way to dislodge material from the filter.
- \* The large chip drawer is removable for quick and easy clean out.
- \* The fan is on the clean air side. Dust and particles are stopped so that only clean air reaches the fan.
- \* Filtered air is recirculated indoors, saving costly heated or conditioned air.

#### SPECIFICATIONS

Filter Area 20 Square Ft.
CFM 300
Cleanout Drawer Cap 4 Cubic Ft.
Filter Shaker Foot Operated

Motor	
Dimensions 24" x 18" x 191/2"	
Intake Hose Connection4"	
Weight120 Lbs.	

# POWERMATIC

MODEL 1150-A

# 15" DRILL PRESS

FIVE-SPEED MODELS







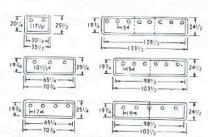
### FULL 6" (152.40mm) STROKE NOW STANDARD

Economy price makes this model very popular with smaller shops, schools and maintenance shops. Built with the same care and precision as the variable speed model, this powerful machine offers years of heavy-duty performance in the most common drill applications.

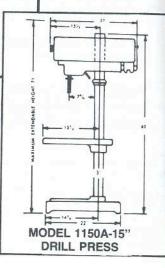


STEP-PULLEY MULTIPLES

Choose from bench, floor and single or multiple spindle production models . . . add components and accessories to custom-tailor the machines for special requirements! In addition to feature-packed design and exacting, precision construction usually found only in higher priced units, the Powermatic 15" drill press offers the ultimate in operating flexibility.



STANDARD MULTIPLE SPINDLE ARRANGEMENTS



# POWERMATIC® 1150-A

# 15" DRILL PRESS

VARIABLE SPEED MODELS

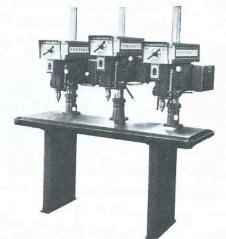


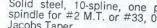
No belts to handle when you change spindle speed! Just a twist of the accurately-calibrated variable speed control lets you choose speeds instantly while machine is running. Extra wide speed range in one model. 475 to 4800RPM (49.74 rad/s to 502.66 rad/s). Increased accuracy and bit life in all drilling operations. drilling operations.

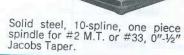


POWERMATIO

FULL 6" (152.40 mm) STROKE NOW STANDARD







AN OPTIONAL

VARIABLE SPEED MULTIPLES

First



ATTACHMENT



ONE belt change provides infinite-variable speed control from less than 100 RPM to 4600 RPM (10.47 rad/s to 481.71 rad/s). For Field Installation Only.

FOR ALL MODEL

1150A VARIABLE

SPEED

DRILL

**PRESSES** 

2398 \*2398 2398

20280

2028

21920 22120

22501 22770

22771 23910

24320

NOTE:

Spind Tap Spind Quill Colur Colun Colur

Colun Table

Uti

Pro Base

Capa Capa

Throa

# STANDARD FLOOR AND BENCH MODELS

Spindle & Motor Spec.	Utility Table Floor Model		Tilting Table Floor Model		Tilting Table Bench Model		Production Table Floor Model		Production Table Bench Model	
	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley
#2 Morse Taper Less Mtr. & Switch	1151310 285 lbs (129.2 kg)	1151320 245 lbs (111.1 kg)	1152810 290 lbs (131.5 kg)	1152820 250 lbs (113.4 kg)	1152822 205 lbs (93.0 kg)	1152824 165 lbs (74.8 kg)	1153810 360 lbs (163.3 kg)	1153820 320 lbs (145.1 kg)	1153822 320 lbs (145.1 kg)	1153824 180 lbs (81.6 kg)
Key Chuck Less Mtr. & Switch	1151290 285 lbs (129.2 kg)	1151300 245 lbs (111.1 kg)	1152790 290 lbs (131.5 kg)	1152800 250 lbs (113.4 kg)	1152821 205 lbs (93.0 kg)	1152823 165 lbs (74.8 kg)	1153790 360 lbs (163.3 kg)	1153800 320 lbs (145.1 kg)	1153821 320 lbs (145.1 kg)	1153823 180 lbs (81.6 kg)

<sup>\*</sup> Table Raising Mechanism Standard Equipment

# MULTIPLE SPINDLE MODELS

Standard Equipped with Head Raising Mechanism and Legs

Spindle & Motor Specs.	2-Spindle		3-Spindle		4-Spindle		5-Spindle		6-Spindle		8-Spindle	
	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley
#2 Morse Taper, Less Mtr. & Switch	1154290 778 lbs (352.8 kg)	1154294 730 lbs (331.0 kg)	1155290 1140 lbs (517.0 kg)	1155294 981 lbs (444.9 kg)	1156290 1325 lbs (600.9 kg)	1156294 1230 lbs (557.8 kg)	1157290 1575 lbs (714.3 kg)	1157294 1480 lbs (671.1 kg)	1158290 1916 lbs (868.9 kg)	1158294 1771 lbs (803.1 kg)	1159290 2513 lbs (1139.6 kg)	1159294 2318 lbs (1051.2 kg
Key Chuck Less Mtr. & Switch	1154291 778 lbs	1154295 730 lbs	1155291 1140 lbs (517.0 kg)	1155295 981 lbs	1156291 1325 lbs	1156295 1230 lbs	1157291 1575 lbs	1157295 1480 lbs	1158291 1916 lbs	1158295 1771 lbs	1159291 2513 lbs	1159295 2318 lbs (1051.2 kg

# MULTIPLE SPINDLE MODELS

Standard Equipment except with T-slot Tables, Head Raising Mechanism & Legs

Spindle &	2-Sp	indle	3-Sp	indle	4-Spindle		
Motor Spec.	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	
#2 Morse Taper Less Mtr. & Switch	1154292 Wt. 778 lbs (352.8 kg)	1154296 Wt. 730 lbs (331.0 kg)	1155292 Wt. 1140 lbs (517.0 kg)	1155296 Wt, 981 lbs (444.9 kg)	1156292 Wt. 1325 lbs (600.9 kg)	1156296 Wt. 1230 lbs (557.8 kg)	
Key Chuck Less Mtr. & Switch	1154293 Wt. 778 lbs (352.8 kg)	1154297 Wt. 730 lbs (331.0 kg)	1155293 Wt. 1140 lbs (517.0 kg)	1155297 Wt. 981 lbs (444.9 kg)	1156293 Wt. 1325 lbs (600.9 kg)	1156297 Wt 1230 lbs (557.8 kg)	

# MULTIPLE SPINDLE TABLES AND STEEL SUPPORT LEGS

2423007 — Leg, steel, 27½" (698.50 mm) high for mounting production tables. Wt. 43 lbs (19.5 kg) ea.
2797014 — Production, Table 19¾" x 98½" (501.65 mm x 2501.90 mm). Accommodates up to six spindles. 3 legs required.

Wt. 560 lbs (254.0 kg)

2797015 — Production Table 19¾" x 128½" (501.65 mm x 3263.90 mm). Accommodates up to eight spindles. 4 legs required. Wt. 731 lbs (331.5 kg).

3797016 — Production Table 20¼ x 30¾" (514.35 mm x 768.35 mm).

Accommodates up to two spindles. 2 legs required. Wt. 235 lbs (106.6 kg).

3797017 — T-Slotted Multiple Spindle Production Table for 1 & 2

spindles. Wt. 235 lbs (106.6 kg)
3797018 — 20" x 20" (508.00 mm x 508.00 mm) center section. Accommodates up to two spindles. Wt. 171 lbs (77.5 kg)
3797037 — Production Table 19¾" x 65¼" (501.65 mm x 1657.35

mm). Accommodates up to four spindles. 2 legs required. Wt. 394 lbs (178.7 kg).

Production Table 1934 x 6514" (501.65 mm x 1657.35 3797066 mm) with T-slots. Accommodates up to four spindles. 2 legs required. Wt. 394 lbs (178.7 kg).

#### STANDARD HEADS

1150258 - Variable Speed, No. 2 Morse Taper, Head only. Less:

1150259 - Variable Speed, Key Chuck, Head only, Less: Motor.

1150260 - Five-speed, No. 2 Morse Taper, Head only. Less: Motor. 1150261 — Five-speed, Key Chuck, Head only, Less: Motor.

# MOTORS FOR USE WITH MODEL 1150 DRILL PRESSES

1 Phase

34 HP (.560 kw), 60 Hz, 1200 RPM (125.66 rad/s), 115/ 230v, TEFC, 56 frame. 34 HP (.560 kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/ 6470600 -

6470700 230v, TEFC, 56 frame.

3 Phase

6470607 — ¾ HP (.560 kw), 60 Hz, 1200 RPM (125.66 rad/s), 200v, TEFC, 56 frame

 34 HP (.560 kw), 60 Hz, 1200 RPM (125.66 rad/s), 230 460v, TEFC, 56 frame.
 34 HP (.560 kw), 60 Hz, 1800 RPM (188.50 rad/s), 575v, TEFC, 56 frame.
 34 HP (.560 kw), 60 Hz, 1800 RPM )188.50 rad/s), 230 460 FFG Frame. 6470608 -

6470702

6470707 ---

460v, TEFC, 56 Frame. 34 HP (.560 kw), 60 Hz, 1800 RPM (188.50 rad/s), 200v 6470712 TEFC, 56 Frame.

VARIABLE SPEED MODEL 1150 DRILL PRESSES REQUIRE A MINIMUM ¾ HP (.560 kw) HP MOTOR.

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice

<sup>\* \*</sup> Head Raising Mechanism Standard Equipment

# **POWERMATIC®**

MODEL

# 15" DRILL PRESS

## CONTROLS FOR USE WITH MODEL 1150 DRILL PRESSES

1 Phase

2398523 — Magnetic Controls. 2398525 — Magnetic Controls w/24v Transformer.

2398527 — Manual Controls.

\*May be specified with 110v transformer.

3 Phase

2398230 — JIC Controls.

2398522 — Manual Controls.

2398524 — Magnetic Controls. \*2398526 — Magnetic Controls w/24v Transformer.

#### **OPTIONAL ACCESSORIES**

2028013—Mortise Attachment, complete with hold-down. Wt. 11 lbs (5.0 kg). 12028067—Vari-Slo Attachment. Field Installation Only. 2192003—Foot Feed. Wt. 32 lbs (14.5 kg) 2212005—Flange for mounting Column on Table. Wt. 9 lbs 8 oz (4.3 kg).

2212005—Hange for Industrial
2250122—Guard.
2277004—Table Raising Mechanism
2277004—Head Raising Mechanism. Wt. 14 lbs 4 oz (6.5 kg).
2391010—Coolant Parts Assembly. Consists of nozzle, valve, column mounting clamp and hose assembly. Wt. 10 lbs (4.5 kg). One required for each spindle.

(3.2 kg).

-Spindle Assembly, #33 Taper complete with bearings. Less: Jacobs Chuck. Wt. 7 lbs (3.2 kg).
-Tilting Table 10'' x 14'' (254.00 mm x 355.60 mm). Wt. 33 lbs (15.0

kg). Production Table for Floor Model, 12" x 18" (304.80 mm x 457.20

mm). Wt. 79 lbs (35.8 kg). -Utility Table 10'' x 11'' (254.00 mm x 279.40 mm). Wt. 29 lbs 8 oz (13.4 kg)

-Center table leg (4 spdl. table)

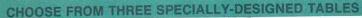
NOTE: Vari-Slow attachment cannot be factory installed.

3042121—Base for Single Spindle Floor Model. Wt. 60 lbs (27.2 kg). 3096008—Safety Collar for Head or Table. Wt. 2 lbs 4 oz. (1.1 kg) 3098208—Column, Multiple Spindle, 42" (1066.80 mm). Wt. 19 lbs (8.6 kg). 3098209—Column, Floor Model, 66" (1676.40 mm). Wt. 31 lbs (14.1 kg). 3797029—Production Table for Bench Model, 14½" x 16" (368.30 mm x 406.40 mm) working surface. Wt. 87 lbs (39.5 kg). 6023003—Adaptor Arbor for #6118013 Chuck. Wt. 6116001—Hollow Chisel, ¼" (6.35 mm). Wt. 6116003—Hollow Chisel, ¾" (9.52 mm). Wt. 6116005—Hollow Chisel, ½" (12.70 mm). Wt. 6118013—O" to ½" (12.70 mm) Chuck. Wt. 6118005—O" to ½" (12.70 mm) Chuck. Wt. 6118005—O" to ½" (12.70 mm) Chuck. #33 Taper, with locking collar. Wt. 6160002—Coolant Pump and Tank. Wt. 37 lbs. (16.8 kg) 6220003—Hollow Chisel Bit only, ¾" (6.35 mm). Wt. 6220005—Hollow Chisel Bit only, ¾" (9.52 mm). Wt. 6220005—Hollow Chisel Bit only, ½" (12.70 mm). Wt. 6448005—Adjustable Work Light. Wt. 10 oz (.3 kg) 8856003—Angle Vise, 2½" (63.50 mm) capacity. Wt. 9 lbs (4.1 kg) 6856004—Straight Vise, 2½" (63.50 mm) capacity. Wt. 6 lbs (2.7 kg) 6856005—Straight Vise, 3" (76.20 mm) capacity. Wt. 7 lbs (3.2 kg) 9100014—Machined base in lieu of standard base.

#### **SPECIFICATIONS**

Spindle; steel
Spindle travel
Quill diameter         2 3/16" (55.56 mm)           Column diameter         3" (76.20 mm) 0.D.
66" /1676 40
200 110 110 110 110 110 110 110 110 110
Column, Wall thickness
Utility table
Tilting table
Dase Working Surface
Capacity in cast iron
Capacity in steel         %2' (13.68 mm)           Throat depth         Drills to center of 15'' (381.00 mm) dia.

Spindle Speeds: Variable Speed Models 1800 RPM (188.50 rad/s) mo	tor"
1200 RPM (125.66 rad/s) mg	PM (49.74 rad/s) to 4800 RPM (502.66 rad/s)
Step Pulley Models 1800 RPM (188.50 rad/s)	PM (33.20 rad/s) to 3200 RPM (335.10 rad/s)
	0 RPM (41.89 rad/s), 840 RPM (87.96 rad/s) 580 RPM (165.46 rad/s), 2800 RPM (293.22
1200 RPM (125.66 rad/s moti	rad/s), 5300 RPM (555.02 rad/s)
1050	.260 RPM (27.2 rad/s) 560 RPM (58.6 rad/s) RPM (109.9 rad/s) 1875 RPM (196.3 rad/s)
Height, floor model Height, Bench model Weight, Net, bench model	3550 RPM (371.6 rad/s) 





Utility Table affords com-pletely rigid and level 10" x 11" (254.00 mm x 279.40 mm) working surface. Slotted for easy attachment of tooling. Part. No. 2797120



Tilting Table tilts 90° right or left for any angle boring job. Provides 10" x 14" (254.00 mm x 355.60 mm) working surface slotted for tooling. Part. No. 2797008

Production Table provides extra large 12" x 18" (304.80 mm x 457.20 mm) working Part No. 2797033

#### surface, precision machined for extra drilling accuracy. Includes raising mechanism.



Spring-Balanced Foot Feed with depth-stop frees operators hands for unusual drilling jobs. Part. No. 2192003

#### Optional Accessories Speed Up Specialized Drilling Operations



Mortising Attachment sec-urely positions stock for all mortising operations. Part No. 2028013



Straight Vise with accurately machined faces locks stock securely. Available in 2½" (63.50 mm) and 3" (76.20 mm) capacities. Part No. 6856004 — 2½" (63.50 mm) Part No. 6856005 - 3" (76.20



Tilting Vise, with precision machined faces, is quickly adjustable for drilling stock at virtually any angle. Part. No. 6856003



Drill Press depth gauge and safety electrical control. Note that the electrical control conforms to accepted standards with hooded start, and open stop buttons.

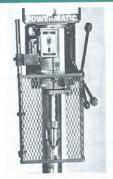


# MADADADADADADA

Hollow Chisels And Bits available for every specialized mortising application. Choose from  $\frac{1}{4}$ " (6.35 mm),  $\frac{3}{6}$ " (9.52 mm), and  $\frac{1}{2}$ " (12.70 mm) sizes.



And Head-Raising Table Mechanisms are quick, positive . easily operated crank operates worm gear on column rack.



115

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115

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The Drill Press guard provides operator protection with grid type panels set in a heavy self-locking frame. Visibility is through a thick plastic window directly in front of the work. Part No. 2250122



-Auto-vise for 15" 6122040drill press -Auto-vise for 20" 6122041drill press

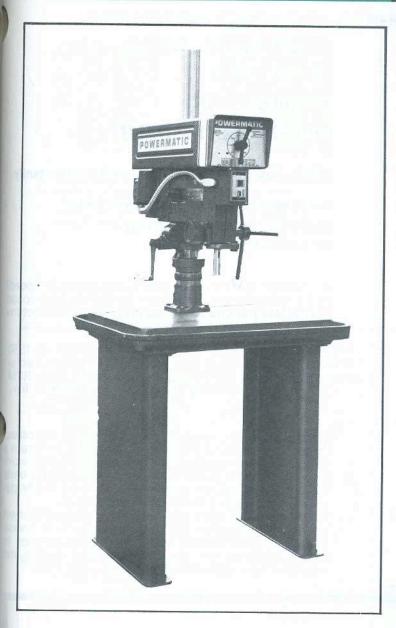


Jacobs chuck w/#33 Taper ... 0-1/2" (12.70 mm) Jacobs chuck complete with key. Part No. 6118013

#2 Mt. Arbor with 33 Taper 6023003



Mounting Flange ... Available for special installations. Part No. 2212005



## INCREASE PRODUCTION RAISE EFFICIENCY

WITH EXTRA-LARGE WORKING SURFACE DRILL PRESSES.

Powermatic Drill Presses combine ruggedness with flexibility, adaptability with versatility and engineering with practical application.

Equipped with 5-step speed or infinitely variable drives-bringing to the job just the right power transmission and speed for the job at hand.

Extra working surfaces are always available with Powermatic over-size tables. And for Multiple Spindle Models, Table Inserts are available to extend the capacities even farther.

Many important optional accessories are also offered to increase the flexibility and utility of the Powermatic Drill Presses; additional tables, spindle assemblies, larger and longer columns, vises, coolant systems and many others. One new and very important addition to the list of Drill Press options is Vari-Slo Drive. This versatile item provides speed from 100 RPM (10.47 rad/s) to 4600 RPM (481.71 rad/s).

#### MODEL LISTINGS-

1150250-Variable Speed with #2 Morse Taper. Less: T-Slots, Motor and Controls

-Variable Speed with Key Chuck, Less: T-Slots, Motor and Controls. -Variable Speed with #2 Morse Taper and T-Slots, Less: Motor and 1150252-

1150253 - Variable Speed, with Key Chuck and T-Slots. Less: Motor and Switch.

1150254—Step Speed with #2 Morse Taper. Less: T-Slots, Motor and Controls.

1150255—Step Speed with Key Chuck. Less: T-Slots, Motor and Controls. 1150256—Step Speed, with #2 Morse Taper and T-Slots. Less: Motor and

1150257—Step Speed with Key Chuck and T-Slots. Less: Motor and Switch.

(SEE PAGES 70-71 FOR MOTORS AND ELECTRICAL CONTROLS)

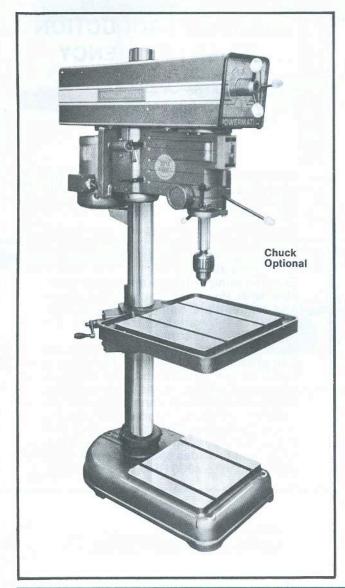
#### **SPECIFICATIONS**

Spindle Speeds: Step-pulley models: High Speed ..... .400 RPM (4189 rad/s), 840 RPM (87.96 rad/s), 1580 RPM (165.46 rad/s), 2800 RPM (293.22 rad/s) 5300 RPM (555.02 rad/s) Vari-Slo Attachment speeds . . 
 Quill Diameter
 to 4600 RPM (481.71 rad/s)

 Stroke
 2 3/16" (55.56 mm)

 6" (152.40 mm)

П	TICATIONS
	Column Diameter
	Column Wall Thickness
	Column Length (standard)
	Largest Dia. Hole in Cast Iron
	Largest Dia. Hole in Steel
	Table Working Surface
	Max. Distance, #2 MT Spindle Nose to Table
	(with Standard Column) 2134" (552.45 mm)
	Max. Distance Key Chuck to Table
	(with Standard Column)
	Weight, Net
	, , ,



# MECHANICAL OR HAND FEED . . . VARIABLE OR FIVE-SPEED MODELS

Change Speed Instantly . . . Check Speed Instantly

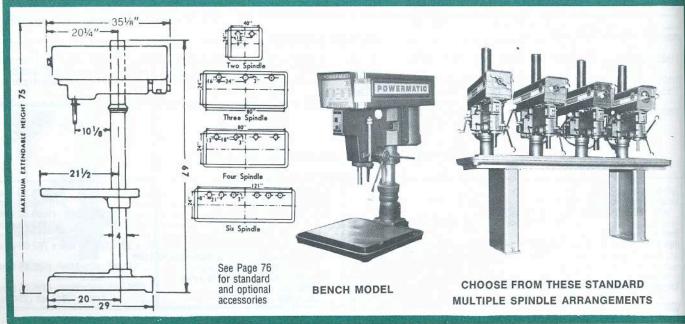
Powermatic® Variable Speed Model with QUICK-SET SPEED SELECTOR AT EYE-LEVEL

No belts to handle when you change spindle speed Just a twist of the accurately-calibrated variable speed control lets you choose speed instantly while machine runs.

Speed ranges from 135 RPM (14.14 rad/s) to 1350 RPM (141.37 rad/s) with 1200 RPM (125.66 rad/s) motor . . . and 200 RPM (20.94 rad/s) to 2000 RPM (209.44 rad/s) increase drilling accuracy and bit life.

Advanced design, rugged construction and big capacity combine to make the Powermatic® 20" Drill Pressa versatile performance-leader for the heaviest work loads. Utilizing optional accessories, specialized units for every production requirement can be easily developed in multiple spindles or single units.

veloped in multiple spindles or single units.
Easily movable, units can be quickly shifted to met changing production line requirements. Low investment and maintenance costs bring giant savings to industrial plants, schools, metal working, pattern and maintenance shops of all types.



## STANDARD FEATURES ASSURE PRECISION DRILLING



Micrometer - Type Depth Gauge assures depth accuracy with precision, eye-level calibrations. Easy to set, easy to see!



Safety Control Switch is front-mounted for operator convenience. Guarded push-button design helps prevent accidental starts.



Extra Heavy 4" (101.60 mm) Column is ½" (12.70 mm) thick mm) precision - ground steel, assuring rigid top and bottom support for heavy duty, cast iron head assembly. Available lengths 42" (1066.80 mm) (standard bench model), 66" (1676.40 mm) (standard floor model) or 78" (1981.20 mm)



Table-Raising Mechanism is fast and accurate . . . crank-op-erated utilizing worm gear. Part No. 2797012

#### **FIVE SPEED MODEL** with Exclusive Counter-shaft Drive

Utilizing an inter-pulley drive concept, this five-speed concept, this five-speed model offers the widest model offers the widest range of speeds available to-day. The combination of ultra-slow speed (100 RPM with 900 RPM (10.47 rad/s with 94.25 rad/s) to high speed (1500 RPM with 1800 RPM (157.08 rad/s with 188.50 rad/s) affords a flexi-188.50 rad/s) affords a flexi-bility of speed ranges previ-ously unavailable for complicated multiple spindle production lineups.

duction lineups.
This extremely wide range of speeds assures top performance of every operation, from tapping, spotfacing and reaming to high-speed drilling on a single unit, without bulky attachments. bulky attachments.

Centrifugal action

delivers large volume of liquid at low pres-

### Choose Mechanical or Manual Feed Operation



#### Time-Saving, Variable Speed **POWER FEED**

The variable speed mechanical feed unit now available featuring infinitely variable feed speeds from .004" (.102 mm) to .012" (.30 mm) per-spindle-revolution! Speed is adjusted with convenient handle on feed housing . . easy-to-check, eye-level speed indicator. Feed rate is maintained for dicator. Feed rate is maintained for all spindle speeds. Drills to any desired depth, controlled by limitswitch on depth-stop indicator. Part No. 2192013.

#### COOLANT PUMP Cuts Production Costs . . .



Pump and Tank - Part No. 6160002 Coolant Parts Assembly - Part. No. 2391010

sure ... seals and bearings above liquid Flow may be controlled or shut off without damage to motor ... No priming needed ... Coolant Pump complete with 115 V, 60 Cycle, AC, 1800 RPM (188.50 rad/s) motor. Coolant parts assembly: nozcolumn zle, valve, mounting clamp and flexible hose, coolant piping and table clamps.

MODEL

## HOW TO ORDER MULTIPLE SPINDLE FLOOR AND BENCH MODELS

SPEED AND		11001		Floor Model Bench Model oduction Table Production Table		Two Spindle		Three Spindle		Four Spindle		Six Spindle		Eight Spindle		
MOTOR SPECIFICATIONS	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley	Variable	Step Pulley
*Hand Feed Less Mtr. and Switch	1202010 582 lbs (263.9 kg)	1202260	1203010 600 lbs (272.1 kg)	1203260 570 lbs (258.5 kg)	1203510 485 lbs (219.9 kg)	1203760 400 lbs (181.4 kg)	1204010 1270 lbs (575.9 kg)	1204260 1240 lbs (562.3 kg)	1205010 2040 lbs (925.0 kg)	1205260 1950 lbs (884.3 kg)	1206010 2330 lbs (1056.7 kg)	1206260 2210 lbs (1002.2 kg)	1208010 3515 lbs (1594.0 kg)		1209010 4640 lbs (2104.2 kg	4400 lbs

NOTE: ALL MULTIPLE SPINDLE MODELS INCLUDE HEAD RAISING MECHANISMS AND LEGS.

V/S MACHINES PRICED LESS MOTOR FOR MOTOR EXCHANGE PURPOSES — NOT AVAILABLE LESS MOTOR.

## MULTIPLE SPINDLE T-SLOTTED TABLE DRILL PRESSES

STANDARD EQUIPMENT	Two S	Spindle Three Spindl		Spindle	ndle Four Spindle			pindle	Eight Spindle		
T-Slotted Tables. Less: Motor and Controls.	Variable 1204050 1270 lbs (575.9 kg)	Step Pulley 1204040 1240 lbs (562.3 kg)	Variable 1205050 2040 lbs (925.0 kg)	Step Pulley 1205040 1950 lbs (884.3 kg)	Variable 1206050 2330 lbs (1056.7 kg)	Step Pulley 1206040 2210 lbs (1002.2 kg)	Variable 1208050 3515 lbs (1594.0 kg)	Step Pulley 1208040 3335 lbs (1512.4 kg)	Variable 1209050 4640 lbs (2104.2 kg)	Step Pulley 1209040 4400 lbs (1995.4 kg	

#### HEAD ASSEMBLIES

1200010 - Head Assembly, hand feed, variable speed, belt, pulley. Less: Motor, Switch and Head Raising Mechanism. Wt. 370 lbs (167.8 kg)

1200260 - Head Assembly, hand feed. 5-speed, belt and pulleys. Less: Motor, Switch and Head Raising Mechanism. Wt 340 lbs (154.2 kg)

#### MOTORS FOR USE WITH MODEL 1200 DRILL PRESSES

1 Phase

1 HP (.746 kw), 60 Hz, 1200 RPM (125.66 rad/s), 115/230v, 6470912 -

TEFC, 145T frame.

11/2 HP (1.119 kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/ 6471301 -230v, TEFC, 145T frame.

3 Phase

1 HP (7.46 kw), 60 Hz, 1200 RPM (125.66 rad/s), 230/460v, TEFC, 145T frame. 6470901 -

1 HP (.746 kw), 60 Hz, 1800 RPM (188.50 rad/s), 200 v, 6471026 -

TEFC, 143T frame. 1 HP (.746 kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/460v, 6471027 -TEFC, 143T frame

11/2 HP (1.119 kw), 60 Hz, 1200 RPM (125.66 rad/s), 200v, 6471206

TEFC, 182T frame. 1½ HP (1.119 kw), 60 Hz, 1200 RPM (125.66 rad/s), 230/ 460v, TEFC, 182 T frame. 6471207

\*Do not specify High Reversing motors on V.S. models

6471304 — 1½ HP (1.119 kw), 60 Hz, 1800 RPM (188.50 rad/s), 230 460v, TEFC, 145T frame. 6471317 — 1½ HP (1.119 kw), 60 Hz, 1800 RPM (188.50 rad/s), 575k, TEFC, 145T frame.

11/2 HP (1.119 kw), 60 Hz, 1800 RPM (188.50 rad/s), 200), 6471322 -

2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 575), TEFC, 145T frame.
-2 HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 200, 6471616 -

6471617 -TEFC, 145T frame.

**3-Phase, 2-speed** 6473012 — 2 & 1 HP (1.492 & .746 kw), 60 Hz, 1800 & 900 RPM (188.50 & 94.25 rad/s), 230/460v, O.D.P., 184T frame.

#### CONTROLS FOR USE WITH MODEL 1200 DRILL PRESSES

1 Phase

2398178 Magnetic Controls, 115/230v.

2398183 - Pushbutton Switch, 115/230v.

2398492 - Magnetic Controls, 115/230v, w/24v transformer.

Magnetic Reverse Starter, Pushbutton w/limit switches 2398171 -200/230/460/575v.

2398172 Manual Reverse Switch, 200/230/460/575v

2398174 -Magnetic Controls, 200/230/460/575v, w/24v transformer.

2398180 - Magnetic Controls, 200/230/460/575v.

2398182 -Pushbutton Switch, 200/230/460/575v

2398230 - JIC Controls, 200/230/460/575v

2398428 — Multiple Speed, 2-Speed Switch, 200/230/460/575v.

Magnetic Reverse Starter, w/3-station pushbutton, w/o 2398506 limit switch, 200/230/460/575v

Special Controls for High Reversing Motors

2398171 - Magnetic Reverse Starter, Push Button, w/Limit Switches, 200/230/460/575v.

\$2398478—Magnetic Rev. w/trans. 200/230/460/575v. w/o limit sws 6821137 — Reverse Limit Switch. (2 required.)

9100002 - Conduit in lieu of standard wiring

\*May be specified with 110v transformer

‡Does not include limit switches.

#### - OPTIONAL ACCESSORIES

2192013-Mechanical Feed, Wt. 80 lbs (36.3 kg)

2212006—Flange, with screws for mounting column on table. Wt. 15 lbs (6.8 kg)

2250119—Guard, Hand feed drill presses. 2250125—Guard, Power feed drill press.

2277005-Head Raising Mechanism. Wt. 20 lbs (9.1 kg)

2797028

6023008 6160002

6448005

6856001

6856002

Spindle

Variable

High

Slow

2-Speed

Step Pu

1800

1200

#### OPTIONAL ACCESSORIES (Continued)

- 0" to 1/2" (12.70 mm) Chuck with adapter for No. 3 Morse Taper. Wt. 2383001 — 0" to ½" (12.70 mm) Chuck with adapter for No. 3 Morse Taper, wt.
2391010 — Coolant Assembly for 1-spindle, consisting of Nozzle, Valve, Manifold and Hose Assembly.
2391011 — Coolant Assembly for 2-spindle, consisting of Nozzle, Valve, Manifold and Hose Assembly.
2391012 — Coolant Assembly for 3-spindle, consisting of Nozzle, Valve, Manifold and Hose Assembly.
2391013 — Coolant Assembly for 4-spindle, consisting of Nozzle, Valve, Manifold and Hose Assembly.
2423003 — Steel Legs for mounting production tables. Height, 27" (685.80mm). (each) Wt. 55 lbs (24.9 kg) 2423008-Middle leg (6 & 8 spdl. table) 2423009—Center post (4 spdl. table) 2797012 — Table Raising Mechanism. (Standard with floor model). Wt. 21 lbs (9.5 kg)
2797018 — Production Table 24" x 121" (609.60 mm x 3073.40 mm), ground surface for six spindles. 3 legs required. Wt. 1240 lbs (562.3 kg)
2797026 — Production Table with parallel T-slots, 15½ x 18" (393.70 mm x 457.20 mm), ground surface. Wt. 119 lbs (54.0 kg)
2797028 — Tilting Table 16" x 18" (406.40 mm x 457.20 mm), ground surface, column bracket and tilting scale. Less: Raising Mechanism. Wt. 6-Spindle T-Slot Table. 3 legs required. 2797127 3096039-Safety collar — Column, 4" x 66" (101.60 mm x 1676.40 mm). (Standard on floor models) Wt. 103 lbs (46.7 kg) — Column, 4" x 42" (101.60 mm x 1066.80 mm). (Standard on bench models) Wt. 66 lbs (29.9 kg) — Column, 4" x 78" (101.60 mm x 1981.20 mm). Wt. 122 lbs (55.3 kg) 3098004 -3098005 3098007 3694006—Leveling screw (2 required per leg) - Center Section, 24" x 42" (609.60 mm x 1066.80 mm), drilled and tapped for 2 spindles, to make 8 spindle table. Wt. 335 lbs (151.9 3797012 kg)
- Production Base Bench Model, 18" x 25" (457.20 mm x 635.00 mm) ground surface. Wt. 121 lbs 54.9 kg)
- Production Table 24" x 40" (609.60 mm x 1016.00 mm), ground surface for 2 spindles. Wt. 370 lbs (167.8 kg). 2 legs required.
- Production Table 24" x 80" (609.60 mm x 2032.00 mm), ground surface, for 4 spindles. Wt. 835 lbs (378.7 kg). 2 legs required.
- 2-Spindle T-Slot Table.
- 4-Spindle T-Slot Table.
- 4-Spindle T-Slot Table.
- 5-Coolant Pump & Table Wt. 37 lbs (16.8 kg) 3797028 3797035 3797036 3797064 3797065 6023008 Coolant Pump & Tank. Wt. 37 lbs (16.8 kg) 6160002 Adjustable Work Lamp. Wt. 10 oz (.3 kg)
 Drill Press Vise, 4½" (114.30 mm) capacity. Wt. 12 lbs 5 oz (5.6 kg) 6448005

#### SPECIFICATIONS

- Drill Press Vise, tilting. Wt. 33 lbs (15.0 kg)

6856001

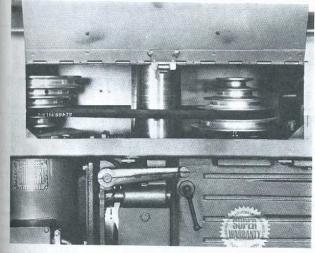
6856002

Spindle Speeds: Variable Speed Model

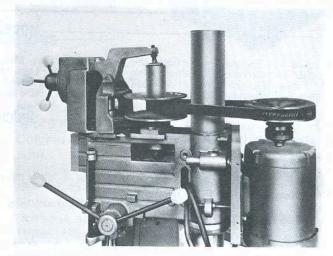
Quill Diameter       2¾" (69.85 mm         Spindle       #2 or #3 M.T., 6 spline       13/16" (30.16 mm         Base Working Surface       13½ x 18" (342.90 mm x 457.20 mm         Stroke       6" (152.40 mm	1)
Dimensions:  Height, Floor Model (max.)	りりりりりりりりんりり

All specifications, dimensions and design characteristics shown in this catalog are subject to change without notice.

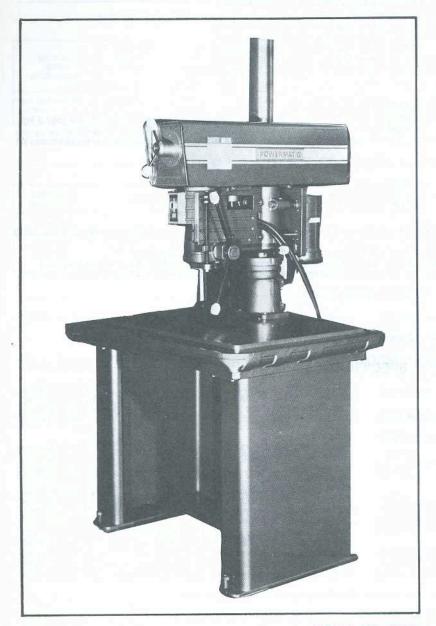
1000 RPM (104.72 rad/s)



STEP PULLEY MODEL WITH **EXCLUSIVE** 'SNAP/OPEN" SPRING LOADED DOOR



CHANGE SPEED INSTANTLY . . . CHECK SPEED INSTANTLY No belts to handle when you change spindle speed! Just a twist of the accurately-calibrated variable speed control lets you choose speeds instantly while machine is running. Extra wide speed range in one model. Increased accuracy and bit life in all drilling operations.



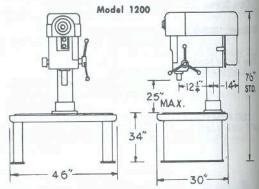
# EQUIP WITH THE BEST . . . . for maximum PRODUCTIVITY, minimum DOWN-TIME, unexcelled PERFORMANCE and unequaled PRECISION.

Powermatic 20-inch Drill Presses have been developed over a twenty five year span, by dedicated people who devote time and effort to the details that make fine products.

Just a few of those important reasons for equipping with Powermatic Drill Presses are: the additional weight, the rugged construction, the carefully machined spindles, the sealed ball bearings the wide variety of tables, the variety of columns the large number of motors and controls and the care and skill which comes with twenty five years of manufacturing experience.

Superior performance is assured by sealed lubricated for life ball bearings, precision ground spindles of solid steel, 6 spline spindles and dynamically balanced pulleys.

Users everywhere, in all applications, depend on Powermatic.



#### MODEL LISTINGS

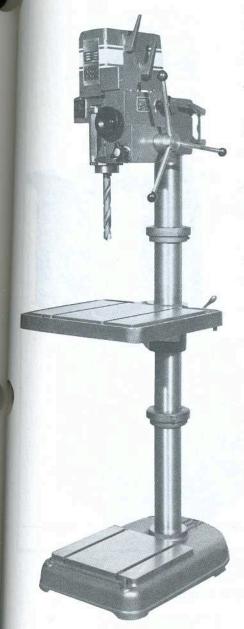
1200300 — 1-Spindle, Production	Table, Step Speed, Less: Motor and Controls.
1200330 - 1-Spindle, Production	Table, Variable Speed. Less: Motor and Controls.
1200340 - 1-Spindle, Production	Table with T-Slots, Step Speed, Less: Motor and Controls.
1200350 - 1-Spindle, Production	Table with T-Slots, Variable Speed. Less: Motor and Controls.

#### SPECIFICATIONS

(with 1200 RPM (125.66 rad/s) Motor)
Slow Speed
400 RPM (41.89 rad/s), 610 RPM (63.88 rad/s)
1000 RPM (104.72 rads
Quill Diameter
Stroke
Column Diameter
Column Wall Thickness
Column Length (Standard)
Largest Dia. Hole in Cast Iron
Largest Dia. Hole in Steel
Table Working Surface
Max. Distance, Spindle Nose to Table
(with standard column)
Weight. Net

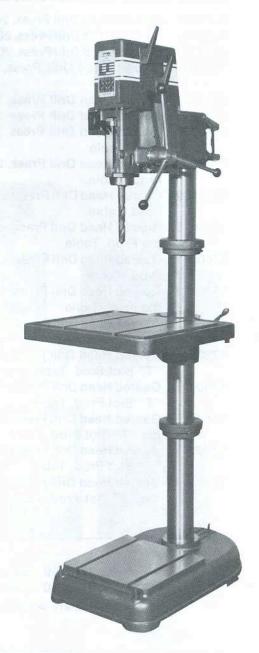
Spin

#### GEARED HEAD DRILL PRESS



#### **FEATURES**

- \* The only geared head drill press with a 4" column hole. Ideal for retrofitting to existing single or multiple spindle set ups. Mix gear drive, step pulley or variable drive heads in any combination to suit your special operations.
- \* The two speed motor delivers 2 horsepower at high speed and a full 1.5 HP at low speed. More torque for heavy duty drilling in exotic metals.
- \* The quietest of all geared head drill presses. An exclusive combination of steel/fiber gearing assures a quiet positive drive.
- \* And now, a 20" geared head drill press with power feed for those heavy duty drilling requirements.



#### SPECIFICATIONS-

#### P-20 SPECIFICATIONS

No. of Speeds—8 Speeds (RPM) 85, 170, 335, 410, 670, 820, 1620, 3240 Column Hole Size—4.004/4.005" (101.702/101.727 mm) Drilling Capacity—1" (25.4mm) in steel 1 3/16 (30.15mm) in Cast Iron

Motor Output—2.0/1.5 HP—1.5/1.1 KW
Distance Spindle to Column—10'' (254mm)
Taper in Spindle—#3 Morse Taper

Spindle Travel—5 5/16 (135mm)

#### PF-20 SPECIFICATIONS

No. of Speeds—8
Speeds (RPM) 85, 170, 335, 410, 670, 820, 1620, 3240
Column Hole Size—4.004/4.005" (101.702/101.727 mm)
Drilling Capacity—1" (25.4 mm) in steel 1 3/16 (30.15mm) in Cast Iron
Motor Output—2.0/1.5 HP—1.5/1.1 KW

Distance Spindle to Column—10" (254mm)
Taper in Spindle—# 3 Morse Taper

Spindle Travel—5 5/16 (135mm)

Number of Feeds—(4)

Feed Rates—.003, .006, .008, and 0.12 in/Rev. .076, .152, .203, and .305 mm/Rev.

# POWERMATIC

#### GEARED HEAD DRILL PRESS

#### BASIC MACHINES

1780001	Geared Head Drill Press, 20", Hand Feed, Floor Model, Prod. Table	
1780002	Geared Head Drill Press, 20", Power Feed, Floor Model, Prod. Table	
1780003	Geared Head Drill Press, 20", Hand Feed, Flood Model, Tilting Table	
1780004	Geared Head Drill Press, 20", Power Feed, Flood Model, Tilting	
	Table	
1780005	Geared Head Drill Press, 20", Hand Feed, Bench Model	
1780006	Geared Head Drill Press, 20", Power Feed, Bench Model	
1780007	Geared Head Drill Press, 20", Hand Feed, 1 Spindle on 2 Spindle	
	Prod. Table	
1780008	Geared Head Drill Press, 20", Power Feed, 1 Spindle on 2 Spindle	
	Prod. Table	
1780009	Geared Head Drill Presses, 20", Hand Feed, 2 Spindles on 2 Spindle	
	Prod. Table	
1780010	Geared Head Drill Presses, 20", Power Feed, 2 Spindles on 2 Spin-	
	dle Prod. Table	
1780011	Geared Head Drill Presses, 20", Hand Feed, 4 Spindles on 4 Spindle	
	Prod. Table	
1780012	Geared Head Drill Presses, 20", Power Feed, 4 Spindles on 4 Spiin-	
	dle Prod. Table	
1780013	Geared Head Drill Press, 20", Hand Feed, 1 Spindle on 2 Spindle "T"	
	Slot Prod. Table.	
1780014	Geared Head Drill Press, 20", Power Feed, 1 Spindle on 2 Spindle	
	"T" Slot Prod. Table.	
1780015	Geared Head Drill Presses, 20", Hand Feed, 2 Spindles on 2 Spindle	
	"T" Slot Prod. Table.	
1780016	Geared Head Drill Presses, 20", Power Feed, 2 Spindles on 2 Spin-	
	dle "T" Slot Prod. Table.	
1780017	Geared Head Drill Presses, 20", Hand Feed, 4 Spindles on 4 Spindle	
	"T" Slot Prod. Table.	
1780018	Geared Head Drill Presses, 20", Power Feed, 4 Spindles on 4 Spin-	

dle "T" Slot Prod. Table.

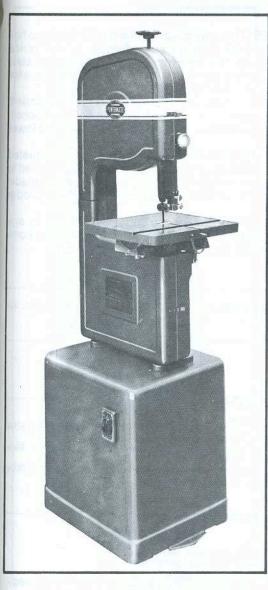


#### **HEAD ASSEMBLIES**

1780019 Geared Hill Drill Press, 20", Hand Feed, Head Assembly 1780020 Geared Head Drill Press, 20", Power Feed, Head Assembly Machines are wired for single voltage only. Please specify 230V, 3Ph or 460V, 3Ph

#### **OPTIONAL ACCESSORIES**

2212006	Mounting Flange	3098005	42" Column
2277005	Head Raising Mechanism	3694006	Leveling Screw (2 reg per leg)
2383001	1/2" Chuck to No. 3 MT	3797035	2 Spindle Production Table
2391010	Coolant Assembly, 1 Spindle	3797036	4 Spindle Production Table
2391011	Coolant Assembly, 2 Spindle	3797064	2 Spindle "T" Slot Production Table
2391013	Coolant Assembly, 4 Spindle	3797065	4 Spindle "T" Slot Production Table
2423003	27" Steel Leg	6023008	No. 3 to No. 2 MT Sleeve
2423009	Center Post 4 SpdI Table	6160002	Coolant Pump and Tank
2797012	Table Raising Mechanism	6448005	Adjustable Work Light
3096039	Safety Collar	6856001	Vise
3098004	66'' Column	6856002	Tilting Vise



#### HEAVIER ... VIBRATIONLESS ... SMOOTHER ...

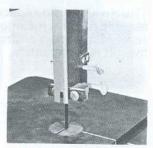
Leading the field in performance . . . rugged, versatile, dependable . . . POWERMATIC® Model 141 Band Saw, through precise engineering, offers the outstanding performance required for every type of band sawing operation. The advance-design of the rugged one-piece, box type frame casting makes it the heaviest 14" Band Saw available. The weight, vibrationless operation, and perfect alignment gives the smoothest performance ever and, insures years of trouble free operation. A complete line of accessories, blades and electricals provide flexibility and safety previously found only in higher priced production models.



OPTIONAL CIR-CLE CUTTING AT-TACHMENT. Cuts circles and arcs with ease.



**Exhaust Chute.** This exhaust chute scavenges most of the dust and particles from inside the saw, reducing clean-out periods and improving saw performance.



Blade Guard. Extends the protected blade area to the workpiece, minimizing blade exposure to workable tolerances.



Ball bearing side and backup bearings reduce blade fatigue as much as 50% on all non-ferrous materials.



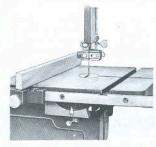
Swivel type table stop. Positive table stop at 90° or is easily moved to a 15° left tilt.



Quick change tires eliminates difficult tire change — massive boxtype casting houses dynamically balanced wheel for smooth operation.



Side Takeout Slot for bandsaw blade eliminates necessity of split or narrow trunnions. Tapered pin keeps table surface flat.



Rip Fence — Optional for precision ripping and resawing.

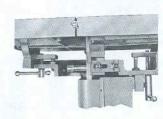


Table Trunnion — Heavy duty, widely spaced table trunnion assures positive lock and maximum table rigidity at any degree of tilt. Large, easy to read tilt scale located at the front of the trunnion.



Eye level blade tension scale shows correct tension for different blade widths. Adjustable from front of machine.

# POWERMAT

MODEL

#### 14" WOODCUTTING BAND SAW

FRAME: Massive, box-type, one piece, cast iron frame, ribbed and cross ribbed for maximum rigidity, vibrationless, trouble-free service.

WHEELS: Heavy duty cast iron upper and lower wheels, precision machined and dynamically balanced for smooth running. Crowned rubber tires provide positive grip preventing blade slippage.

TABLE: Huge 15" x 15" (381.00 mm x 381.00 mm) cast iron table, ground for true accuracy and equipped with side take-out to permit use of a one piece rip-fence guide rail. Tilts 45° right—15° left, with positive stop at 90°

TRUNNION: Wide spaced cast iron and steel trunnion assures positive locking of table. An easy to read 'sight' scale is mounted on front of trunnion for quick, positive tilt adjustment.

SAW GUIDES: Top saw guide is fitted with back-up ball bearings and ball bearing side guides. Lower guide utilizes back-up ball bearing and 45° hardened steel side guides. Lower guide is just below table surface for maximum blade support.

GUARDS: All moving parts are completely guarded. Only the operating portion of the blade is exposed. Large deep drawn steel doors enclose upper and lower wheels.

SAW BLADE ADJUSTMENT. Blade tension is adjusted with conveniently located handwheel, spring loaded to absorb shock and maintain equal tension on the blade. A tension scale, located at eye-level, indicate proper blade tension.

DRIVE: Non-slip V-belt for utmost efficiency in any work load range. Drive, motor, and "v" belt are completely enclosed in a rugged steel floor stand.

#### STANDARD EQUIPMENT

MODEL 141 BANDSAW: 1/4" (6.35mm) blade, ball bearing guides,

wheel guards, blade guards, wrenches, arbor pulley, motor pulley, V-belt, and exhaust chute.

#### BASIC MACHINES

1410010 - 14" Bandsaw, complete with all standard equipment. Less: Motor, controls, stand, motor pulley and V-belt.

#### **MOTORS FOR USE WITH MODEL 141 BANDSAWS**

1 Phase 6470700 - 34HP (.560kw), 60 Hz, 1800 RPM (198.50 rad/s), 115/230v, TEFC, 56 frame.

6470702 — ¾HP (.560kw), 60 Hz, 1800 RPM (198.50 rad/s), 575v. TEFC, 56 frame.

3/4HP (.560kw), 60 Hz, 1800 RPM (198.50 rad/s), 230/460v, 6470707 -

TEFC, 56 frame. 6470712 — ¾HP (.560kw), 60 Hz, 1800 RPM (198.50 rad/s), 200v. TEFC, 56 frame.

#### **CONTROLS FOR USE WITH MODEL 141 BANDSAWS**

1 Phase 2398114 - Pushbutton Switch, 115/230v.

2398336 — Magnetic Controls, 115/230v. 2398487 — Magnetic Controls, 115/230v, w/24v transformer.

\*May be specified with 110v transformer.

3 Phase 2398115 — Pushbutton Switch, 200/230/460/575v. 2398118 — Magnetic Controls, 200/230/460/575v. 2398115 -

2398230 - JIC Controls, 200/230/460/575v

2398435 - Magnetic Controls, 200/230/460/575v, w/24v transformer. 9100003 — Wired in flexible metal conduit in lieu of standard wiring.

#### **OPTIONAL ACCESSORIES**

\*1370000—Dust collector. Wt. 120 lbs (54.4 kg)

2195015-Rip Fence. Wt. 8 lbs (3.6 kg)

2250087 - Guard (retrofit.) Wt. 4 oz (.2kg)

2253040 — Lower Guide Assembly. Wt: 3 lbs (1.4kg) 2253060 — Upper Guide Assembly. Wt. 3 lbs (1.4 kg)

2471010 - Miter Gauge. Wt. 31/2 lbs (1.6kg)

2670003 - Stop Rod Assembly. Wt. 1 lb (.45 kg)

2028073-Circle Cutting Attachment

NOTE: See page 94 for blade welders.

\*See page 67 for dust collector.

2759013 - Floor Stand. Wt. 57 lbs (25.8kg)

6080002 — ¼" (6.35mm) Wide Bandsaw Blade. Wt. 6 oz (.2kg) 6080003 — %" (9.52mm) Wide Bandsaw Blade. Wt. 6 oz (.2kg)

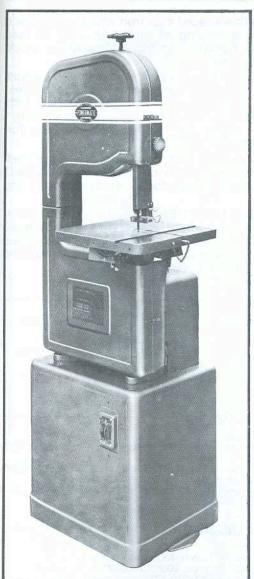
6080004 — ½" (12.70mm) Wide Bandsaw Blade. Wt. 8 oz (2kg) 6080005 — ¾" (19.05mm) Wide Bandsaw Blade. Wt. 12 oz. (.3 kg)

6448005 - Work Light. Wt. 8 oz (.2kg)

#### SPECIFICATIONS

CAPACITY: Blade to column distance	
Under guide	.3000SFM (15.24 m/s)
Overall Height (on stand)	71" (1803.40mm)
Width Front to Back	
Table Size	1.00mm x 381.00mm)

Table tilt         .45° right, 15° left           Blade width, maximum         .34" (19.05mm)
Table till
Blade width, maximum
Blade length96" - 94" (2438.40mm - 2387.60mm)
Weight, crated, less stand
Weight, crated, with stand and motor355 lbs (161.0kg)
Export, boxed, with stand and motor (39.9 cu ft (1.129 m3)

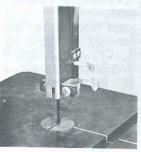


#### RUGGED... BIG CAPACITY... A VERSATILE PERFORMANCE LEADER...

Combining careful design, rugged cast iron construction and big capacity, the Powermatic Model 143-14" combination wood and metal Band Saw is equally adaptable to the machine shop, tool room, foundry, pattern or school shop, or wherever exacting performance is required. The added rigidity of its heavy duty construction makes it possible to cut stainless steel and guarantees true accuracy wherever there exists the problem of performing precision contour and band filing operations. Loaded with quality features, the Model 143-14" Band Saw is the ultimate for production needs . . . and it's priced within the range of the average hobbyist.



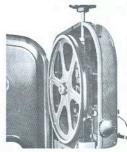
OPTIONAL CIRCLE CUTTING ATTACHMENT. Cuts circles and arcs with ease.



Blade Guard. Extends the Exhaust Chute. This exhaust



protected blade area to the chute scavenges most of the workpiece, minimizing blade dust and particles from inexposure to workable toler- side the saw, reducing clean-out periods and improving saw performance.



Quick-change tires eliminates difficult tire change-massive boxtype casting houses dynamically balanced balanced wheel for smooth operation.



Eye level blade tension scale shows correct tension for different blade widths. Adjustable from front of machine.



Saw Guides. Rugged, dependable hardened steel side guides with ball bearing back-up guarantee accuracy. Lower angular guide places guide just below table surface for maximum blade control.



Swivel type table stop. Positive table stop at 90° or is easily moved for a 15°



Side Takeout Slot for bandsaw blade eliminates necessity of split narrow trunnions. Tapered pin keeps table surface flat.



Heavy Duty Precision Gear Train is constant-ly bathed in non-foaming oil. All shafts are mounted in sealed ball bearings assuring long life and trouble-free operation.



Belt-Tension Control. Swing-away action pro-vides quick, simple belt tension control. Lever located outside of belt housing permits belt adjustment in a minimum of time.



Welder. Blade welder and grinder for quick blade repair and installation. Portable only.

#### **FEATURES**

FRAME: Massive, box-type, one piece cast iron frame, ribbed and cross ribbed for maximum rigidity, vibrationless, trouble free service.

TRANSMISSION: Friction free ball bearing design throughout ... a massive, quick-change two speed gear box constantly bathed in oil for noise-less, long life operation. The two-speed transmission and step pulley drive provide any of eight speeds from 40 to 3000SFM (.203 m/s to 15.240 m/s) for cutting a variety of metals, plastics and wood.

WHEELS: Heavy duty cast iron upper and lower wheels are precision machined and dynamically balanced for smooth running. Crowned rubber tires provide positive grip preventing blade slippage.

**TABLE:** A huge 15" x 15" (381.00mm x 381.00mm) cast iron table, ground for true accuracy is equipped with side take-out permitting use of a solid rip fence guide rail. Tilts 45° right — 15° left with positive stop at TRUNNION: Wide-spaced cast iron and steel trunnion assures positive locking of table. An easy to read 'sight' scale is mounted on front of table for quick positive tilt adjustment.

SAW GUIDES: The top saw guide is fitted with backup ball bearing and large hardened steel side guides. Lower guide also utilizes backup ball bearing with angular hardened steel side guides. This design places lower guide just below table surface for maximum blade control.

GUARDS: All moving parts are completely guarded. Only the operating portion of the blade is exposed. Large deep drawn steel doors enclose upper and lower wheels.

SAW BLADE ADJUSTMENT: Blade tension is adjusted with conveniently located handwheel, springloaded to absorb shock and maintain equal tension on the saw blade. Convenient scale, mounted at eye-level for proper blade tension.

#### STANDARD EQUIPMENT

MODEL 143 BANDSAW: 2-speed Transmission, belt guards, driven (9.52 mm) blade, wheel blade guards, wrenches, hardened steel blade guides, driven pulley, drive belt and exhaust chute.

#### **BASIC MACHINES**

1430020-14" Bandsaw, complete with all standard equipment. Less: Motor and controls and stand.

NOTE: MACHINE NOT SOLD LESS STAND

#### MOTORS FOR USE WITH MODEL 143 BANDSAWS

1 Phase 34HP (.560kw), 60 Hz, 1800RPM (188.50 rad/s), 115/230v, TEFC, 56 frame. 6470700 -

3 Phase <sup>3</sup>4HP (.560kw), 60 Hz, 1800RPM (188.50 rad/s), 575v, TEFC, 56 frame. <sup>3</sup>4HP (.560kw), 60 Hz, 1800RPM (188.50 rad/s), 230/460v, 6470702

6470707 -

TEFC, 56 frame. 34HP (.560kw), 60 Hz, 1800RPM (188.50 rad/s), 200v, TEFC, 56 frame. 6470712 -

#### CONTROLS FOR USE WITH MODEL 143 BANDSAWS

1 Phase

2398114 - Pushbutton Switch, 115v.

2398336 — Magnetic Controls, 115/230v. 2398487 — Magnetic Controls, 115/230v, w/24v transformer.

\*May be specified with 110v transformer.

3 Phase 2398115 — Pushbutton Switch, 200/230/460/575v. 2398118 — Magnetic Controls, 200/230/460/575v. 2398230 — JIC Controls, 200/230/460/575v: Class 1 only. "2398435 — Magnetic Controls, 200/230/460/575v, w/24v trans-

former

9100003 - Conduit in lieu of standard wiring.

#### **OPTIONAL ACCESSORIES**

\*1370000—Dust collector. Wt. 120 lbs (54.4 kg)

1990010-Band Saw Welder with case and grinder for blades up to 1/2" (12.70

mm), 115v, wt. 59 lbs (26.8 kg) -Band Saw Welder with case and grinder for blades up to ¾'' (19.05 mm), 230v, wt. 59 lbs (26.8 kg) 1990030—Band Saw Welder with case and grinder for blades up to ¾'' (19.05

mm), 460v, wt. 59 lbs (26.8 kg)

-Band Saw Welder with case and grinder for blades up to ¾'' (19.05

mm), 575v, wt. 59 lbs (26.8 kg) 2195015—Rip Fence, Wt. 8 lbs (3.6 kg) 2471010—Miter Gauge. Wt. 3½ lbs (1.6 kg) 2250087—Guard (retrofit.) Wt. 1 lb. (.45 kg)

NOTE: See page 94 for blade welders.

\*See page 67 for dust collector.

2670003—Stop Rod Assembly. Wt. 1 lb (.45 kg) 6080008—¼'' wide band saw blade. (Specify wood or metal). Wt. 6 oz. (.2 kg) 6080009—¾'' (9.52 mm) wide band saw blade. Wt. 6 oz. (.2 kg) 6080010—½'' (12.70 mm) wide band saw blade. Wt. 8 oz. (.23 kg) 6080011—¾'' (19.05 mm) wide band saw blade. Wt. 12 oz. (.3 kg) 6448005—Work Light. Wt. 10 oz. (3 kg) 2379001—Dust Chute (retrofit.) Wt. 1 lb (.45 kg) 2759043—Floor Stand

2759043—Floor Stand

2028073—Circle Cutting Attachment

#### SPECIFICATIONS -

Capacity: Blade to column distance
Speeds: With 1800RPM (188.50 rad/s) motor40SFM, (.203m/s), 60SFM (.305 m/s), 100SFM (.508 m/s), 160SFM (.813m/s), 750SFM (3.810 m/s), 1200SFM (6.096 m/s), 1800SFM (9.144m/s), 3000SFM (15.240m/s)
Overall Height (on stand)       .71" (1803.40mm)         Width       .25½" (647.70mm)         Front to back       .13¼" (336.55mm)

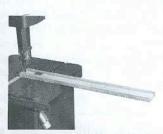


#### **ACCURACY IN EVERY OPERATION**

Powermatic<sup>®</sup> precision means exacting engineering and design to assure superior accuracy in every band saw job you do. Powermatic dependability means years of rugged service on the production line or job shop type of operations. A balance combining rigid heavy gauge sheet steel and cast iron construction, the Powermatic Model 81 has all moving parts enclosed to help insure safety.



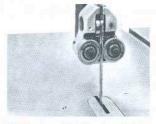
Table Insert Quickly Removed for fast blade change. Note deep flange on precision-machined table for extreme rigidity.



OPTIONAL CIRCLE CUTTING ATTACHMENT. Cuts circles and arcs with ease.



Fully Enclosed Motor and Drive assures longer motor life. Top and bottom wheels easily accessible through front doors.



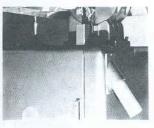
Friction-Free Ball Bearing Guides top and bottom increase blade life, adjust to fit any type of blade.



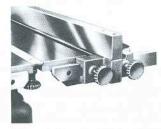
Heavy-Duty 6'' (152.40 mm) Single-Action Trunnion affords maximum rigidity. Fast, sure table adjustment 45° right, 15° left, positive 90° stop.



Crowned tires for accurate blade tracking.



Exhaust Chute. This Standard exhaust chute scavenges most of the dust and particles from inside the saw, reducing clean-out periods and improving saw performance.



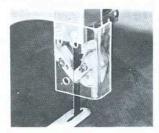
Optional Simplified Rip Fence Mounting on machined and drilled front edge of table. # 2195001



Optional Miter Gauge. Precision cast aluminum miter guage. # 2471010



Optional Work Light. Flexible work-lamp. Ideal for spotlighting working surface. # 6448003



**Blade Guard.** This heavy duty standard plastic guard extends the area of blade protection to the top of the workpiece.

TABLE: Ground to precision tolerance. Mounted on heavy-duty trunnion to tilt 45° right, 15° left. Front edge machined and drilled for mounting rip fence.

WHEELS: Made of finest machined castings, dynamically balanced and fitted with vulcanized tires. Upper and lower wheels run in lubricated-for-life ball bearings.

DRIVE: Belt driven two speed, powered by 1800 RPM (188.50 rad/s) motor mounted on adjustable motor base.

BRAKE: Standard with manually operated foot brake.

Powermatic's exclusive brake interlock with switch (optional) with magnetic controls.

SAW BLADE ADJUSTMENT: Conveniently located handwheel for blade tension adjustment. Spring mechanism absorbs shock and maintains uniform tension on the blade.

SAW GUIDES: Top and bottom saw guides are ball bearing to assure minimum friction and increased blade life.

GUIDE ARM: Rugged, counter-balanced guide arm allows effortless adjustment of saw guides - yet maintains unsurpassed rigidity.

#### STANDARD EQUIPMENT

MODEL 81 BANDSAW: Blade and wheel guards, %" (9.52mm) blade, set of wrenches, foot brake, dust chute, blade tension control, ball bearing blade guides, counterbalanced guide arm, motor mount bracket, driven pulley, motor pulley, and belts. Less: Motor and Controls.

#### BASIC MACHINES

1810010 - 20" Bandsaw, complete with all standard equipment. Less: Motor and controls.

1810020 — 20" Bandsaw, complete with all standard equipment, 24" (609.60mm) Under guide. Less: Motor and controls.

#### MOTORS FOR USE WITH MODEL 81 BANDSAWS

#### 1 Phase

6471301 — 1½HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/230v, TEFC, 145T frame.
6471627 — 2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/230v, TEFC, Special 182T frame

3 Phase

6471026 — 1HP (.746kw), 60 Hz, 1800 RPM (188.50 rad/s), 200v, TEFC, 143T frame. 6471027 — 1HP (.746kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/460v, TEFC, 143T frame.

6471304 — 1½HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/460v, TEFC, 145T frame. 6471317 -- 1½HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 575v,

TEFC, 145T frame. - 1½HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 200v, TEFC, 145T frame. 6471322 -

2HP (1.492kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/460v 6471603 -TEFC, 145T frame.

2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 575v, 6471616 -

TEFC, 145T frame. 6471617 — 2HP (1.492 kw), 60 Hz, 1800 RPM )188.50 rad/s), 200v, TEFC, 145T frame.

#### CONTROLS FOR USE WITH MODEL 81 BANDSAWS

#### 1 Phase

2398007 - Magnetic Controls, 115/230v

2398414 — Pushbutton Controls, 115/230v.

2398483 — Magnetic Controls, 115/230v, w/24v transformer.

3 Phase - JIC Controls, 200/230/460/575v

2398011 — Magnetic Controls, 200/230/460/575v. 2398015 — Magnetic Controls, 200/230/460/575v, w/24v transformer 2398156 — Pushbutton Switch, 200/230/460/575v.

9100002 - Conduit in lieu of standard wiring

#### \*May be specified with 110v transformer.

# \*1370000—Dust collector. Wt. 120 lbs (54.4 kg) 2195001—Rip Fence. Wt. 2 lbs (10.0 kg) 2397031—Dust Chute (retrofit.) Wt. 1 lb (.45 kg)

2397032—Guard Wt. 4 oz. (.2 kg)

2398513-Foot Brake Interlock with Switch to provide power shut-off (available with magnetic starter only)

2471010-Miter Gauge. Wt. 31/2-lbs (1.6 kg

2670003—Stop Rod Assembly. Wt. 1 lb (.45 kg)

6077160-Belt Hi-Speed A-41

6077161-Belt Lo-Speed A-55

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# OPTIONAL EQUIPMENT

6080014—1/4'' (6.35 mm) wide Band Saw Blade. Wt. 8 oz. (.2 kg) 6080015—3/6'' (9.52 mm) wide Band Saw Blade. Wt. 8 oz. (.2 kg) 6080016—1/2'' (12.70 mm) wide Band Saw Blade. Wt. 8 oz. (.2 kg) 6080017—3/4'' (19.05 mm) wide Band Saw Blade. Wt. 8 oz. (.2 kg) 6339002—Carter Guide Set (2 required). 6448003—Flexible Work Light. Wt. 10 oz. (.3 kg) 2028073—Circle Cutting Attachment

#### NOTE: See page 94 for blade welders. \*See page 67 for dust collector.

#### SPECIFICATIONS

Table Size3" x 24" x 24" (76.20 mm x 609.60 mm x 609.60mm)
Table in front of blade
Table tilt — 45° right
Wheel size
Blade to column distance
Maximum depth of cut under guide
Maximum width blade recommended
Maximum adjustment of blade

Wheel speeds .......900 RPM (94.25 rad/s) 4500 SFM (22.860ms) 400 RPM (41.89 rad/s) 2000 SFM (10.160 m/s)

Motor power recommended, (V-belt drive) ...1 to 2 HP (.746 to 1.492kw), 1800RPM (188.50 rad/s) 
 Overall height
 .76" (1930.40mm)

 Table height from floor
 .41½" (1054.10mm)

 Weight, domestic crated, with motor
 .895 lbs (405.9kg) app.
 Weight, export boxed, with motor (94.4 cu ft (2.672 m3)

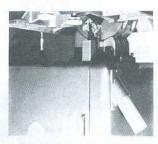
POWERMATIC

# CHECK THESE IMPORTANT EXTRA VALUE FEATURES

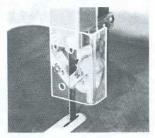
CHECK SPEED INSTANTLY... CHANGE SPEED INSTANTLY... FROM 47 to 5200 SFM (.239 m/s to 26.416 m/s)

Match the speed to the material to be cut... instantly! No time-wasting speed change-over necessary. Just dial the correct speed and get a smooth cut every time.

Rugged, precision construction assures years and years of dependable performance in cutting all types of ferrous and non-ferrous metals . . . wood, plastic and similar materials.



Exhaust Chute. This optional exhaust chute scavenges most of the dust and particles from inside the saw, reducing clean-out periods and improving saw performance. Optional equipment.



Blade Guard. This standard heavy duty plastic guard extends the area of blade protection to the top of the workpiece



SHOWN WITH OPTIONS

Heavy Duty 6" (152.40mm) Single-Action Trunnion for maximium rigidity. Adjust table 45° right, 15° left.

This Welder is optional.
Part No. 2846001 — 115v.
2846002 — 230v.
2846006 — 460v.
2846007 — 575v.



New upper and lower guide blocks with M-2 steel faced back-up bearings are standard with the Model 87. One set of 36" (9.52mm) inserts only is supplied as original equipment.



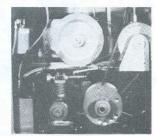
Blade Welder and Grinder is front-mounted for quick, accurate blade repair and installation.



Convenient, Removable Chip Pan is located just below lower wheel.



Counter-Balanced Guide Bar makes guide and blade adjustment safe and simple. Note telescoping guard completely enclosing blade above guide.



Quik-Set Speed Selector mechanism, transmisison, motor and drive mechanism are completely enclosed in the base.



Front-Mounted Control Center within easy reach activates entire variable speed range. No belts to change . . . hand-wheel controlled speed.



EXCLUSIVE . . .



SPEED SELECTOR (STANDARD EQUIPMENT)

Just a quick turn of the convenient hand-wheel and you accurately dial any speed from 47 SFM (.239 m/s) to 5200 SFM (26.416 m/s). Highly important when stock changes are frequent and extreme accuracy must be maintained. Exclusive in the Powermatic® price range!

#### **EXTRA SAFETY**

— streamlined in design with all moving parts completely guarded. Blade exposed only from guide to table!

#### PRECISION ENGINEERED

combining practical shop requirements with the finest operating features.

#### RUGGED CONSTRUCTION

built of tough, heavy-duty steel plate.
 Sturdy reinforcement at all points of stress assures maximum rigidity, accuracy and dependability even under the most extreme operating conditions.

#### SPECIFICATION .

Blade to column guard distance	1.65mm)
Maximum depth of cut under guide	4.80mm)
Table size 3" x 24" x 24" (76.20mm x 609.60mm x 60	9.60mm)
Wheel size	1.75mm)
Table tilt, right	45°
Table tilt, left	15°
Blade width3%" (	9.52mm)
(Usable Maximum 3/4" (19.05mm) Minimum 1/16" (1.59mm	1)

o 152" (3860.80mm)
5200 SFM (26 416m/s)
76" (1930 40mm)
60mm x 685 80mm)
1000 lbs (453 5kg)
1300 lbs (589 6kg)
1560 lbs (707.5kg)

MODEL

#### **FEATURES**

FRAME: Rugged sheet steel construction, braced for

maximum rigidity—no die castings. **TABLE:** 24'' x 24'' (609.60 mm x 609.60 mm) precision ground grey iron, with 3" (76.20mm) machined flange, removable table insert. Tilts 45° right, 15° left on 6" (152.40mm) wide grey-iron trunnion assembly with

single lock and positive 90° stop.

WHEELS: Dynamically balanced cost iron wheels turning on lubricated-for-life ball bearings.

GUARDS: Completely enclosed moving parts; counter-balanced, telescoping upper blade guard.

BLADE ADJUSTMENT: Convenient handwheel adjusts blade tension. Visible tension scale assures proper adjustment. Spring mechanism absorbs shock, maintains uniform tension. Optional chip blower furnishes air jet to working area.

GUIDES: 45° angle guides, carbo nitrided powdered iron inserts correspond to blade size in use. Heat

treated tool steel backup ring.

DRIVE: Infinitely variable 47 to 5200 SFM (.239 m/s) to 26.416 m/s), by variable speed dial. 2-step oil bath transmission.

#### STANDARD EQUIPMENT

Blade and wheel guards, 3/8" (9.52 mm) blade, set of wrenches, chip pan, blade tension control, 45° angle guide with one set only 3/8" (9.52mm) inserts. Counter

balanced guide arm, motor mount bracket, driven pulley, motor pulley and belt. Less: Motor and Controls.

#### **BASIC MACHINES**

1870140 - 20" Metal Cutting Bandsaw, with all standard equipment and plain 24" x 24" (609.60mm x 609.60mm) table. Less: Motor and controls.

1870150—20" Metal Cutting Bandsaw, with all standard equipment and tee slotted 24" x 24" (609.60 mm x 609.60 mm) table. Less: Motor and controls.

(Model 87 Bandsaws not sold less motor. Select from list below.) SPECIAL "HIGH-NECK" 24" UNDER GUIDE BANDSAWS AVAILA-BLE ON SPECIAL ORDER.

#### MOTORS FOR USE WITH MODEL 87 BANDSAWS

1 Phase

6471301 — 1½HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/ 230v, TEFC, 145T frame.

6471627 — 2HP (1.492kw), 60 Hz, 1800 RPM (188.50 rad/s), 115/230v, TEFC, Special 182T frame.

3 Phase

6471304 -11/2HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/

6471317 -

6471322 -

460v, TEFC, 145T frame. 11/2HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 575v, TEFC, 145T frame. 11/2HP (1.119kw), 60 Hz, 1800 RPM (188.50 rad/s), 200v, TEFC, 145T frame.

6471603 — 2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 230/ 460v, TEFC, 145T frame. 6471616 — 2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 575v,

TEFC, 145T frame. 2HP (1.492 kw), 60 Hz, 1800 RPM (188.50 rad/s), 200v, 6471617 -

TEFC, 145T frame. \*6471916-3HP (2.238kw), 60 Hz, 1800 RPM (188.50 rad/s), 200/230/ 460v, TEFC, special 182T frame.

\*3 HP Requires Magnetic Control

#### CONTROLS FOR USE WITH MODEL 87 BANDSAWS 3 Phase

1 Phase 2398007 — Magnetic Controls, 115/230v.

2398414 — Pushbutton Switch, 115/230v.

2398483 — Magnetic Controls, 115/230v, w/24v transformer.

2398001 -JIC Controls, 200/230/460/575v

2398011 — Magnetic Controls, 200/230/460/575v.

2398015 — Magnetic Controls, 200/230/460/575v, w/24v transformer. 2398156 — Pushbutton Switch, 200/230/460/575v.

9100002 - Conduit in lieu of standard wiring.

\*May be specified with 110v transformer.

#### **OPTIONAL ACCESSORIES**

\*1370000—Dust collector. Wt. 120 lbs (54.4 kg)
2028073—Circle Cutting Attachment. Wt. 7 lbs 11 oz (3.5kg).
2028002—Blade Filing Clamp. Wt. 12 oz (.3kg).
2028003—Automatic Power Feed Attachment.
2109001—Blade Shear, Wt. 4 lbs (1.8kg).
2195001—Rip Fence. Wt. 22 lbs (10.0kg).

2253068—Lower Guide with Guide post. Less: Inserts.

2253071—Upper Guide Less: Inserts

2253073-90° Twist Bracket Kit. 2253074—Angle Feed Block for Hand or Screw Feed. Wt. 7 lbs (3.2kg) 2266001—Screw Feed Attachment. Wt. 9 lbs 8 oz (4.3kg).

2395005—Chip Blower. Wt. 15 lbs (6.8kg.)

2397032-Guard. (Retro fit.)

2398514—Electrical Shift Interlock Kit.

2400001-Work Light with Transformer.

-Guide Insert Set (4 each of 5 sets, 1/8" (3.18 mm thru 34" (19.05 mm). 2403005-

-45° Angle Guide Set. (Twists blade to 45° angle.) Wt. 1 lb (.45 kg)

2471010-Miter Gauge. Wt. 4 lbs (1.8 kg).

2670003-Stop Rod Assembly.

 $2846001-12^{\prime\prime}$  (12.70 mm) Welder with Grinder, 115v, Wt. 55 lbs (24.9kg).  $2846002-11^{\prime\prime}$  (19.05 mm) Welder with Grinder, 230v, Wt. 55 lbs (24.9kg).  $2846006-11^{\prime\prime}$  (19.05 mm) Welder with Grinder, 460v. Wt. 55 lbs (24.9kg).

2846007—1'' (19.05 mm) Welder with Grinder, 575v. w/transformer. Wt. 55 lbs

(24.9kg).

3328040-Table Insert. Wt. 2 lbs (.9kg).

3328216—1/8" 3328217—1/4" (3.18mm) Guide Inserts, (4 required) (6.35mm) Guide Inserts, (4 required)

3328218-%" (9.52mm) Guide Inserts, (4 required). (12.70mm) Guide Inserts, (4 required). (19.05mm) Guide Inserts. (4 required). 3328219—1/2:

3328220-34

6080020-1/4" (6.35mm) Band Saw Blade.

(9.52mm) Band Saw Blade. (12.70mm) Band Saw Blade 6080021—¾'' 6080022—½''

6080103-34" (19.05mm) Band Saw Blade.

<sup>\*</sup>See page 67 for dust collector.

MODEL 87

BAND SAW ACCESSORIES

# OPTIONAL ACCESSORIES FOR ADDED FLEXIBILITY

# Precision Performance, Extra Safety on... Every Job

Engineered Powermatic® accessories are available to cover every bandsaw operation, faster, more accurately and with safety. Powermatic time and money saving accessories increase the flexibility of the Model 87 Bandsaw by meeting all conceivable bandsaw job requirements.

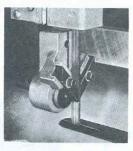


Screw Feed Attachment, fitted to table insert, offers maximum in feed control and safety for cutting smaller stock.
Part No . . . . . 2266001





Table-Insert Stock Guide is essential for many high production operations. Standard equipment



New upper and lower guide blocks with M-2 steel faced back-up bearings are standard with the Model 87. One set of %" (9.52mm) inserts only is supplied as original equipment.



Flex Mount Work Lamp keeps work area well lighted. Move easily to any position. Flexible chip blower is also available.
Part No. ......2400001



# **AUTOMATIC POWER FEED available (OPTIONAL EQUIPMENT)**Part No. 2028003



Tremendous time and labor saver on production line operations! Stock moves perfectly along table-insert slot at predetermined rate of feed. Handy, foot-controlled release.



In addition to the rigidity and extra strength standard with Powermatic® bandsaws, the new "dynamatic" has improved on this feature with a new unitized steel frame. Deflection of the upper housing under full load is minimal.

A newly incorporated one-piece upper wheel housing, simplifies guidepost alignment and strengthens the upper wheel housing

A hydraulic powered table adds to the utility and versatility of this over other 20" bandsaws.—feed through use of a hydraulicly actuated table,—longer blade life from the consistent feed forces employed—better operator performance because the machine—does all the hard work.

Finally,-a new 2 -speed transmission together with Powermatic's recognized infinitely variable speed control to give a maximum speed range for almost every shop requirement (47 SFM (.239 m/s) to 470 SFM (2.388 m/s) in low and 520 SFM (2.642 m/s) to 5200 SFM (26.416 m/s) in high speed). The shift lever is conveniently located just under the table for ease of operation, yet placed to prevent accidental shifting while the machine is running. Another feature of this transmission is a self-adjusting "Torque Limiter" which prevents machine overloading. In case of overload, a clutch slips thus preventing broken gears. The whole unit is readily accessible for maintenance or adjustment.

#### SPECIFICATIONS

Throat blade to column guard		19¾'' (501.6	55 mm)
Maximum work thickness		12" (304 8	(0 mm)
Blade width capacity	1/8'' (3	.18 mm) to 1" (25.4	10 mm)
Blade length	149" (3784.60 n	nm) to 152'' (3860.8	30 mm)
Type blade		(19.05 mm) Carbo	on steel
Table size	24" x 24"	(609.60 mm x 609.6	60 mm)

Blade speed	47 SFM (.239	m/s) to 5200 SFM (26.416 m/s)
Table tilt		45° H—15° L
Table feed stroke		
Table feed force		
Table feed speed		U to 58 IPM (24.55 mm/s)
Hydraulic pump		.1.5 GPM (9.463 530 E-05 m3/s)
		@ 100 PSI (6.894 757 E-05 Pa)

MODEL

20" METAL CUTTING BANDSAW with HYDRAULIC TABLE

#### **FEATURES**

FRAME: Rugged unitized welded steel construction. Braced for maximum rigidity

and minimum deflection with 300 lbs (136.1 kg) of cutting force. **TABLE:** 24'' x 24'' (609.60 mm x 609.60 mm) precision ground grey iron, tilts 45° right and 15° left. Coolant trough around entire table.

WHEELS: Dynamically balanced cast iron wheels turning on lubricated-for-life ball bearings. New one piece upper wheel housing simplifies wheel/guide post alignment and increases strength of upper housing.

GUARDS: Blade guards are attached to the counterbalanced guide post thus automatically adjusting guard position and allowing minimum blade exposure.

HYDRAULIC FEED: The hydraulic system in this bandsaw is an independent unit, driven directly from the bandsaw motor. Feed speed and direction (forward, reverse, stop) of the hydraulicly powered table is operator controlled. Adjustable

positive stop is standard. **GUIDES:** 45° angle guides, carbo nitrided powdered iron inserts correspond to

blade size in use. Heat treated steel backup ring.

DRIVE: 2-speed transmission with infinitely variable speed control offering 47 to 470 SFM (.239 m/s to 2.388 m/s) in low speed, and 520 SFM to 5200 SFM (2.642 m/s to 26.416 m/s) in high speed. Incorporated as standard equipment in this transmission is a Torque Limiter which is self-adjusting and prevents overloading the drive system.

#### STANDARD EQUIPMENT

MODEL 88 BANDSAW: Blade and wheel guards, ¾" (19.05mm) blade, set of wrenches, 45° angle heat treated sintered guides, blade tension control, counterbalanced guide arm, hydraulic table feed, integral hydraulic pump and reservoir, 2-speed transmission, flood and mist coolant system with pump, work squaring bar and work light. Less: Motor and controls.

#### BASIC MACHINES

1880010 — 20" metal cutting bandsaw with all standard equipment. Less: Motor and controls.

#### - MOTORS -

6471603 - 2HP (1.492 kw), 3 Ph, 1800 RPM (188.50 rad/s), 230/460v, 145T frame.

6471616 - 2HP (1.492 kw), 3Ph, 1800 RPM (188.50 rad/s), 575v, 145T frame.

6471617 - 2HP (1.492 kw), 3 Ph, 1800 RPM (188.50 rad/s), 200v, 145T frame.

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6471916 — 3HP (2.238 kw), 3 Ph, 1800 RPM (188.50 rad/s), 200/230/460/575v, Special 182 frame.

#### CONTROLS

2398520-3 Ph, Magnetic controls, with 115v transformer. 9100002- Conduit in lieu of standard wiring.

#### OPTIONAL ACCESSORIES

\*1370000-Dust collector. Wt. 120 lbs (54.4 kg)

2028073—Circle cutting attachment. Wt. 2 lbs (.9 kg) 2028002—Blade filing clamp. Wt. 22 oz (.6 kg)

2028066-Contour Cutting Attachment

2253068-Lower guides with steel faced back-up bearings. Less: Inserts.

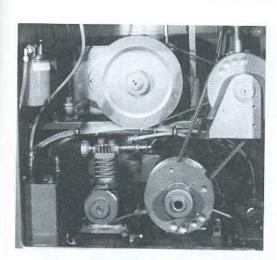
2253071—Upper guides with steel fenced back-up bearings. Less: Inserts. 2253073—90° twist bracket kit. 2397031—Dust chute. Wt. 1 lb (.45 kg) 2398514—Electrical interlock kit.

2403005--Guide Insert Kit.

2846001—¾" (19.05 mm) welder, 115v, Wt. 55 lbs (24.9 kg) 2846002—1" (19.05 mm) welder, 230v. Wt. 55 lbs (24.9 kg) 2846006—1" (19.05 mm) welder, 460v. Wt. 55 lbs (24.9 kg) 2846007—1" (19.05 mm) welder, 575v. Wt. 55 lbs (24.9 kg)

\*See page 67 for dust collector.

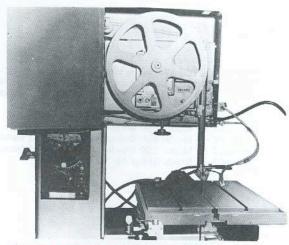
#### ASSURANCE OF PERFORMANCE



#### 2-SPEED TRANSMISSION

This new and different two speed transmission is powered by enclosed helical gears running in a continuous bath of oil. High and Low range gears are now selected by a shift lever located on the frame just under the left corner of the table . . . easy to reach . . . eliminating all "linkage" characteristics in older models.

The two speed transmission, plus a new variable speed drive system provides a wide speed range . . . 47 to 470 SFM in low range, and 520 to 5200 SFM in high range. A speed for all slow or high speed cutting operations; even to friction cutting sheet metal. Incorporated as standard equipment with this new transmission, is a SELF ADJUSTING TORQUE LIMITER which prevents "overloading". A clutch slips in case of overload without shearing gears. Placement in the lower bandsaw compartment makes this power unit easily accessible for maintenance or adjustment.



UPPER WHEEL HOUSING TABLE
AND GUIDE BAR

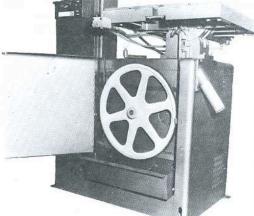
This view of the upper wheel housing and guide bar serves to familiarize the viewer with the general makeup of the bandsaw.

The massive construction of the upper wheel bearing support is apparent, even "looking through the wheel". Blade tension is accomplished through the small handwheel directly below the blade wheel in the center of the picture. The blade guard and guide assembly is counterweighted for ease of movement and are locked in place through use of a handwheel lock screw on the back of the housing.

Illustrated in place, are the flood coolant system and the work light. These units are standard equipment. Also shown in place in the illustrations used in this brochure, is a blade Welder. This unit is optional and is shown in this way to illustrate the convenience and utility of this accessory.

The table is 24" x 24", slotted to accept standard "T" bolts and the work squaring bar which is standard equipment, (not shown). Note that the table has a coolant trough around the entire perimeter.

The hydraulic table control valve is at the left corner of the table, while the shift control lever is between the table and frame on the top of the lower wheel housing.



This view of the lower wheel housing emphasizes thoughtful design, massive construction and simplicity.

The flood coolant trough around the table is shown at the top of the picture. Here can be seen the ends of the table slots, the table hydraulic control valve and the gear shift lever.

Although hidden by the open door, the infinitely variable speed control hand-wheel is conveniently located for minimal

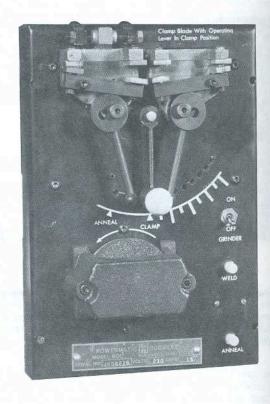
movement or effort on the part of the operator to vary speeds infinitely in either the high or low speed range. The dust or chip chute shown is optional equipment. The removable chip pan just under the lower wheel is standard.

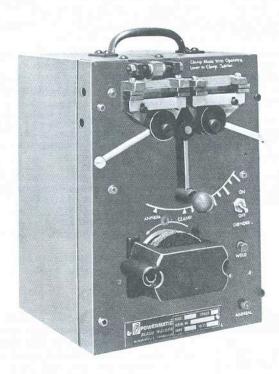
The extra heavy trunnion for tilting the table is obvious from the photo. Just a glimpse is shown here of the heavy duty round steel bars on which the table slides.

#### WELDERS

The Model 600 Welder is designed to weld most commonly used blades. Controls and clamping features are the best available for the purpose. The built-in grinder assures a finished blade weld.

2846001 — Model 600 Welder w/grinder, 115v. 2846002 — Model 600 Welder w/grinder 230v. 2846006 — Model 600 Welder w/grinder and transformer, 460v. 2846007 — Model 600 Welder w/grinder and transformer, 575v. 2109001 — Blade Shear for Model 600.





Capacities of the Model 600 Welder are from 1/16" through 1" blades. (Note: 115v models are 1/2" capacity only.)

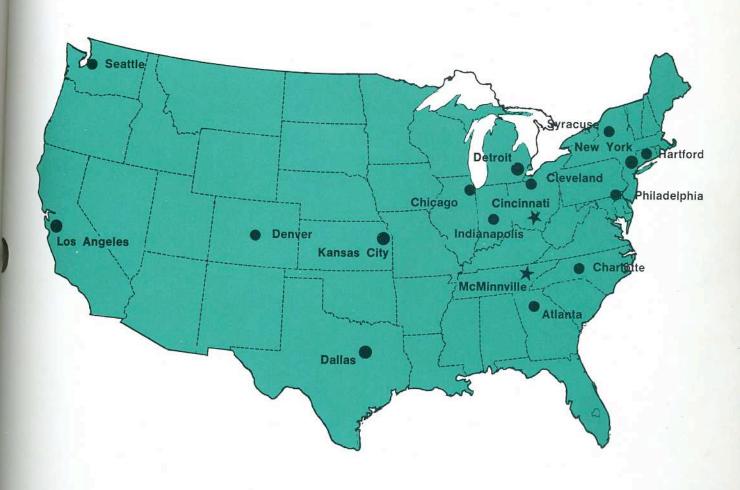
This is the same Model 600 Welder except with case.

1990010 — Model 600 Welder w/case, 115v. 1990020 — Model 600 Welder w/case, 230v.

1990030 — Model 600 Welder w/case and transformer 460v. 1990040 — Model 600 Welder w/case and transformer 575v.

# THE EXPANDING POWERMATIC DISTRIBUTION SYSTEM

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