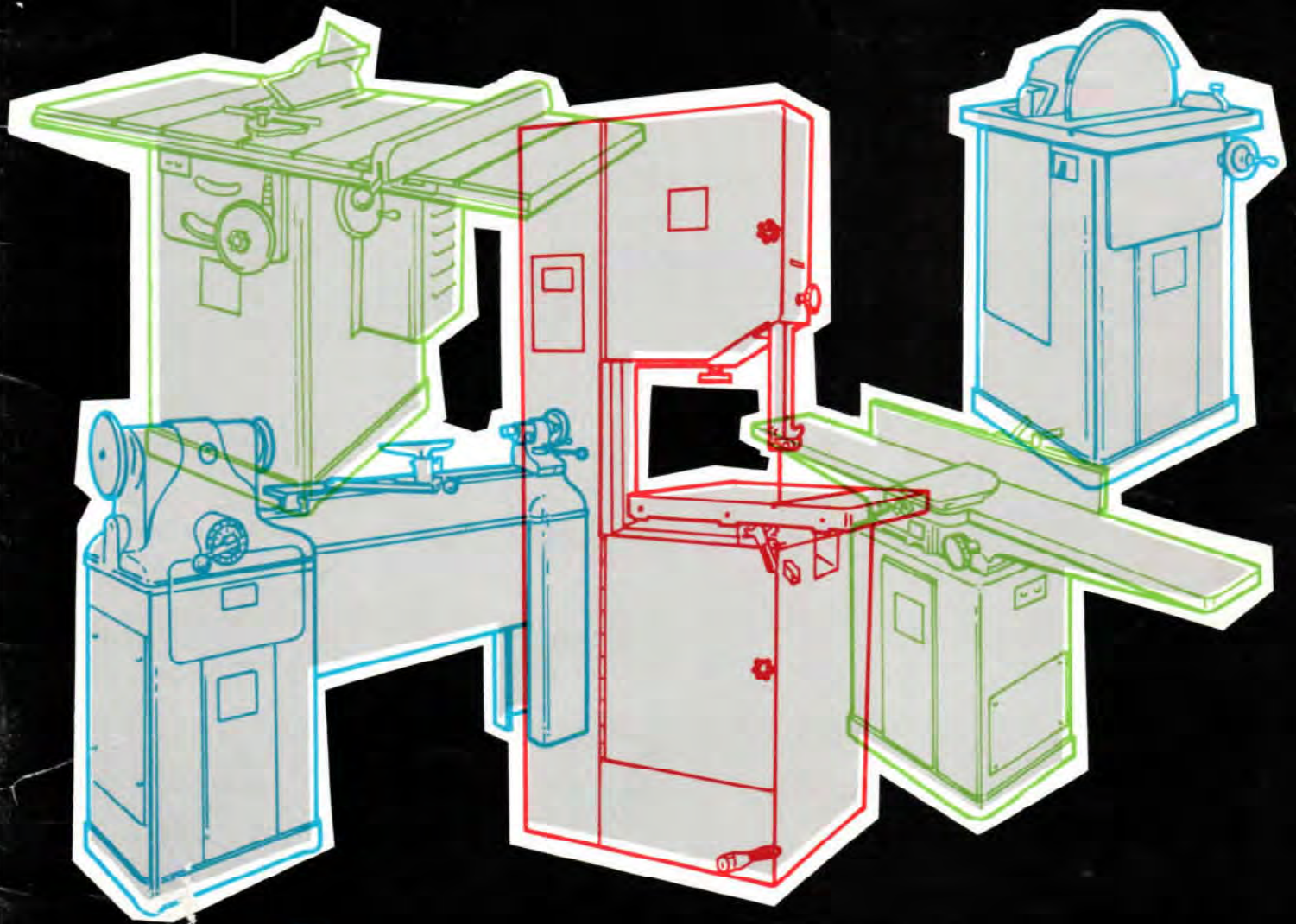


J-LINE

WOODWORKING MACHINES

FOR SCHOOLS AND INDUSTRY



*"Progress
with a
meaning"*

DISTRIBUTED EXCLUSIVELY TO SCHOOLS BY

BRODHEAD-GARRETT

4560 East 71st Street, Cleveland, Ohio 44105

Western Division: 1233 Broadway, Sacramento, California 95818

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On the following pages you will see the complete series of J-Line woodworking machines. Each unit has been designed to incorporate modern working features.

Every piece of every machine has been designed to provide years of trouble-free service. It will withstand professional and student use. Each J-Line machine incorporates the latest safety factors for protection of the operator.

These machines are available with a wide range of motors, starters and accessories so that they may be ordered to fit your specific requirement.

For schools or industry, the quality line is J-Line.

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**All machines in this catalog are shipped
completely wired and ready to operate.
Each machine is run and tested
for accuracy at the factory.**

J-LINE TILTING ARBOR SAW

J-125 10"

- **PATENTED RIP FENCE . . .**
that floats on ball bearings
- **BIG CAPACITY . . .**
11" and 22" cast iron table,
extensions available
- **STANDARD NEMA FRAME MOTORS . . .**
1½ HP to 3 HP
- **FLOATING-SAFETY SAW GUARD**



The J-Line 10" Tilting Arbor Circular Saw is designed for extreme accuracy and maximum safety, yet ease of operation has been maintained. This combination of features with its power and capacity (up to 3 HP), makes it the outstanding circular saw now available. The J-125, utilizing the full capacity of its 10" blade, works effortlessly . . . resulting in increased production at lower cost.

The entire saw mechanism is a self contained unit assembly, within the cabinet, carried on a single oversized precision trunnion. There are no separate assemblies to get out of line. This design allows the blade to raise, lower or tilt without binding . . . giving smooth floating positioning without hesitation.

Durability is increased by the heavily ribbed cast iron table (normalized, close grained). The table surface is fully machined with the right and left sides drilled for mounting of table extensions. The cabinet is of heavy steel construction. Embossed panels and a welded floor increase the rigidity. A removable panel on the top left side provides for inspection of the saw

mechanism. A dust removal opening is also provided.

Accuracy is the keynote of the saw arbor. It is made of precision ground alloy steel. The arbor runs on lubricated-for-life bearings . . . perfectly aligned in a precision bored housing. Oversized double row ball bearings, on the blade side, give the stability required for lasting accuracy.

Smooth and Powerful drive easily transmits the full capacity of a 3 HP motor to the saw. This especially designed drive unit, with two steel cabled V-belts, transmits the full power of the motor evenly with maximum belt life. An added feature is the use of "standard NEMA frame motors of 1½, 2 or 3 HP . . . no need for special motors."

Convenience and Operation Ease are apparent by the location of all controls close to the operator's position. Both tilt and hoist screws are provided with thrust bearings for ease of operation and full protection from sawdust and other dirt. Strong acme threads transmit the load. The hoist scale on the hoist handwheel allows the positioning

of the blade height within thousandths of an inch. The tilt scale is set on a convenient eye angle. The electrical control switch is located on the left front and is fully guarded against accidental engagement or damage.

SPECIFICATIONS

Diameter of Blade.....	10"
Diameter of Arbor at Blade.....	5/8"
Diameter of Arbor at Bearing.....	2 3/32"
Cutter Capacity on Arbor.....	1"
Maximum Depth of Cut—90°.....	3 3/8"
Maximum Depth of Cut—45°.....	2 3/16"
Arbor Speed.....	4000 RPM
Table in Front of Blade at	
Maximum Cut.....	14"
Maximum Width of Cut-off (1" Stock).....	15 5/8"
Maximum Capacity Cross Cut,	
Miter Gauge Extended.....	24"
Capacity to Fence—Right	
(with 22" extension).....	29 1/16"
Capacity to Fence—Left	
(with 11" extension).....	18 1/16"
Table Size (less extensions).....	22" x 28"
Table Size with Extensions	
(11" left, 22" right).....	55" x 28"
Tilt of Blade to Right.....	45°
Fence Height.....	2 1/2"
Table Height from Floor.....	34 1/8"
Motors—Standard NEMA Frame, Totally	
Enclosed, Fan-Cooled, 1½, 2 or 3 HP.	
Shipping Weight with Motor	470 lbs.

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CATALOG LISTING

BASIC MACHINE WITH CABINET: 10" circular saw with belts (60W303), rip fence, miter gauge (10W958), splitter and guard (10W976). Without motor, controls and extensions **CAT. NO. 10W400**

BASIC MACHINE WITH CABINET: 10" circular saw with belts (60W303), rip fence, miter gauge (10W958). Without motor, controls, splitter, guard, extensions and switch **CAT. NO. 10W401**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage)

Motor, 1½ HP, 115/230 V, 60 cy, 3450 rpm, totally enclosed **CAT. NO. 90W171**

Motor, 2 HP, 115/230 V, 60 cy, 3450 rpm, totally enclosed **CAT. NO. 90W127**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 1½ HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed **CAT. NO. 90W129**

Motor, 2 HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed **CAT. NO. 90W130**

Motor, 3 HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed **CAT. NO. 90W131**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase, 1½ HP, 230 V and 2 HP, 230 V motors only **CAT. NO. 90W873**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors **CAT. NO. 90W875**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase, 1½ HP, 230 V only and 3-phase through 2 HP motors **CAT. NO. 90W862**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase, 1½ HP, 115 V, 1½ HP & 2 HP, 230 V only and for all 3-phase motors **CAT. NO. 90W863**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used with single phase, 1½ HP, 115 V, 1½ HP & 2 HP, 230 V only and 3-phase through 2 HP motors **CAT. NO. 90W864**

Power Cord, 3 wire, 8 foot, complete with twist lock plug and fittings for use with manual switch and manual starters **CAT. NO. 90W879**

ACCESSORIES

Moulding Cutters **CAT. NOS. 10W801 thru 10W840**

Moulding Cutterhead with wrench **CAT. NO. 10W860**

Moulding Cutter Set (Heavy duty steel head with wrench and 4 sets of 3 knives each—10W805, 10W806, 10W810, 10W815) **CAT. NO. 10W862**

Dado Head, 6" diameter **CAT. NO. 10W880**

Table Insert for dado **CAT. NO. 10W950**

Table Insert for moulding cutter **CAT. NO. 10W951**

Table Insert for standard saw **CAT. NO. 10W952**

Table Extension Arms, left hand with scale and fastener **CAT. NO. 10W955**

Miter Gauge with stop rods **CAT. NO. 10W958**

Motor Cover with fasteners **CAT. NO. 10W959**

Cross Cut Blade, 10" diameter **CAT. NO. 10W960**

Rip Saw Blade, 10" diameter **CAT. NO. 10W961**

Combination Rip Cross Cut Blade, 10" diameter **CAT. NO. 10W962**

Planer Blade, hollow ground, 10" diameter **CAT. NO. 10W963**

Novelty Blade, flat ground, 10" diameter **CAT. NO. 10W964**

Solid Table Extension, right hand 22" with 2 miter gauge slots and adjustable post for leveling **CAT. NO. 10W970**

Extension Arms, 19¼", for use with 22" solid extension, with scale and fastenings **CAT. NO. 10W971**

Table Extension Arms, right hand complete with scale and fastener **CAT. NO. 10W972**

Solid Table Extension, 11" right hand side with scale, fastenings, 18½" rip capacity **CAT. NO. 10W973**

Solid Table Extension, 11" left hand side with scale, fastenings, 18½" rip capacity **CAT. NO. 10W974**

Splitter with mounting bracket and kickback fingers **CAT. NO. 10W975**

Guard and Splitters with mounting bracket and kickback fingers **CAT. NO. 10W976**

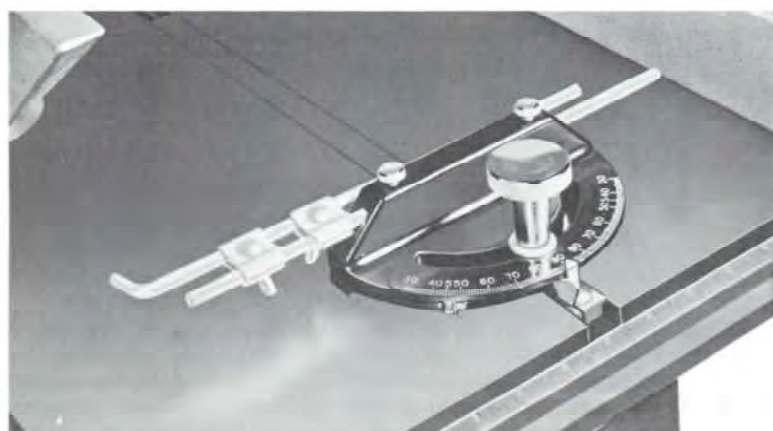
Caster Set **CAT. NO. 40W825**



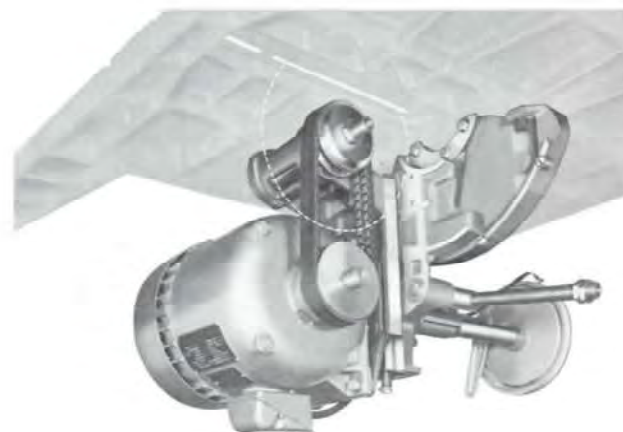
The smoothly floating rip fence (patented) moves on ball bearings to exact position. A single cam lock positively locks fence in position both front and rear in one operation. The fence can be removed from the table at any position without need for moving it to the extreme end of the table or guide bars.



The pivot arms on the saw guard ride on ball bearings which allows smooth floating action. Roller bearings guide the guard with relationship to the splitter, eliminating twist and bind. A window allows inspection of cut or scribe mark. Splitter and anti-kickback fingers prevent stock bind and kick-back.



The miter gauge has positive adjustable stops at 45°, 90° and 45°, easily and accurately set for repetitive cuttings. Head pivots full 120°. Miter gauge can be extended over the front edge of the table to give full 24" capacity ahead of blade without falling, as it is secured by lip on table plug. Stop rods for use on either side of blade allow repetitive cutting to the same length. With miter gauge head on table it will cross cut 1" stock 15½" wide—with miter gauge extended by means of a table plug, 1" stock 25½" wide can be cross cut. The 6" dado cuts 1½" wide and 1½" deep.



The Single Trunnion is bolted to the heavily ribbed table. This assures perfect saw alignment with the table surface even when the saw base is on an uneven floor. The single trunnion (oversize with large bearing surfaces, accurately machined) eliminates binding giving smooth flowing action.

J-LINE JOINTERS

J-136 6"
J-138 8"

- **SAFETY ENGINEERED . . .**
rear table adjustment
- **EXTRA LONG TABLE**
- **SHEAR CUTTING FEATURE . . .**
reduces impact at point of cut
for smoother finish
- **HEAD COMPLETELY GUARDED**
WHEN RABBETING

SPECIFICATIONS

	J-136	J-138
Length of table	50"	64"
Width of table	6"	8"
Maximum depth of cut	1/2"	1/2"
Rabbeting capacity	1/2" x 6"	1/2" x 8"
Fence	4" x 34 1/2"	4" x 34 1/2"
Fence tilts right or left	45°	45°
Shear cut available with fence set at shear	10°	10°
Positive stops on fence	45°-0°-45°	45°-0°-45°
Number of knives in cutterhead	3	3
Cutting circle	2 13/16"	2 13/16"
Cutterhead speed	4300 RPM	4300 RPM
Height on cabinet	32"	32"
Shipping weight with motor	280 lbs.	350 lbs.

Table Ways Dovetailed with Gib Take-up
Cutterhead bearings Sealed—lubricated for life
Knife adjustment 2 Adjusting Screws at each knife



J-Line Jointers are designed to make precision cuts possible, even in the most unusual grained hardwoods . . . they are sturdy and will give long years of service. These machines are an asset in school shops because of their simplicity and safety features. When used by carpenters, contractors, cabinet shops, pattern shops or other similar operations, they are geared to do quality work on a mass production basis.

One of the most outstanding features of J-Line Jointers is the "shear cutting fence" . . . a simple adjustment of the Jointer Fence positions it at a 10° angle to the cutterhead to permit movement of the stock at an angle across the head thus reducing impact at the point of cut . . . this shearing action gives a smoother finish to the stock.

For bevel jointed cuts, the jointer fence can be placed at the required

angle. The fence will tilt a full 45° in either direction. Positive stops are provided for 45°, 0° and 45° in the opposite direction.

J-Line Jointer tables are rigid, lengthy and accurately machined. Both front and back tables are equipped with a locking device to securely hold the table in position. The front table can be easily adjusted by a handwheel for proper depth of cut. The rear table has an added safety feature in that a handwheel is not provided for adjustment. Adjustment is made by use of a special wrench under the rear table. This design was used because the rear table needs adjusting only as the knives wear. This adjusting technique makes it impossible for someone to unknowingly move the rear table.

Additional safety features include the conventional swing-type jointer guard which is spring loaded. Where required or requested a spe-

cial deluxe guard can be provided where the stock will pass under the guard. Another safety feature is the complete rear knife safety guard . . . this guard comes into use when the fence is brought over to the outside edge of the table for rabbeting purposes. The guard completely covers the rear of the knives.

To the safety, sturdiness and usefulness of the machine is added ease of operation. The operator will find accurate adjustments possible by means of easily read, conveniently located scales. Fence tilting scale, located behind the fence, can be seen from the operator's position . . . depth of cut indicator scale is found on the rabbeting arm.

The cutterhead is a 3-knife, round, safety-type cutting unit with a 2 13/16" cutting circle. A set of two jack screws for each knife makes possible individual knife adjustments. The cutterhead runs in lubricated-for-life bearings.

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CATALOG LISTING

BASIC MACHINE WITH CABINET: 6" Jointer with fence, arbor pulley, swing guard, motor pulley and belt. Without motor and switch.....**CAT. NO. 30W300**

BASIC MACHINE WITH CABINET: 8" Jointer with fence, arbor pulley, swing guard, motor pulley and belt. Without motor and switch.....**CAT. NO. 30W400**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage)

Motor, 1/2 HP, 115/230 V, 60 cy, 3450 rpm, open drip-proof, for 6" jointer.....**CAT. NO. 90W140**

Motor, 1/2 HP, single phase, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W142**

Motor, 3/4 HP, 115/230 V, 60 cy, 3450 rpm, open drip-proof, for 6" and 8" jointer.....**CAT. NO. 90W148**

Motor, 3/4 HP, single phase, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W150**

Motor, 1 HP, single phase, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W157**

Motor, 1 HP, 115/230 V, 60 cy, 3450 rpm, open drip-proof, for 8" jointer.....**CAT. NO. 90W159**

Motor, 1 1/2 HP, 115/230 V, 60 cy, 3450 rpm, open drip-proof, for 8" jointer.....**CAT. NO. 90W168**

Motor, 1 1/2 HP, single phase, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W171**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 1/2 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof, for 6" jointer.....**CAT. NO. 90W139**

Motor, 1/2 HP, 3 phase, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W141**

Motor, 3/4 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof, for 6" and 8" jointer.....**CAT. NO. 90W147**

Motor, 3/4 HP, 3 phase, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W149**

Motor, 1 HP, single phase, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W156**

Motor, 1 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof motor, for 8" jointer.....**CAT. NO. 90W158**

Motor, 1 1/2 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof, for 8" jointer.....**CAT. NO. 90W167**

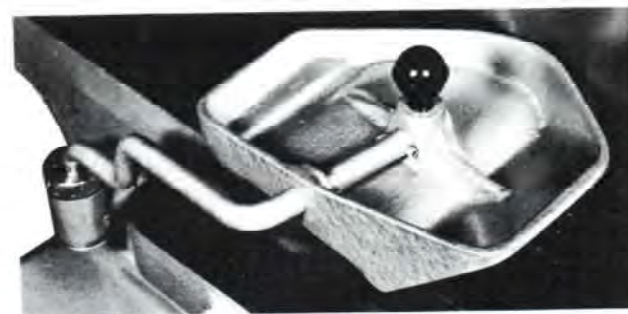
Motor, 1 1/2 HP, 3 phase, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled motor.....**CAT. NO. 90W170**



Shear-Cutting Fence . . . by a simple adjustment the jointer fence can be positioned at a 10° angle to the cutterhead to permit movement of the stock at an angle to the head. Fence is full 4" high and 34 1/2" long.



The fence base is so designed that when fence is forward for rabbeting it acts as a rear knife guard for added safety to cover the cutterhead completely.



Where requested a deluxe safety Guard can be supplied. Guard is designed for the work to pass completely under the guard. Handle on guard makes it possible to be used as a work holdown.

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....**CAT. NO. 90W866**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W865**

Starter, manual complete with overload protection, motor cord and fittings. Used with all single phase motors thru 1 HP.....**CAT. NO. 90W861**

Starter, manual complete with overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W862**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase, 1 1/2 HP motors.....**CAT. NO. 90W863**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors.....**CAT. NO. 90W864**

Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with manual starters.....**CAT. NO. 90W879**

ACCESSORIES

Cutterhead knives, set of 3 for 6" Jointer.....**CAT. NO. 30W858**

Cutterhead knives, set of 3 for 8" Jointer.....**CAT. NO. 30W859**

Caster Set.....**CAT. NO. 30W860**

Safety Guard, Deluxe for 6" Jointer.....**CAT. NO. 30W854**

Safety Guard, Deluxe for 8" Jointer.....**CAT. NO. 30W855**

Wide dust Chute permits free discharge of dust and chips.



J-LINE HEAVY DUTY VARIABLE SPEED LATHE

J-170 12"

- TOP CAPACITY
39" Between Centers
16½" Swing Over Gap
- SAFETY ENGINEERED
- GAP OR SOLID BED

The J-Line J-170 Lathe, with a full 12" swing, is engineered to assure extreme accuracy, efficiency and safety at a modest cost. This versatile machine can be used to do both wood turning and metal spinning operations.

The variable speed drive allows the operator to select any speed from 630 RPM to 3450 RPM without changing pulleys or belts and with the machine in operation . . . with work quality improved, by selecting the exact speed needed for the type of operation being performed.

Lubricated-for-life bearings are used throughout to assure true-running of the spindles and to reduce maintenance time and costs.

The machine was designed to make sure that the machine would hold up under the heaviest loads . . . Note the heavy cast iron bed and headstock.

The focal point of any Lathe is the headstock. We have made every effort to make sure that the Model J-170 Lathe would have the best. The spindle diameter between bearings is 1⅞" with the diameter at the bearings being 1.378". Two bearings, 12⅛" on center, support the spindle. Each bearing is 1.375" wide. With a headstock built around such a heavy spindle, the operator is assured that the machine will have a long life with a minimum of maintenance even under the most adverse conditions. Additional accuracy is further assured by the fully balanced front and rear face plates. Both ends of the spindle are accurately threaded to receive chucks and face plates. The spindle has a standard No. 2 Morse taper for spur centers and is hollow to permit rapid removal of centers. A plunger type spindle lock secures the spindle when changing face plates. This lock is designed so that it cannot be engaged when machine is in operation.

A choice of manual switch, manual overload or magnetic starter is offered. On a standard machine, starting and stopping is positively controlled by the operator at any speed. When the Lathe is furnished with a magnetic starter, it will start at low speed only and has a push button for emergency stop at any speed.



SPECIFICATIONS

Swing Over Bed.....	12"
Swing Over Bed Gap.....	16½" diameter x 4½" thick
Distance Between Centers.....	39"
Length of Bed (overall).....	67"
Variable Speed Drive.....	630 RPM to 3450 RPM
Spindle Diameter.....	1⅞"
Spindle Length (overall).....	17½"
Distance Between Spindle Bearing Centers.....	12⅛"
Spindle Thread.....	1⅞" - 8"
Total Length.....	69"
Total Width.....	16½"
Overall Height.....	45¾"
Centerline of Spindle to Floor.....	42"
Shipping weight with motor	625 lbs.

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CATALOG LISTING

WOOD TURNING LATHES: Variable Speed, V-belt Drive, Belts, Motor Pulley including 6" Front Face Plate, 8" Combination Handwheel and Face Plate, Face Plate Wrench, Center Drift Rod, Blueprint Holder, Front Clamping Tool Rest Holder, 6" Tool Rest, 12" Tool Rest, 3/4" Cup Center and 1" Spur Center, Without Motor and Controls.

Gap Bed **CAT. NO. 53W302**
Solid Bed **CAT. NO. 53W305**

METAL SPINNING LATHES: Variable Speed, V-belt Drive, Belts, Motor Pulley and including 6" Front Face Plate, 8" Rear Combination Handwheel and Face Plate, Face Plate Wrench, Center Drift Rod, Blueprint Holder, Front Clamping Tool Rest Holder, Metal Spinning Tool Rest, Ball Bearing Tail Center and set of 4 Metal Spinning Tools. Without Motor and Controls.

Gap Bed **CAT. NO. 53W304**
Solid Bed **CAT. NO. 53W307**

COMBINATION WOOD TURNING AND METAL SPINNING LATHES: Variable Speed, V-belt Drive, Belts, Motor Pulley and including 6" Front Face Plate, 8" Rear Combination Handwheel and Face Plate, Face Plate Wrench, Center Drift Rod, Blueprint Holder, Front Clamping Tool Rest Holder, 6" Tool Rest, 3/4" Cup Center, 1" Spur Center, Metal Spinning Tool Rest, Ball Bearing Tail Center and set of 4 Metal Spinning Tools. Without Motor and Controls.

Gap Bed **CAT. NO. 53W303**
Solid Bed **CAT. NO. 53W306**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage)

Motor, 3/4 HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W146**

3/4 HP, 115/230 V, 60 cy, 1725 RPM, totally enclosed fan cooled motor **CAT. NO. 90W182**

Motor, 1 HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W161**

1 HP, 115/230 V, 60 cy, 1725 RPM, totally enclosed fan cooled motor **CAT. NO. 90W162**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 3/4 HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W145**

3/4 HP, 208-220/440 V, 60 cy, 1725 RPM, totally enclosed fan cooled motor **CAT. NO. 90W183**

Motor, 1 HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W160**

1 HP, 208-220/440 V, 60 cy, 1725 RPM, totally enclosed fan cooled motor **CAT. NO. 90W132**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors **CAT. NO. 90W866**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors **CAT. NO. 90W865**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase motors **CAT. NO. 90W861**

Starter, manual complete with overload protection, motor cord and fittings. Used with 3-phase motors **CAT. NO. 90W862**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used with all single phase and 3-phase motors **CAT. NO. 90W864**

ACCESSORIES

Tail Center-Ball Bearing (with plug center & 3/8" cup center) **CAT. NO. 53W810**

Metal Spinning Tools (set of 4), Flat Tool, Pointed Tool, Flat Ball, Beading Roll **CAT. NO. 53W811**

Metal Spinning Tool Rest **CAT. NO. 53W812**

Wood Turning Tools (set of 9), 1/4" Round Point, 1/2" Round Point, 1/2" Square Point, 1/2" Spear Point, 1/2" Parting Tool, 1/2" Skew Chisel, 1" Skew Chisel, 3/4" Gouge, 1/2" Gouge **CAT. NO. 53W815**

1/2" 3-Jaw Chuck with Arbor for Tail Stock **CAT. NO. 53W817**

Floor Stand with Offset Rest Holder **CAT. NO. 53W819**

Spur Center, 1" dia. **CAT. NO. 1786PP**

Cup Center, 3/4" dia. **CAT. NO. 1787PP**

Extra Point for Spur Center **CAT. NO. 1788PP**

2" Screw Center No. 2 MT **CAT. NO. 1789PP**

Rosette Chuck 3" dia. **CAT. NO. 50L267**

Rear Combination Handwheel & Face Plate, 8" dia. **CAT. NO. TR921**

Front Face Plate, 4" dia. **CAT. NO. TR526**

Front Face Plate, 6" dia. **CAT. NO. TR527**

Front Face Plate, 8" dia. **CAT. NO. TR528**

Front Face Plate, 10" dia. **CAT. NO. TR529**

Tool Rest, 4" **CAT. NO. TR855**

Tool Rest, 6" **CAT. NO. TR856**

Tool Rest, 12" **CAT. NO. TR859**

Tool Rest, Right Angle, 6" **CAT. NO. 50L581**



Note heavy construction of the headstock with the heavy cast iron bearing support. The wide (12 1/2" centers) distance between the bearings assures minimum deflection of the spindle under heaviest loads. See, too, the spindle drive pulley between the bearings which again helps minimize spindle deflection.



The tool rest assembly is quick-locking, with an extra-long base so that the rest can be placed exactly where required. All tool rests are chilled to prevent marring and to reduce wear on the guiding lip. An added feature is a locknut on the tool rest holder to insure positive location even under heaviest work loads.



The tailstock spindle has a standard No. 2 Morse taper for cup centers. It is adjusted by means of a large handwheel with a revolving handle and is positively guided in a straight line to prevent rotation. The tailstock spindle is locked by a double wedge lock actuated by a convenient T-handle. While a slight movement of the heavy tailstock locking handle instantly locks the entire tailstock securely. At all times there is alignment between the tailstock and headstock centers because the tailstock assembly is accurately keyed to the bed. Tailstock center is self-ejecting.

J-LINE MEDIUM DUTY LATHE

J-112 12"

- VARIABLE SPEED OR 4-SPEED MODELS
- BIG CAPACITY
- TOTALLY ENCLOSED BASE CABINET
- ONE PIECE CAST IRON BED

This lathe is ruggedly constructed for professional workmanship and for rigid support with heavy work. It is efficient in the complete range of turning operation in wood, light metals and plastics.

The cast iron bed, the heavy gray iron casting for headstock and tailstock provide the rigid foundation necessary for dependable performance. Bed ways precision ground for accurate alignment of the spindles. The head and tailstock spindles are machined for No. 2 Morse taper centers and adaptors. Two lubricated-for-life ball bearings in the head casting resist radial thrust and thrust loads.

This lathe is available with a stepless drive that permits dialing an infinite number of spindle speeds from 500 to 3300 RPM.

The motor is enclosed in the steel cabinet, and all the belts and pulleys are completely guarded for utmost safety in the school or professional shop.



SPECIFICATIONS

Swing over bed	12"
Distance between centers	36"
Ram travel	2"
Spindle thread FRONT	1" — 14 R. H.
Hole (complete through spindle)	3/8"
Spindle reverse threads REAR	3/8" — 14 L. H.
Head and tailstock spindle taper	#2 Morse
Overall length	57"
Height	46"
Width	19"
Variable speed model	500 to 3300 RPM
4 speed model	930, 1430, 2150, 3300 RPM
Tool rest length	12"
Height center line of spindle to floor	42"
Shipping weight with cabinet	400 lbs.

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CATALOG LISTING

Variable speed lathe with cabinet base, tool rest holder, 6" tool rest, 12" tool rest, cup center, spur center, wrenches, V-belts and pulleys, less motor and control.....CAT. NO. 43W001

4 speed lathe with cabinet base, tool rest holder, 6" tool rest, 12" tool rest, cup center, spur center, wrenches, V-belts and pulleys less motor and control.....CAT. NO. 43W002

MOTORS FOR SINGLE PHASE OPERATION

(Specify Operating Voltage)

1/2 HP, 115/230V, 60 cy, 1725 rpm, open drip-proof.....CAT. NO. 90W138

1/2 HP, 115/230V, 60 cy, 1725 rpm, totally enclosed fan cooled motor.....CAT. NO. 90W180

3/4 HP, 115/230V, 60 cy, 1725 rpm, open drip-proof.....CAT. NO. 90W146

3/4 HP, 115/230V, 60 cy, 1725 rpm, totally enclosed fan cooled motor.....CAT. NO. 90W182

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)

1/2 HP, 208-220/440V, 60 cy, 1725 rpm, open drip-proof.....CAT. NO. 90W137

1/2 HP, 208-220/440V, 60 cy, 1725 rpm, totally enclosed fan cooled motor.....CAT. NO. 90W181

3/4 HP, 208-220/440V, 60 cy, 1725 rpm, open drip-proof.....CAT. NO. 90W145

3/4 HP, 208-220/440V, 60 cy, 1725 rpm, totally enclosed fan cooled motor.....CAT. NO. 90W183

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....CAT. NO. 90W866

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....CAT. NO. 90W865

Starter, manual complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....CAT. NO. 90W861

Starter, manual complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....CAT. NO. 90W862

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors.....CAT. NO. 90W864

Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with manual starters.....CAT. NO. 90W879

Slow speed start switch for variable speed models.....CAT. NO. 90W100



View of tailstock showing heavy duty construction and cam type locking.



Quick-action tool rest and bed locks lever controlled, no wrenches required.

ACCESSORIES

Front Face Plate, 4"	CAT. NO. 307057
Front Face Plate, 6"	CAT. NO. 307054
Front Face Plate, 8"	CAT. NO. 307055
Rear Handwheel and Faceplate 5"	CAT. NO. 307065
Tool Rest Holder	CAT. NO. 43W008
Single Tool Rest, 6"	CAT. NO. 43W009
Single Tool Rest, 12"	CAT. NO. 42W010
Double Tool Rest, 24"	CAT. NO. 42W011
Center for metal spinning, 60°	CAT. NO. 54W015
Spur Center #2 Morse Taper, 1"	CAT. NO. 1786PP
Cup Center #2 Morse Taper, 3/4"	CAT. NO. 1787PP
Screw Center #2 Morse Taper	CAT. NO. 54W018
Center for Jacobs Chuck with #2 Morse Taper Shank	CAT. NO. 54W021
Jacobs 3-Jaw Chuck with #2 Morse Taper Shank, 1 1/2"	CAT. NO. 54W022
Metal Spinning Tools, (set of 4) flat, pointed tool, flat ball and beading roll	CAT. NO. 53W811
Floor Stand with offset rest holder	CAT. NO. 43W819
Woodturning Chisels, (set of 9) 1/4", 1/2" & 1" skew, 1/4", 1/2" & 3/4" gouge, 1/2" parting, 1/2" round nose, 1/2" spear point	CAT. NO. 53W815
Tail Center-Ball Bearing (with plug center & 5/8" cup center)	CAT. NO. 53W810
Metal spinning Tool Rest	CAT. NO. 43W812



Husky Headstock turns on lubricated-for-life ball bearings, 60 hole indexing mechanism.

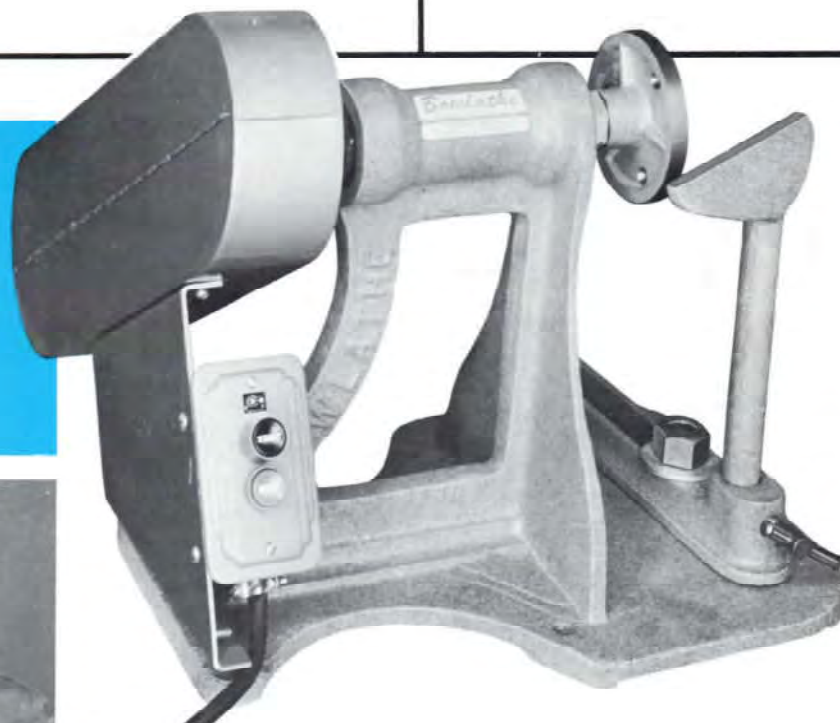


Precision-ground bed ways for accurate spindle alignment.

J-LINE BOWLATHE

J-116

- MOUNTS ON ANY BENCH
- EASY TO OPERATE
- CAN BE USED FOR DISC SANDING



The J-Line Bowlathe is designed for face plate turning for the experienced as well as the beginner. This machine can perform all aspects of wood turning which normally requires a larger, more costly lathe.

It features a spindle locking nut, spring loaded shaft lock and fully enclosed belt guard.

SPECIFICATIONS

Height: 11½" Length: 16" Width: 11"

Capacity: Wood — 16" diameter

Motor Required: 1/3 or 1/2 HP, 1725 RPM

Drive: Single V-belt, 3 step cone pulleys

Shaft speeds in RPM: 800, 1400, 2900

Bearings: Permanently sealed ball bearings never require lubrication.

Weight: 40 lbs.

5W100 Bowlathe; includes belt guard, belt, motor rail spindle lock, 4" face plate, wrench and instruction booklet. Less motor and controls.

MOTORS AND CONTROLS

90W217 1/3 HP, 1725 RPM, 60 cycle 110 volt split phase, single phase, open drip proof motor.

90W218 1/2 HP, 1725 RPM, 60 cycle 110 volt split phase, single phase, open drip proof motor.

90W138 1/2 HP, 1725 RPM, 60 cycle 115/230 volt single phase, capacitor motor.

90W180 1/2 HP, 1725 RPM, 60 cycle 115/230 volt single phase, capacitor, totally enclosed fan cooled motor.

90W181 1/2 HP, 1725 RPM, 208-220/440 volt, 3 phase, totally enclosed fan cooled motor.

90W866 Magnetic starter for all single phase motors, complete with heater, motor cords and fittings.

90W865 Magnetic starter for all 3 phase motors, complete with heater, motor cord and fittings.

6808 Manual switch for all single phase motors with motor cord and fittings.

7810 Manual switch for all 3 phase motors with motor cord and fittings.

90W879 3 wire 8 ft. power cord complete with plug and fittings for use with above controls.

ACCESSORIES

1465PP ½" round nose tool.

2114BL 4" face plate.

2117BL 7" face plate.

5W200 Steel bench for mounting Bowlathe.

5W202 Safety goggles.

5W203 Sanding table.

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TIPS FOR FACE PLATE TURNING



Turning procedures on the Bowlathe are nearly identical to face plate turning on any wood turning lathe, so that if you have had instruction or experience in face plate turning, the same techniques may be used when turning on the Bowlathe. There are several unique developments on the Bowlathe, however, which make turning both safer and easier.

1. PLANNING YOUR DESIGN

Careful preliminary planning is essential to a useful, well designed article. If these plans are not immediately available to you, or you wish to develop your own plan, proceed as follows:

- A. Determine the nature of the article to be made (bowl, plate, tray, etc.).
- B. Determine the overall dimension (diameter, thickness, depth, etc.).
- C. Sketch, in full size, the shape of the article, showing the outside shape, inside shape, and shape of base.

2. SELECTION OF STOCK

Walnut and mahogany are perhaps the most desirable woods to turn due to their even, firm texture and fine finishing qualities. Maple and birch are also good turning woods. Generally, the hardwoods are much better suited to turning than softwoods, which tear easily and are more difficult to finish.

The stock selected should be sound, even textured, free from knots, thoroughly dry, and free from checks (cracks).

3. CUTTING OUT STOCK

After the careful selection of stock, it is necessary to plane one face flat. A band saw should be used to cut out the blank.

4. FASTENING THE BLANK TO THE FACE PLATE

- A. *First Method:* Use screws of adequate length to fasten the face plate to the blank, which will not be encountered when turning out the inside of the project.
- B. *Second Method:* This method is to be used when a shallow base in the turned piece will not allow the screws fastening the face plate to be driven into the blank without interference. This method is also used when the piece to be turned is smaller in diameter than the face plate.

A circular blank is first cut from a piece of $\frac{3}{4}$ " softwood. This piece is now centered on the flat surface of the blank and scribed. A piece of paper (not glazed) is cut slightly larger than the softwood blank. Be sure that both faces to be joined are perfectly flat.

After the article is completed, the softwood blank is removed by striking a broad chisel held between the blank and the base of the article.

5. MOUNTING THE FACE PLATE ON THE BOWLATHE

Place the face plate against the threaded end of the spindle and revolve the spindle towards you.

6. TOOL REST ADJUSTMENT

There should be about $\frac{1}{8}$ " clearance between the toolrest and the edge of the stock.

7. SELECTION OF PROPER TURNING SPEED

Always use a slow speed for rough turning and increase speed only after item is perfectly round.

8. SHARP TOOLS ARE SAFE TOOLS

Carefully check all tools so that you are working with safe tools.

9. ROUGH TURNING

Rough turning may be done with a round-nose turning tool which is used for most face plate operations. Keep the tool rest as close to the area being worked as possible.

10. FINISH TURNING

The speed for rough turning, should be slow. After the work is round, the speed may be increased to the next speed. This will give a smoother cut.

11. SANDING ON THE BOWLATHE

Sanding on the Bowlathe can be accomplished by removing the tool rest and forming a pad of four layers of proper sand paper.

12. FINISHING

After all scratches have been removed by fine sanding, the article is ready for finishing. Read application information on the finish to be applied and complete project.

J-LINE BAND SAW

J-114 14"

- **ADJUSTMENTS**
conveniently made from operator's position
- **COMPLETELY GUARDED**
except at point of cut
- **ALUMINUM WHEELS**
easily adjusted for blade tension and tilt
- **SOLIDLY SUPPORTED**
upper and lower backing bearings



The J-Line 14" Band Saw is built with a sturdy one-piece frame for vibrationless production work. This machine is ideal for vocational training, cabinet shops, pattern shops, production shops and other similar applications. The construction of this machine makes it readily adaptable for use in cutting all types of wood, plastic, cork, rubber, paper products, insulation, Celotex, masonite or other similar non-metallic materials.

The design of the machine is such that safety features have been made an integral part of the machine. The blade is completely guarded above and below the table except at point of cut.

Adjustments can be made quickly, easily and safely from the operator's position. Hinged doors make the upper and lower wheels accessible, making blade changing safe and fast. The wheel tilting and tension adjustments are located on top of the machine. The use of light weight aluminum wheels makes possible quick accelerating action without undue starting strain on the motor.

SPECIFICATIONS

Capacity	{ Blade to frame—13 $\frac{3}{4}$ " Under Guide—6 $\frac{1}{2}$ "
Speed	3850 FPM
Table Size	14" x 14"
Table height from floor (with cabinet)	43 $\frac{3}{4}$ "
Table tilt to right	45°
Table tilt to left	10°
Maximum blade width	$\frac{3}{4}$ "
Maximum blade length	92 $\frac{3}{4}$ "
Minimum blade length	90 $\frac{1}{4}$ "
Wheel covers	Hinged
Band saw wheels	Aluminum
Shipping weight with motor	330 lbs.

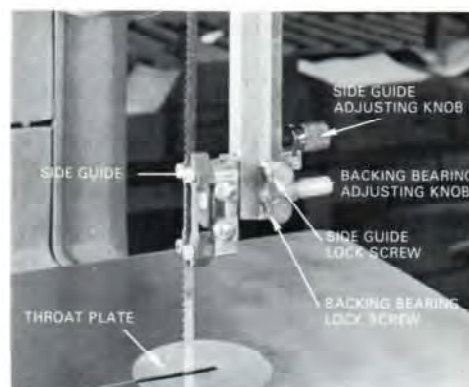
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The heavily ribbed one-piece cast iron frame resists deflection under cut and furnishes a solid support for table and wheels.



The blade tensioning adjustment and the wheel tilting control are located at the top of the machine. In addition, a window in the upper wheel cover allows the operator to check the blade tension at any time. Convenience of the controls and scales permits proper adjustments from operator's position even when the machine is in operation.



Backing bearing shaft is solidly supported by a heavy hexagon steel guide post, so designed that during adjusting it will not drop down and hit the throat plate. The lower backing bearing (not shown) is supported by the cast iron frame.

The upper guide post clamp is adjusted from the operator's position. An exclusive advantage of the J-114 14" Band Saw is a side guide that supports the blade both above and below the ball bearing backing guide. This feature assists tracking of the blade and avoids "snaking" under heavy loads.

The table insert (patented) is so designed that when making a circular cut it will not turn and be in contact with the blade.

CATALOG LISTING

BASIC MACHINE: 14" Band Saw with one 1/4" general purpose blade (20W812) and machine pulley. Without cabinet, motor, control, belt and motor pulley.....**CAT. NO. 20W299**

BASIC MACHINE WITH CABINET: 14" Band Saw with motor pulley (60W362), belt (60W305), one 1/4" blade (20W812). Without motor and control.....**CAT. NO. 20W300**

CABINET: With motor support and belt guard.....**CAT. NO. 20W850**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage)

Motor, 1/2 HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof.....**CAT. NO. 90W138**

Motor, 1/2 HP, 115/230 V, 60 cy, 1725 rpm, totally enclosed fan cooled.....**CAT. NO. 90W180**

MOTOR FOR 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 1/2 HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof.....**CAT. NO. 90W137**

Motor, 1/2 HP, 208-220/440 V, 60 cy, 1725 rpm, totally enclosed fan cooled.....**CAT. NO. 90W181**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....**CAT. NO. 90W866**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W865**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase motors.....**CAT. NO. 90W861**

Starter, manual complete with overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W862**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors.....**CAT. NO. 90W864**

Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with manual starters.....**CAT. NO. 90W879**

ACCESSORIES

Miter Gauge.....**CAT. NO. 10W883**

Rip Fence with guide rails.....**CAT. NO. 20W800**

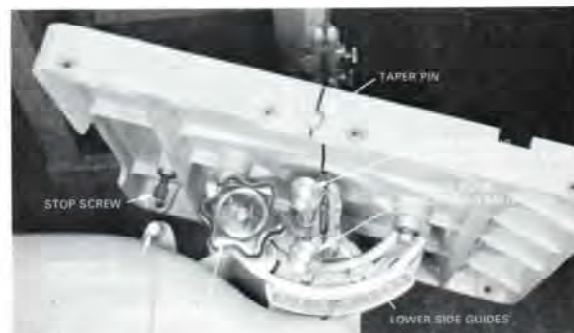
Work Light, 7' cord and plug.....**CAT. NO. 21W810**

WOOD CUTTING BLADES FOR GENERAL WORK

1/8" width.....**CAT. NO. 20W810** 3/8" width.....**CAT. NO. 20W813**

3/16" width.....**CAT. NO. 20W811** 1/2" width.....**CAT. NO. 20W814**

1/4" width.....**CAT. NO. 20W812** 3/4" width.....**CAT. NO. 20W815**



Double table trunnions give solid support and are clamped with one hand knob from the front of the machine so that the operator can make adjustments at point of operation. A stop pin is used to reset the table tilt of 10° to left or 45° to right without making cumbersome adjustments.

J-LINE BANDSAW

J-120 20"

- **ADJUSTMENTS**
conveniently made from operator's position
- **COMPLETELY GUARDED**
except at point of cut
- **ALUMINUM WHEELS**
easily adjusted for blade tension and tilt
- **SOLIDLY SUPPORTED**
upper and lower backing bearings



The J-Line 20" Band Saw has a fabricated steel base with a plate steel upper frame. The machine is designed with all moving parts completely enclosed for safety. It is well received in schools, cabinet shops, pattern shops and production shops—and is adaptable for use with wood, plastic, cork, paper products, insulation, Celotex, masonite and other non-metallic products.

Lubricated-for-life bearings have been used throughout. The 24" x 24" cast iron table . . . accurately machined on the top surface and provided with a slot for a miter gauge as well as holes for attaching a rip fence . . . tilts 45° right and 12° left on double trunnions. Both upper and lower wheels—made of aluminum for quick accelerating action without strain on the motor—are 20" in diameter with a 1¼" face. The motor base is adjustable to maintain proper belt tension. A convenient foot actuated brake works on the lower wheel for fast stops when necessary. All of these features combined assure accuracy and high operating efficiency.

SPECIFICATIONS

Stock capacity.....	{ Blade to frame—19½" Under Guide—13½"
Speed.....	4580 FPM
Table Size.....	24" x 24"
Table height from floor.....	41½"
Table tilt to right.....	45°
Table tilt to left.....	12°
Maximum blade width.....	1"
Maximum blade length.....	149¾"
Minimum blade length.....	142½"
Wheel covers.....	Hinged
Band saw wheels.....	Aluminum
Shipping weight with motor.....	900 lbs.

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Double table trunnions give solid support and are clamped with two hand clamps from the front of the machine so that the operator can make adjustments at point of operation. The table will tilt 45° right and 12° left.

CATALOG LISTING

BASIC MACHINE: 20" Band Saw with $\frac{3}{8}$ " general purpose blade (269VL) and machine pulley. Without motor and control..... **CAT. NO. 21W299**

MOTOR FOR SINGLE PHASE OPERATION (Specify Operating Voltage)

Motor, 1 HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W161**

Motor, 1 HP, 115/230 V, 60 cy, 1725 rpm, totally enclosed..... **CAT. NO. 90W162**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 1 HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W160**

Motor, 1 HP, 208-220/440 V, 60 cy, 1725 rpm, totally enclosed..... **CAT. NO. 90W132**

Motor, $1\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W164**

Motor, $1\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 1725 rpm, totally enclosed..... **CAT. NO. 90W133**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors..... **CAT. NO. 90W850**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors..... **CAT. NO. 90W851**

Starter, manual complete with overload protection, motor cord, mounting plate and fittings. Used with single phase motors..... **CAT. NO. 90W854**

Starter, manual complete with overload protection, motor cord, mounting plate and fittings. Used with 3-phase motors..... **CAT. NO. 90W855**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors..... **CAT. NO. 90W894**

Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with toggle switch and manual starters..... **CAT. NO. 90W879**

ACCESSORIES

Miter Gauge..... **CAT. NO. 10W883**

Rip Fence..... **CAT. NO. J120-A**

Work Light, 7' cord and plug..... **CAT. NO. 21W810**

WOOD CUTTING BLADES FOR GENERAL WORK

12'4" long, $\frac{1}{4}$ " wide, 25 gauge..... **CAT. NO. 268VL**

12'4" long, $\frac{3}{8}$ " wide, 25 gauge..... **CAT. NO. 269VL**

12'4" long, $\frac{1}{2}$ " wide, 25 gauge..... **CAT. NO. 270VL**

12'4" long, $\frac{3}{4}$ " wide, 25 gauge..... **CAT. NO. 272VL**

12'4" long, 1" wide, 25 gauge..... **CAT. NO. 274VL**



The blade tensioning adjustment and the wheel tilting control are located on the right side of the machine. In addition a gauge for setting proper blade tension is also located on right side of machine. Convenience of the controls and scales permits proper adjustments from operator's position even when the machine is in operation.



Backing bearing shaft is solidly supported by a heavy steel guide post, so designed that during adjusting it will not drop down and hit the throat plate. The lower backing bearing (not shown) is attached to the cast iron frame.

The upper guide post clamp is adjusted from the operator's position.

- **BIG CAPACITY**
14" x 14" Cast Iron Table
- **STANDARD NEMA FRAME MOTORS**
- **SMOOTH ACTION**
- **ENCLOSED CABINET BASE**



Whatever the operation or type of material — wood, metal, plastics, fibre, bone or ivory — this machine will handle it with better finish and greater accuracy.

The secret of its smooth operation is the precision balance of its exclusive drive mechanism. Drive is automotive-type, with each part accurately balanced in relation to the weight of every other part. Drive shaft is solid steel, precision ground for perfect balance. It spins on two large ball bearings — transmits a smooth flow of power to the lower operating shaft through a balanced crank and connecting rod. Crank is hardened oil-impregnated iron, and connecting rod is durable heavy-duty Super Oilite — both are highly resistant to wear. Operating shaft is ground steel, guided and supported by *two* widely spaced Oilite bronze bearings. Entire mechanism is splash lubricated at each down stroke.

Crank case is cast integrally with base — overarm is easily removed to permit sawing big panels — these heavy castings further contribute to smooth operation.

The 14" x 14" precision-ground table is supported by *two large trunnions spaced 6 $\frac{3}{4}$ " apart* — tilts 45° to right, 15° to left — swivels 90° to handle angular cutting of long stock.

The universal chucks . . . easy-to-adjust blade guide, blade support roller and work hold down . . . and continuous-type air blower are exclusive convenience features.

No. 24W001 has four speeds . . . 570, 860, 1220 and 1660 RPM. No. 24W004 is equipped with variable speed drive that provides an infinite variety of speeds between 430 and 1725 RPM. Speeds are available instantly by turning crank at front of saw — speed is indicated on easy-to-read dial.

SPECIFICATIONS

Throat Capacity	26"
Max. Depth of Cut	2 $\frac{1}{4}$ "
Speeds, C.S.M., Variable Speed	
Jig Saw	Infinite from 430 to 1725
Speeds, C.S.M., 4-Speed	
Jig Saw	570, 860, 1220 and 1660
Length of Stroke	1"
Table Tilts	15° to Left, 45° to Right, Swivels 90°
Size of Table	14" x 14"
Table Height	12"
Base Dimensions	35 $\frac{3}{4}$ " x 6"
Over-all Dimensions:	
Ready-To-Run Units	16 $\frac{1}{2}$ " wide x 55" high x 42" long
Bench Model	16 $\frac{1}{2}$ " wide x 25" high x 42" long
Blade Lengths	6" or less
Shipping Weight:	
Ready-To-Run Units	330 lbs.
Motor Recommended	$\frac{1}{2}$ HP. 1725 RPM

CATALOG LISTING



Adjustable blade guide bar handles blades of any width or thickness. Blade support roller is hardened ground steel - spins freely with blade, greatly prolonging blade life - positions in and out to handle any size blade.



Lower chuck holds all blades and sabers up to .2812 (9/32") wide and files and accessories up to 1/4" dia. shank without adapters. To cut from side of saw, you merely insert blade in 90° slot of lower chuck and index upper chuck!



Shown is the variable speed drive that provides an infinite variety between 450 and 1725 RPM. The motor and drive assembly is totally enclosed on all cabinet models.

BASIC MACHINE: 26" Scroll Saw, one 4-step Machine Pulley, one 4-step Motor Pulley with 5/8" bore, and V-belt. Without Cabinet, Guard, Motor and Switch **CAT. NO. 24W001**

BASIC MACHINE WITH CABINET: 26" Scroll Saw with one 4-step Machine Pulley, one 4-step Motor Pulley with 5/8" bore, Guard and V-belt. Without Motor and Switch **CAT. NO. 24W002**

BASIC MACHINE WITH CABINET AND VARIABLE SPEED: 26" Scroll Saw, Machine Pulley, Motor Pulley with 5/8" bore, V-Belt, and cabinet. Without Motor and Switch **Cat. No. 24W004**

BASIC MACHINE WITH OPEN TYPE STAND: 26" Scroll Saw, one 4-step Machine Pulley, one 4-step Motor Pulley with 5/8" bore, Guard and V-belt. Without Motor and Switch **CAT. NO. 24W125**

BASIC MACHINE WITH OPEN STAND, VARIABLE SPEED: 26" Scroll Saw, Machine Pulley, Motor Pulley with 5/8" bore, Guard and V-belt. Without Motor and Switch **Cat. No. 24W126**

MOTORS FOR SINGLE AND 3-PHASE OPERATION (Specify Operating Voltage)

Motor, 1/8 HP, single phase, 115/230 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W201**

Motor, 1/2 HP, single phase, 115/230 V, 60 cy, 1725 rpm, totally enclosed with fan cooled motor **CAT. NO. 90W180**

Motor, 1/8 HP, 3-phase, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof **CAT. NO. 90W202**

Motor, 1/2 HP, 3-phase, 208-220/440 V, 60 cy, 1725 rpm, totally enclosed with fan cooled motor **CAT. NO. 90W181**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors **CAT. NO. 90W866**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors **CAT. NO. 90W865**

Starters, manual complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors **CAT. NO. 90W861**

Starters, manual complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors **CAT. NO. 90W862**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used with single and 3-phase motors **CAT. NO. 90W864**

Power Cord, 3 wire, 8 foot, complete with twist lock plug and fittings for use with toggle switch and manual starters **CAT. NO. 90W879**

ACCESSORIES

Belt Guard for bench model **CAT. NO. 23W003**
Lamp Attachment **CAT. NO. 24W040**

JIG SAW BLADES

5" Fret Saw Blade (Pkg. of 6) .012 x .023-20 Pt **CAT. NO. 23W010**

5" Fret Saw Blade (Pkg. of 6) .012 x .032-21 Pt **CAT. NO. 23W011**

5" Fret Saw Blade (Pkg. of 6) .016 x .035-21 Pt **CAT. NO. 23W012**

5" Fret Saw Blade (Pkg. of 6) .017 x .043-18 Pt **CAT. NO. 23W013**

5" Jig Saw Blade (Pkg. of 6) .020 x .070-7Pt **CAT. NO. 23W014**

5" Jig Saw Blade (Pkg. of 6) .020 x .110-7 Pt **CAT. NO. 23W018**

5" Jig Saw Blade (Pkg. of 6) .020 x .110-20 Pt **CAT. NO. 23W019**

5" Jig Saw Blade (Pkg. of 6) .020 x .110-10 Pt **CAT. NO. 23W020**

5" Jig Saw Blade (Pkg. of 6) .020 x .110-15 Pt **CAT. NO. 23W021**

5" Jig Saw Blade (Pkg. of 6) .020 x .070-15 Pt **CAT. NO. 23W022**

5" Fret Saw Blade (Pkg. of 6) .008 x .085-20 Pt **CAT. NO. 23W023**

5" Fret Saw Blade (Pkg. of 6) .010 x .045-18 Pt **CAT. NO. 23W026**

5" Jewelers Blade (Pkg. of 6) .016 x .034-32 Pt **CAT. NO. 23W028**

5" Jewelers Blade (Pkg. of 6) .016 x .054-20 Pt **CAT. NO. 23W030**

5" Jig Saw Blade (Pkg. of 6) .020 x .085-15 Pt **CAT. NO. 23W031**

5" Jig Saw Blade (Pkg. of 6) .020 x .070-32 Pt **CAT. NO. 23W032**

4 1/2" Saber Saw Blade (Pkg. of 3) .028 x .187-10 Pt **CAT. NO. 23W034**

4 1/2" Saber Saw Blade (Pkg. of 3) .028 x .250-7 Pt **CAT. NO. 23W035**

J-LINE BELT, DISC SANDER

J-110

- IDEAL FOR WOOD, METAL, PLASTIC
- FULLY ENCLOSED FOR MAXIMUM SAFETY
- ENCLOSED DUST COLLECTOR

This Disc and Belt Sander is designed for heavy duty, yet versatile work. Its 10" disc and 6" x 48" belt make it applicable to a wide variety of jobs for production sanding of wood, metal or plastic. The ribbed, cast iron construction gives maximum strength and rigidity. The table is changeable and can be used on either the belt or disc. The table tilts a full 45% for angle sanding.

The belt runs over an extra large 6¼" x 17" ground table to provide an accurate, flat, smooth cutting surface even for large sanding jobs. The belt has a uniform cutting speed across its entire face for even finishes. The belt sander features simple one knob tracking with a lock to hold the setting. The guard completely encloses the drums, belt and working mechanism for operator's safety. The top or out-end guard is removable for finishing contour or odd-shaped pieces.

The outer edges and the back of the disc are completely guarded for the operator's protection. The disc is carefully machined and balanced for vibration-free performance...surface is absolutely flat to assure good adhesion of the abrasive paper.

The machine is furnished with a completely enclosed cabinet to give the operator added protection from accidents. The motor is kept free from heavy accumulations of dust with a hinged door to provide easy access. Brackets are mounted on the cabinet to bolt the machine securely to the floor.



SPECIFICATIONS

Sanding belt size	6" x 48"
Sanding disc size.....	10"
Drums.....	3¼" dia.
Overall length, horizontal	35"
Height-belt sander to floor.....	35"
Bearings, lubricated-for-life	4
Table surface for belt	6¼" x 17"
Auxiliary table for miter gauge	7 7/8" x 15"
Auxiliary table tilts.....	45°
Shipping weight	300 lbs.

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Heavy, well-braced construction makes this unit ideal for production as well as intermittent use.

Table unit may be used with either disc or belt, and belt guard and stop are removable for sanding curved pieces on either drum.

Sands plastics and metals as well as wood.

10" disc is machined and balanced to prevent vibration.

Guard encloses the working mechanism.

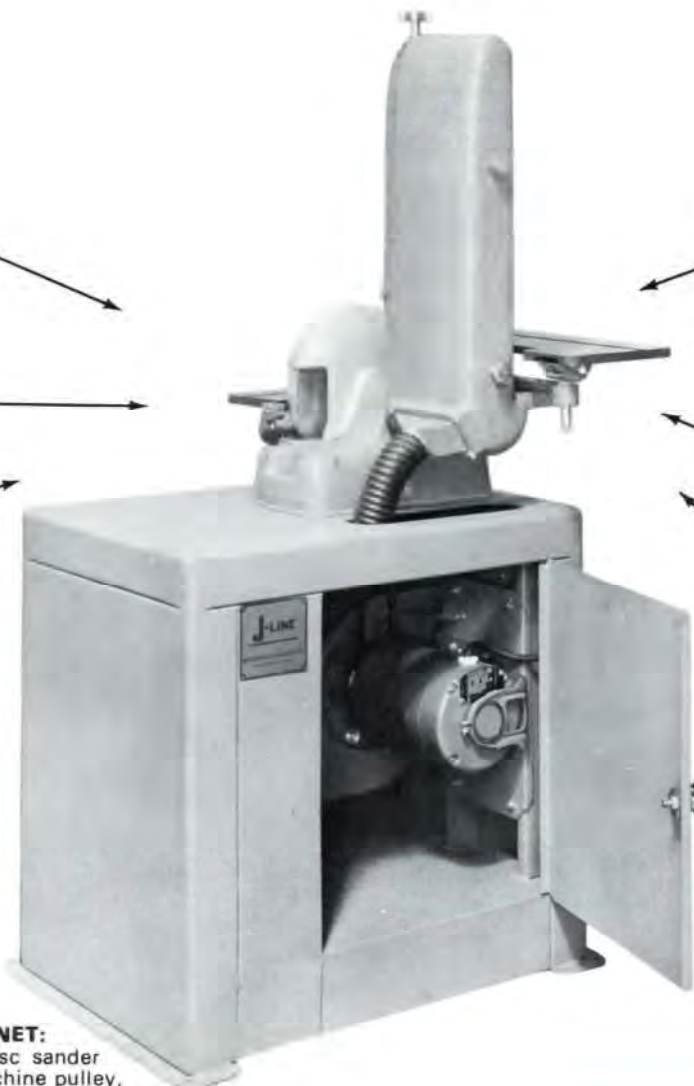
Fence, (extra) simplifies edging operations, assures accuracy.

Disc and guards are easily removed for sanding wide boards on belt

Belt sander is easily adjusted to vertical or horizontal position.

Table tilts full 45° angle.

Fully enclosed dust collection system.



CATALOG LISTING

BASIC MACHINE WITH CABINET:

Combination 6" belt and 10" disc sander with one table, miter gauge, machine pulley, one abrasive belt and disc, cabinet, 5/8" motor pulley and V-belt. Less motor and switch.....CAT. NO. 34W002

MOTORS FOR SINGLE PHASE OPERATION

1/2 HP, 115/230 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W138
 1/2 HP, 115/230 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W180
 3/4 HP, 115/230 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W146
 3/4 HP, 115/230 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W182
 1 HP, 115/230 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W161
 1 HP, 115/230 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W162

MOTORS FOR 3-PHASE OPERATION

1/2 HP, 208-220/440 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W137
 1/2 HP, 208-220/440 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W181
 3/4 HP, 208-220/440 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W145
 3/4 HP, 208-220/440 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W183
 1 HP, 208-220/440 V, 60 cy, 1725 RPM, open drip-proof.....CAT. NO. 90W160
 1 HP, 208-220/440 V, 60 cy, 1725 RPM, totally enclosed fan cooled.....CAT. NO. 90W132

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....CAT. NO. 90W866
 Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....CAT. NO. 90W865
 Starter, manual complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors.....CAT. NO. 90W861
 Starter, manual complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....CAT. NO. 90W862
 Manual Switch, without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors.....CAT. NO. 90W864
 Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with manual starters.....CAT. NO. 90W879

ACCESSORIES

Work Table 7 1/4" x 13 1/2".....CAT. NO. 34W006
 Miter Gauge for Work Table.....CAT. NO. 34W007
 Fence Assembly.....CAT. NO. 34W008
 Dust Collector.....CAT. NO. 34W009

SANDING DISCS (Pkgs. of 6)

Alum Oxide for Metal

10" Fine.....CAT. NO. 33W015
 10" Medium.....CAT. NO. 33W024
 10" Coarse.....CAT. NO. 33W025

Garnet for Wood

10" Fine.....CAT. NO. 33W014
 10" Medium.....CAT. NO. 33W022
 10" Coarse.....CAT. NO. 33W023

SANDING BELTS 6" x 48"

Alum Oxide for Metal

Fine.....CAT. NO. 33W012
 Medium.....CAT. NO. 33W018
 Coarse.....CAT. NO. 33W019

Garnet for Wood

Fine.....CAT. NO. 33W013
 Medium.....CAT. NO. 33W020
 Coarse.....CAT. NO. 33W021

Litho in U. S. A

J-LINE TILTING DISC SANDER J-148 14"

- ACCURATELY FINISH CERAMICS, METAL, PLASTIC, WOOD
- HANDWHEEL TILTS SANDING SURFACE, LOCKS SECURELY
- WORK TABLE ALWAYS REMAINS FLAT

A 14" TILTING DISC SANDER in the price range of most 12" TILTING TABLE machines.

It is no longer necessary to work on a table that is tilted to an awkward angle because the large table, 20 $\frac{3}{4}$ " x 9 $\frac{1}{2}$ ", is stationary as all work tables should be. Large pieces are supported firmly in a flat position at all times, thus offering more safety to the operator. Where material is to be finished at an angle the tilting disc can be adjusted easily and quickly by a handwheel to allow for proper cut.

The stationary work table has a ground surface with a miter gauge slot and extends 3" beyond the edge of the disc on either side, plus a 5 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " surface behind the disc to allow for the finishing of curved or irregular shaped pieces. This quality machine is designed for accurate finishes on metal, plastics and wood for pattern, cabinet, machine shops and school classrooms. It is quiet and vibrationless to assure quality finishes.

The tilting of the disc is easily controlled by a convenient handwheel on the front of the machine. The handwheel has a locking knob to insure accurate tilt settings. The heavy cast iron guard encloses the closely machined disc, but still allows irregular shaped stock to be corner finished.

Machine shops and foundries using this unit appreciate the large flat table to avoid the holding of heavy pieces on an inclined table, which causes the operator to tire and as a result, cut down production. Too, a flat work surface will increase safety because the work piece will not be prone to slide off the table surface.

$\frac{1}{2}$ HP - $\frac{3}{4}$ HP - 1 HP motors are available to provide more than adequate power even for heavy abrasive work on metals.



SPECIFICATIONS

Floor Space.....	20 $\frac{3}{4}$ " x 25 $\frac{3}{4}$ "
Height (Floor to Table).....	34 $\frac{1}{4}$ "
Table Size.....	20 $\frac{3}{4}$ " wide, 9 $\frac{1}{2}$ " from sanding disc with a 5 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " lip extending behind disc.
Sanding Disc.....	Diameter 14"
Disc Bore.....	$\frac{5}{8}$ " ($\frac{7}{8}$ " optional)
Disc Tilt (Maximum).....	45° back and 15° forward
Sanding Disc RPM.....	1750 RPM
Motors.....	Single or 3-phase, $\frac{1}{2}$, $\frac{3}{4}$ or 1 HP
Shipping weight with motor	270 lbs.

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The flat work surface makes it possible to sand heavy awkward pieces quickly and easily. With the work-table always flat and level the operator has an extra safety feature in that one hand can be free to turn the machine "on" and "off" even with the heaviest of work pieces.



The sanding angle on this new machine is made by a hand wheel located at the operator's position. After the angle has been set a locking mechanism maintains the same setting. The heavy cast iron table is an added feature and illustrates the rugged construction of the machine.

CATALOG LISTING

BASIC MACHINE WITH CABINET: 14" diameter Tilting Disc Sander for use with NEMA frame 56 motors with $\frac{3}{8}$ " diameter shaft. Includes Garnet Abrasive Disc and Disc Adhesive. Without motor & controls..... **CAT. NO. 36W300**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage and Phase)

Motor, $\frac{1}{2}$ HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W138**
 Motor, $\frac{1}{2}$ HP, 115/230 V, 60 cy, 1725 rpm, fan cooled..... **CAT. NO. 90W180**
 Motor, $\frac{3}{4}$ HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W146**
 Motor, $\frac{3}{4}$ HP, 115/230 V, 60 cy, 1725 rpm, fan cooled..... **CAT. NO. 90W182**
 Motor, 1 HP, 115/230 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W161**
 Motor, 1 HP, 115/230 V, 60 cy, 1725 rpm, totally enclosed fan cooled motor..... **CAT. NO. 90W162**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage and Phase)

Motor, $\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W137**
 Motor, $\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 1725 rpm, fan cooled..... **CAT. NO. 90W181**
 Motor, $\frac{3}{4}$ HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W145**
 Motor, $\frac{3}{4}$ HP, 208-220/440 V, 60 cy, 1725 rpm, fan cooled..... **CAT. NO. 90W183**
 Motor, 1 HP, 208-220/440 V, 60 cy, 1725 rpm, open drip-proof..... **CAT. NO. 90W160**
 Motor, 1 HP, 208-220/440 V, 60 cy, 1725 rpm, totally enclosed fan cooled motor..... **CAT. NO. 90W132**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase motors..... **CAT. NO. 90W866**
 Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors..... **CAT. NO. 90W865**
 Starter, manual complete with overload protection, motor cord and fittings. Used with single phase motors..... **CAT. NO. 90W861**
 Starter, manual complete with overload protection, motor cord and fittings. Used with 3-phase motors..... **CAT. NO. 90W862**
 Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used for single and 3-phase motors..... **CAT. NO. 90W864**
 Power Cord, 3 wire, 8 foot, complete with twist lock and fittings for use with manual starters..... **CAT. NO. 90W879**

ACCESSORIES

Caster Set..... **CAT. NO. 40W825**
 Cover Plates for side cabinet openings..... **CAT. NO. 36W826**
 Disc Adhesive, 16 oz..... **CAT. NO. 36W821**
 Disc Plate, 14" diameter..... **CAT. NO. 36W831**
 Dust Collector, 14 gallon drum, complete with $\frac{1}{2}$ HP, single phase, 110 V, 50/60 cy motor, 6' hose, plastic nozzle and dust chute (36W827)..... **CAT. NO. 36W828**
 Dust Chute..... **CAT. NO. 36W827**
 Mitre Gauge..... **CAT. NO. 10W883**



A small dust collector and vacuum, powerful—portable—economical is adaptable to the J-148 Tilting Disc Sander. The unit is ideal for schools, commercial shops and other similar applications. When necessary it can be converted for use on other types of machines.
Cat. No. 36W828

SANDING DISCS (Pkg. of 6)

14" Garnet for Wood

#80 fine..... **CAT. NO. 36W800**
 #50 medium..... **CAT. NO. 36W801**
 #40 coarse..... **CAT. NO. 36W802**

14" Alum Oxide for Metal

#100 fine..... **CAT. NO. 36W804**
 #60 medium..... **CAT. NO. 36W805**
 #50 coarse..... **CAT. NO. 36W806**

J-LINE SPINDLE SHAPER

J-151

- FULL $3\frac{5}{16}$ " SPINDLE TRAVEL
- FENCE ALWAYS PARALLEL TO MITER GAUGE SLOT
- BIG TABLE CAPACITY
 $28\frac{3}{8}$ " x 30"
- HARDENED AND GROUND SPINDLES
FOR TOP ACCURACY



The J-Line Single Spindle Shaper has been designed for precision craftsmanship, safety and ease of operation. Every precaution has been taken to equip the user with a machine which can be depended upon for accuracy and fine production. The J-151 Shaper is widely accepted for use in school shops, pattern shops, cabinet shops, as well as for sash, door and blind manufacture and other industrial production. Wherever intricate work or precision mouldings are required, the J-Line Shaper is ideal since the high spindle speed permits cuts not otherwise possible.

The heart of the machine—the spindle—is positioned with two precision lubricated-for-life pre-loaded ball bearings to eliminate possible end play. The bearings are carefully spaced to hold the spindle rigid at just the right degree. The entire spindle assembly is bolted rigidly in position to the underside of the table. The complete unit, with motor, moves up and down in a straight vertical path on gibbed dovetail ways. The spindle is readily raised and lowered by means of a convenient hoist hand-wheel and can be locked at any setting simply by turning the finger knob on the outside of the handwheel.

Another convenient feature of the J-151 Shaper is its reversible spindle; it can be run clockwise or counter-clockwise by means of a reversing switch which is offered as extra equipment.

Drive from the motor spindle is short-coupled to eliminate vibration and to transmit maximum power. This is possible because the motor moves with the spindle. All the power of the motor is delivered directly to the spindle.

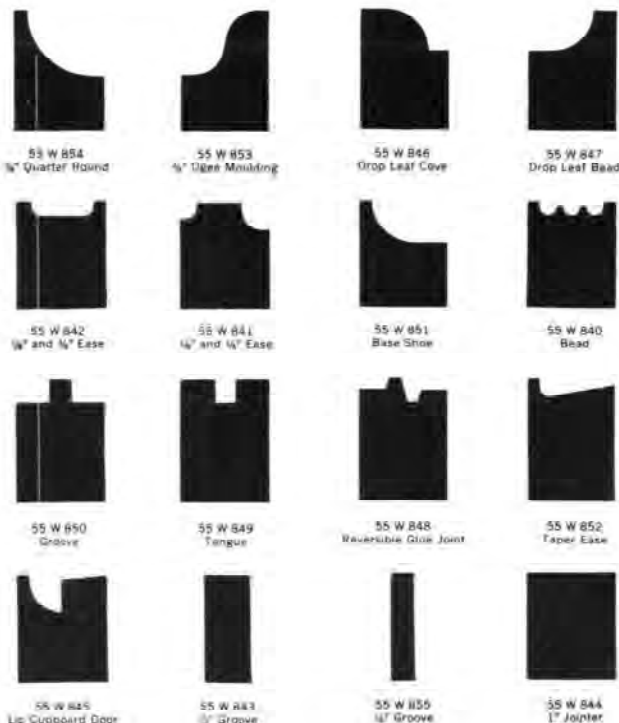
SPECIFICATIONS

Table Height.....	34 $\frac{1}{4}$ "
Table Size.....	28 $\frac{3}{8}$ " x 30"
Table Size with extensions.....	28 $\frac{3}{8}$ " x 38"
Table Opening diameters.....	6 $\frac{1}{2}$ ", 3 $\frac{1}{16}$ ", 3 $\frac{3}{16}$ ", 1 $\frac{3}{8}$ "
Spindle diameter at bearings.....	1 $\frac{3}{8}$ "
Spindle diameters furnished.....	$\frac{1}{2}$ " and $\frac{3}{4}$ "
Other spindle available.....	1"
Capacity of spindles.....	$\left\{ \begin{array}{l} 1" - 3\frac{3}{4}" \\ 3\frac{3}{4}" - 3\frac{1}{2}" \\ 3\frac{1}{2}" - 2\frac{3}{4}" \end{array} \right.$
(under nut)	
Spindle Travel.....	3 $\frac{5}{16}$ "
Spindle Speed.....	10,000 RPM
Largest opening thru table.....	6 $\frac{3}{16}$ "
Motor Sizes.....	1, 1 $\frac{1}{2}$ and 2 HP
Approximate Shipping Weight.....	350 lbs.

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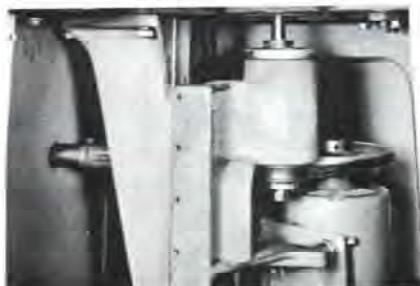
3 WING CUTTERS

Precision-made accessories to fit a wide variety of needs in every woodworking shop $\frac{1}{2}$ " bore cutters are designed to be resharpened conveniently without losing contour.



The holddown and holdover springs are used to secure stock firmly against the table and fence. This unit is designed to adjust for different stock thickness and width and is interchangeable from one side of the spindle to the other. Truly a production aid which also greatly increases the safety of operation.

The holddown ring is a convenient protection for the operator when running curved or irregular stock.



The heavy spindle assembly is firmly bolted to the underside of the machine. Cutting accuracy is assured through the vertical movement of the entire spindle assembly on gibbed dovetail ways. Spindle deflection is held to a minimum.



To withstand wear both the spindle and spindle extensions are made from heat treat alloy steel. Spindle is ground to size to assure added accuracy. Note extra long taper for positive seating.



Throat Plate in position over spindle, with knife blade mounted between knife collars. Throat plate lying on table top (at left) is turned to show rub ring on under side.

Three reversible cast iron throat plates ($6\frac{1}{2}$ " - $3\frac{1}{2}$ ", $3\frac{1}{2}$ " - 3", and 3 - $1\frac{3}{8}$ " diameters) are furnished. Each is designed with a rub ring on the under side that serves as a guide for contour work. The upper side of each throat plate (or table insert) can be inserted flush with the table top.

BASIC MACHINE: Single Spindle Shaper including infeed and outfeed fences, front extension, 3 table inserts, $\frac{1}{2}$ " and $\frac{3}{4}$ " spindles, motor pulley and belt. Without cutters, motor and controls.....**CAT. NO. 55W200**

MOTORS FOR SINGLE PHASE OPERATION (Specify Operating Voltage)
Motor, 1 HP, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled.....**CAT. NO. 90W157**

Motor, 1 HP, 115-208/230 V, 60 cy, 3450 rpm, open drip-proof.....**CAT. NO. 90W159**

Motor, $1\frac{1}{2}$ HP, 115-208/230 V, 60 cy, 3450 rpm, open drip-proof.....**CAT. NO. 90W168**

Motor, $1\frac{1}{2}$ HP, 115/230 V, 60 cy, 3450 rpm, totally enclosed fan cooled.....**CAT. NO. 90W171**

MOTORS FOR 3-PHASE OPERATION (Specify Operating Voltage)
Motor, 1 HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled.....**CAT. NO. 90W156**

Motor, 1 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof.....**CAT. NO. 90W158**

Motor, $1\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof.....**CAT. NO. 90W167**

Motor, $1\frac{1}{2}$ HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled.....**CAT. NO. 90W170**

Motor, 2 HP, 208-220/440 V, 60 cy, 3450 rpm, open drip-proof.....**CAT. NO. 90W175**

Motor, 2 HP, 208-220/440 V, 60 cy, 3450 rpm, totally enclosed fan cooled.....**CAT. NO. 90W130**

STARTERS FOR SINGLE AND 3-PHASE OPERATION

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with single phase, 1 HP, 115/230 V and $1\frac{1}{2}$ HP, 230 V motors only.....**CAT. NO. 90W873**

Starter, magnetic complete with low voltage and overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W875**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase, 1 HP, 115/230 V motors only.....**CAT. NO. 90W861**

Starter, manual complete with overload protection, motor cord and fittings. Used with 3-phase motors.....**CAT. NO. 90W862**

Starter, manual complete with overload protection, motor cord and fittings. Used with single phase, $1\frac{1}{2}$ HP, 115/230 V motors only.....**CAT. NO. 90W863**

Manual Switch without overload protection, complete with mounting plate, motor cord and fittings. Used with all single phase and 3-phase motors.....**CAT. NO. 90W864**

Reversing Switch complete with fittings for all motors except $1\frac{1}{2}$ HP and 2 HP, 3-phase, 440 V motors.....**CAT. NO. 90W900**

Reversing Switch complete with fittings for $1\frac{1}{2}$ HP and 2 HP, 3-phase, 440 V motors.....**CAT. NO. 90W901**

Power Cord, 3 wire, 8 foot, complete with twist lock plug and fittings for use with toggle switch and manual starters.....**CAT. NO. 90W879**

ACCESSORIES

Miter Gauge, complete with stop rods.....**CAT. NO. 10W883**

Spring Hold-downs, pair.....**CAT. NO. 55W800**

Shaving Hood.....**CAT. NO. 55W801**

Safety Ring Guard & Hold-down.....**CAT. NO. 55W802**

Rear Table Extension.....**CAT. NO. 55W803**

Spindle Adapter, $1\frac{1}{2}$ " - $3\frac{3}{4}$ " under nut.....**CAT. NO. 55W804**

Spindle Adapter, $\frac{3}{4}$ " extra long - $4\frac{3}{4}$ " under nut.....**CAT. NO. 55W805**

Conversion Kit, to 7000 rpm spindle, $\frac{3}{8}$ " motor shaft.....**CAT. NO. 55W806**

Spindle Adapter, $\frac{1}{2}$ " stub.....**CAT. NO. 55W807**

Spindle Adapter, $\frac{3}{4}$ ".....**CAT. NO. 55W808**

Spindle Adapter, $\frac{3}{4}$ ".....**CAT. NO. 55W809**

Shaper Knives, $\frac{1}{2}$ " wide, set of 2.....**CAT. NO. 55W810**

Shaper Knives, $\frac{3}{4}$ " wide, set of 2.....**CAT. NO. 55W811**

Shaper Knives, 1" wide, set of 2.....**CAT. NO. 55W812**

Shaper Knives, $1\frac{1}{4}$ " wide, set of 2.....**CAT. NO. 55W813**

Shaper Knives, $1\frac{1}{2}$ " wide, set of 2.....**CAT. NO. 55W814**

Spacing Collars, $\frac{1}{2}$ " bore, set of 4.....**CAT. NO. 55W820**

Knife Collars, $\frac{3}{4}$ " bore, set of 2.....**CAT. NO. 55W830**

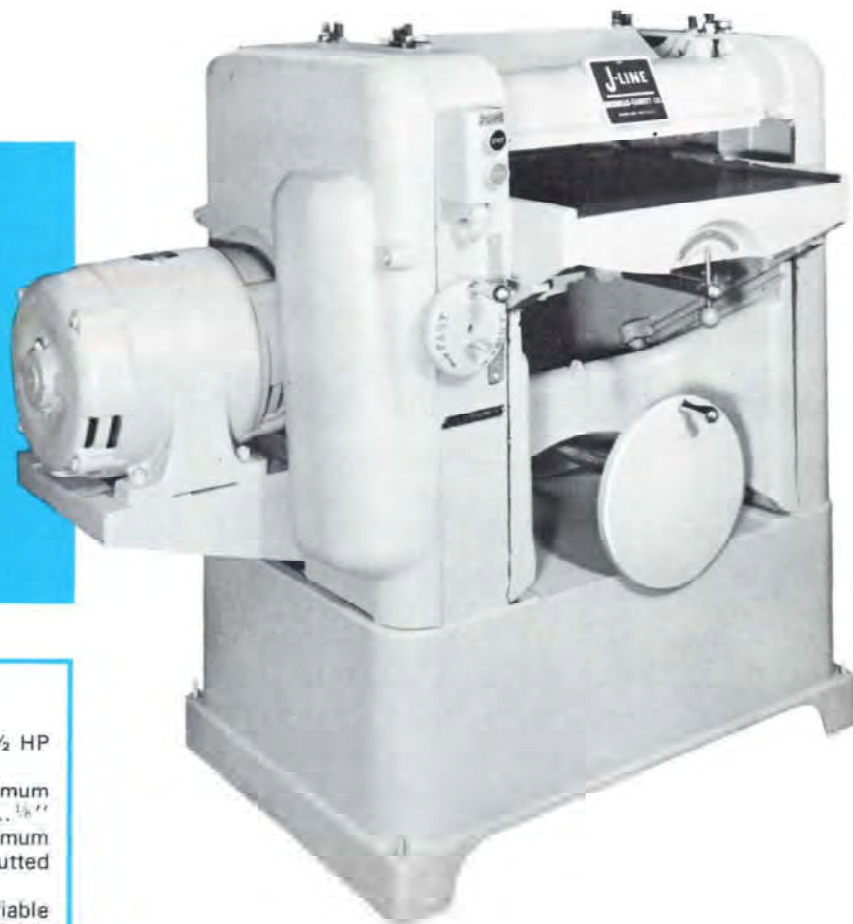
Knife Collars, 1" bore, set of 2.....**CAT. NO. 55W831**

Moulding Cutterhead, $2\frac{1}{2}$ ".....**CAT. NO. 55W835**

J-LINE SURFACER

J-188 18" x 6"

- ONE PIECE WEDGE BED CONSTRUCTION
- COMPLETELY SEALED WORM GEAR DRIVE
- VARIABLE SPEED CUTTING FEED
- REDI-SET, BED ROLL ADJUSTMENT



SPECIFICATIONS

Motors3, 5 and 7½ HP
Capacity:
Width of stock18" Maximum
Thickness of stock: Maximum.....6"; Minimum.....½"
Depth of cut¼" Maximum
Minimum length8" Unbutted
Rate of Feed:
Linear feet per minute15 to 36 Variable
Inches of stock cut per minute.....Variable
Cuts per minute10,350
Cutterhead:
Type3 Knife
Diameter3¼"
Diameter of cutting circle3½"
Knives: (3) High Speed Steel⅝" x 1½" x 18½"
Speed3600 RPM (Direct and Belt Drive Models)
Feed Rollers:
DriveSeparate ½ HP Motor
In-feed rollers2¼" Diameter, Solid Serrated
Out-feed rollers2¼" Diameter, Smooth
Speed (RPM)Variable
Bed Rollers2¼" Diameter, 8" C.C.
Bed Dimensions20" x 30"
Table Raising Mechanism.....Wedge Bed
Thickness Scale.....0" to 6"
Overall Dimensions:
Depth32"; Width31½"; Height41"
Floor Space21¼" x 31½"
Approximate Shipping Weight with Motor1200 lbs.

STANDARD EQUIPMENT

Basic Machine includes set of three cutterhead knives, separate feed motor, feed motor pulley and V-belt. Drive motor, belts, cutterhead pulley, motor pulley, coupling and electrical controls must be ordered separately.

In designing the J-188 Surfacer, special attention has been given to every detail which will make it more efficient, safer and easier to operate.

The cutterhead and feed rolls run in lubricated-for-life bearings assuring easy maintenance and a minimum amount of wear. The chipbreaker swings with the cutterhead at all times making it impossible for the chipbreaker to strike the cutterhead knives. All controls and adjustments are easily accessible to the operator.

Any feed speed from 15 to 36 FPM can be obtained by rotating hand wheel. The feed speed you need to get a high quality finish on any type of stock is instantly available. Feed rolls are powered by an independent ½ HP feed motor.

Finished in horizon gray, the J-188 Surfacer is one of the most attractive machines on the market today.

BRODHEAD-GARRETT 4560 East 71st Street, Cleveland, Ohio 44105

Capacity	Will surface stock up to 18" wide and from 1/8" to 6" thick. Shortest when butted 3", not butted 8 1/4".
Base	One piece casting forms a solid foundation for machine.
Side Frames and Girts	Side frames and girts are cast iron, bolted and pinned to the base to form a rigid unit that will not twist or slide out of alignment.
Bed	Heavy, one piece casting. Bed is 30" long, strongly ribbed and girted. It raises and lowers on gibbed ways. The bed is adjusted by a large, easily operated handwheel. The slide ways give the bed an extremely rigid support.
Feed Rolls	Top infeed roll is solid, corrugated and runs in lubricated-for-life roller bearings. Top outfeed roll is solid. Both top rolls are 2 1/4" in diameter and have 1/4" yield through spring pressure. Bottom rolls are solid, idle, 2 1/4" in diameter and run in lubricated-for-life ball bearings.
Feed Works	Feed is driven by an independent 1/2 HP motor with a belt through the variable speed drive. The gear speed reducing unit is totally enclosed. A door permits easy access to the feed works. Feed rates of from 15 to 36 feet per minute are available. Feed speed is adjusted by a conveniently located hand wheel.
Cutter-head Cylinder	A 3-knife, round, safety-type cutter-head is furnished. The thin, high-speed steel knives are mounted at 30°. Cutting circle is 3 1/2". Cutter-head runs in lubricated-for-life ball bearings. A deflector for shavings is furnished.
Chip-breaker	The solid, steel chipbreaker swings with the cutterhead. The edge of the chipbreaker is always equidistant from the cutting circle and cannot strike the knives.
Pressure Bar	The pressure bar is solid and swings with the cutterhead. Adjustment is made by screws located on top of the frame.
Lubrication	Feed works grease lubricated. Cutter-head and feed rolls have lubricated-for-life bearings.

CATALOG LISTING

Basic Machine. Includes set of 3 cutterhead knives, separate feed motor, feed motor pulley and V-belt, but less drive motor, drive belts, cutterhead pulley, motor pulley, coupling and electrical controls. 1030 lbs.

DIRECT DRIVE MACHINES

18" x 6" Wedge Bed Single Surfer, with 1/2 HP single phase, 115/230 volt, 60 cycle, 1725 RPM open feed motor, and 3 HP single phase, 3450 RPM, 115/230 volt, 60 cycle open motor, coupling for motor shaft, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W005**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 1725 RPM open feed motor, and 3 HP 3 phase, 208-220/440 volt, 60 cycle 3450 RPM open motor, coupling for motor shaft, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W006**

18" x 6" Wedge Bed single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle 1725 RPM open feed motor, and 5 HP 3 phase 208-220/440 volt, 60 cycle, 3450 RPM open motor, coupling for motor shaft, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W008**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 1725 RPM open feed motor, and 7 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 3450 RPM open motor, coupling for motor shaft, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W009**

BELT DRIVE MACHINES

18" x 6" Wedge Bed Single Surfer, with 1/2 HP single phase 115/230 volt, 60 cycle, 1725 RPM open feed motor, and 3 HP single phase, 3450 RPM 115/230 volt, 60 cycle open motor, with head pulley, belts, motor pulley, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W010**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 1725 RPM open feed motor, and 3 HP, 3 phase, 208-220/440 volt, 60 cycle, 3450 RPM open motor, with head pulley, belts, motor pulley, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W011**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP single phase, 115/230 volt, 60 cycle, 1725 RPM open feed motor, and 5 HP single phase, 220 volt, 60 cycle, 3450 RPM open motor, with head pulley, belts, motor pulley, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W012**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 1725 RPM open feed motor, and 5 HP 3 phase, 208-220/440 volt, 60 cycle, 3450 RPM open motor, with head pulley, belts, motor pulley, left hand guard, push button pilot switch and magnetic starter **CAT. NO. 31W013**

18" x 6" Wedge Bed Single Surfer, with 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 1725 RPM open feed motor, and 7 1/2 HP 3 phase, 208-220/440 volt, 60 cycle, 3450 RPM open motor with head pulley, belts, motor pulley, left hand guard, push button pilot switch with magnetic starter **CAT. NO. 31W014**

ACCESSORIES

Extra set of 3 Knives **CAT. NO. 31W800**
 Shaving Hood **CAT. NO. 31W801**
 Knife Grinding and Jointing Attachment **CAT. NO. 31W802**
 Fast Lower Feed Roll Height Adjustment **CAT. NO. 31W803**

J-LINE SURFACER

J-225 25" x 8"

- CUTTERHEAD BRAKE STANDARD
- FEED VARIATION 15 to 100
- 1½ H.P. ON FEED
- ACTUAL CAPACITY 25" x 8¾"
- MINIMUM PLAN THICKNESS 1/16"
- 4 KNIVES STANDARD EQUIPMENT

The J-Line No. J-225 Planer-Surfacer is a precision built machine manufactured from an exacting design utilizing ideas and components to provide the user with a machine to meet the most demanding and varied needs of today's production and vocational woodworking.

Capacity — These machines are designed to plane material 25" wide and from 1/16" to 8¾" in thickness. The cutterhead design allows a maximum cut of ½". Butted pieces as short as 4" and single pieces 12" may be planed.

A Carefully Engineered Feed Mechanism offers speeds from 20 to 100 lineal feet per minute. Higher or lower speeds are available in the same ratio. For added safety and control the machine is equipped with a conveniently located reversing switch. A positive chain, sprocket drive with a gear reduction is used to alleviate any slipping of the mechanism.

Large Box Type Base—A large box-type three point mounted base of pleasing design insures proper support of all components.

Heavy One-Piece Table—The heavy one-piece table accurately carries all table parts for precision planing and is easily adjustable by a conveniently located hand wheel.

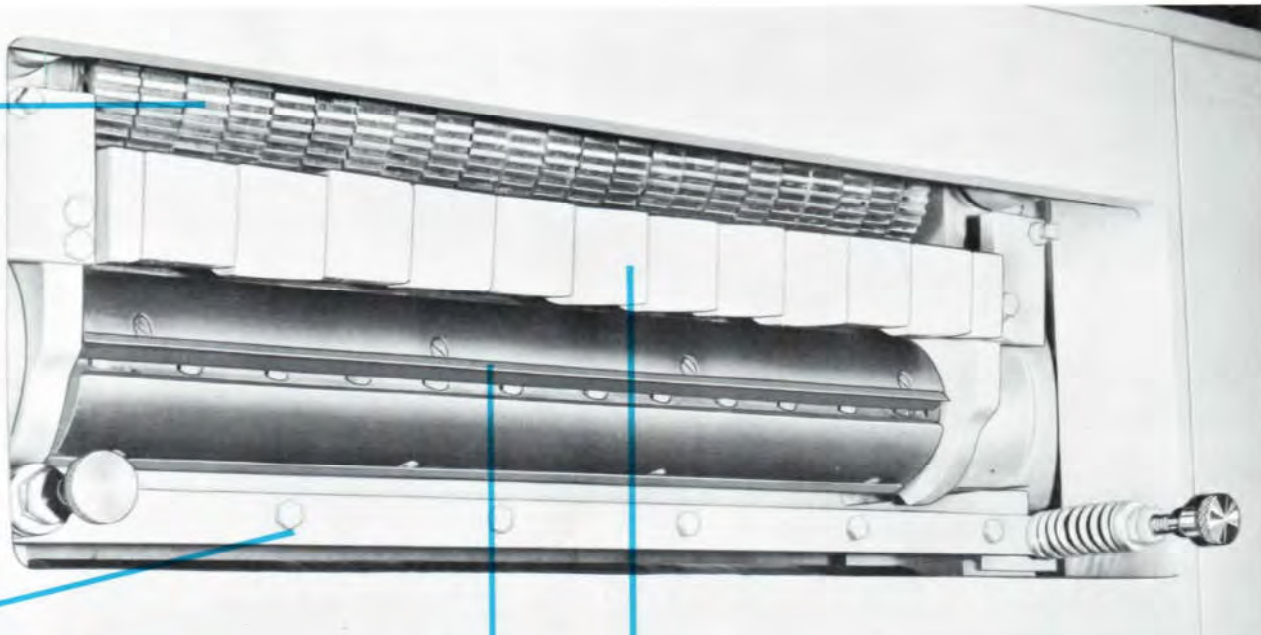
Choice of Drives — The feed mechanism is driven by a 1½ HP totally enclosed fan-cooled motor. This machine is available in either a Direct Motor or VEE-Belt drive with 5, 7½, 10, and 15 HP T.E.F.C. motors. Direct motor drives operate at 3600 RPM and VEE-belt drives operate at 5000 RPM or to customer's orders.



SPECIFICATIONS

Nominal size—25" x 8"
Actual capacity—25" x 8¾"
Cylinder—4½" cutting circle, 4 knife, high carbon steel, micrometer type knife raising screws
Drive—Direct motor or Vee-Belt
Brake—Conveniently located hand brake
Motors—Cutterhead—5, 7½, 10, 15 HP T.E.F.C.
Feed—1½ HP T.E.F.C.
RPM—Direct Motor Drive—3600
Vee-Belt—5000 (or to customer's specification)
Knife Size—¾" x 1¼" x 25" high speed steel
Lower feed rolls—4" solid steel, power driven, sealed for life bearings
Upper feed rolls—infeed—4" diameter, 1" milled steel sections, ¾" section yield, ¾" roll yield, sealed for life ball bearings
Outfeed—4" solid steel, power driven sealed for life ball bearings
Table feed roller adjustment—Single hand lever .001 to .075
Feed speed—20 to 100 lineal feet per minute (higher or lower available in same ratio)
Chipbreaker—Ductile iron, 2" sections, concentric with head
Pressure bar—easily adjustable, with micrometer type adjusting screws
Maximum stock width—25"
Shortest butted piece—4"
Shortest single piece—12"
Maximum stock thickness—8¾"
Minimum stock thickness—¼"
Maximum depth of cut—½"
Controls—Double magnetic switch, single pushbutton; reversing switch on feed mechanism
Floor space—60" x 50"
Base—large box type, three point mounted
Net weight—2400 lbs.
Domestic shipping weight—2550 lbs.
Boxed for export—2750 lbs.

BRODHEAD-GARRETT 4560 East 71st Street, Cleveland, Ohio 44105



Four Knife Cutterhead with Integral Micrometer Type, Knife Raising Screws

The four knife cutterhead of high carbon steel is 25" long and has a $4\frac{1}{2}$ " cutting circle. The $\frac{3}{2}$ " x $1\frac{1}{4}$ " x 25" knives are of high speed steel and can be quickly adjusted with the micrometer type knife raising screws machined integral with the cutterhead. The cutterhead can be quickly stopped with a convenient brake.

Sectional Chipbreaker Mounted Concentrically with Head

A sectional chipbreaker of 2" ductile iron sections is concentric with the cutterhead and yields to $\frac{3}{8}$ ". It rises with the sectional infeed roll on heavy cuts and is fully adjustable.

Quickly Adjustable Pressure Bar

A heavy pressure bar is located directly behind the cutterhead. It is quickly adjustable by means of spring loaded micrometer-type adjusting screws at either end of the bar. If necessary, the pressure bar can be easily removed.

Sectional Upper Infeed Roll

All four 4" feed rolls are power driven. The upper infeed roll is the sectional type with 1" milled steel sections. Each section yields $\frac{5}{16}$ " and the entire roll yields $\frac{3}{4}$ ". All the other feed rolls are solid steel and easily removable. The feed rolls are mounted with sealed for life ball bearings. To adjust the machine from rough to smooth stock a single hand lever quickly adjusts the table power feed rollers from .001 to .075.

Electrics

The machine is delivered to the user completely self contained, wired and ready to attach to main feed lines. A double magnetic switch with single pushbutton control is standard equipment as is the reversing switch for the feed motor. All electrics comply with standard electrical safety codes.

Extras

Shavings hood for gravity exhaust system • Shavings hood for connection to blower system • Knife grinder • Jointing attachments (must be used with grinder bar) • Removable center bed plate • Idler rollers for edge of table • Modifications to customer's order.

POSITIVE DRIVE FEED MECHANISM





**The name plate
that assures you of quality...**

GUARANTEE

Every J-Line machine is a precision made tool that is manufactured under exacting quality specifications. The component parts are inspected at each stage of assembly, then a final inspection assures you of a quality engineered product. This fine workmanship stands behind our guarantee.

We will repair or replace any part or parts of J-Line machines which prove to be defective due to faulty material or manufacturing. Part or parts which have been misused, carelessly handled or normally worn will not be covered by this guarantee. Service on all J-Line machines must be arranged directly through authorized distributors or the factory, including pre-payment of shipping expense.



*"Progress
with a
meaning"*

BRODHEAD-GARRETT

4560 East 71st Street, Cleveland, Ohio 44105

Western Division: 1233 Broadway, Sacramento, California 95818



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