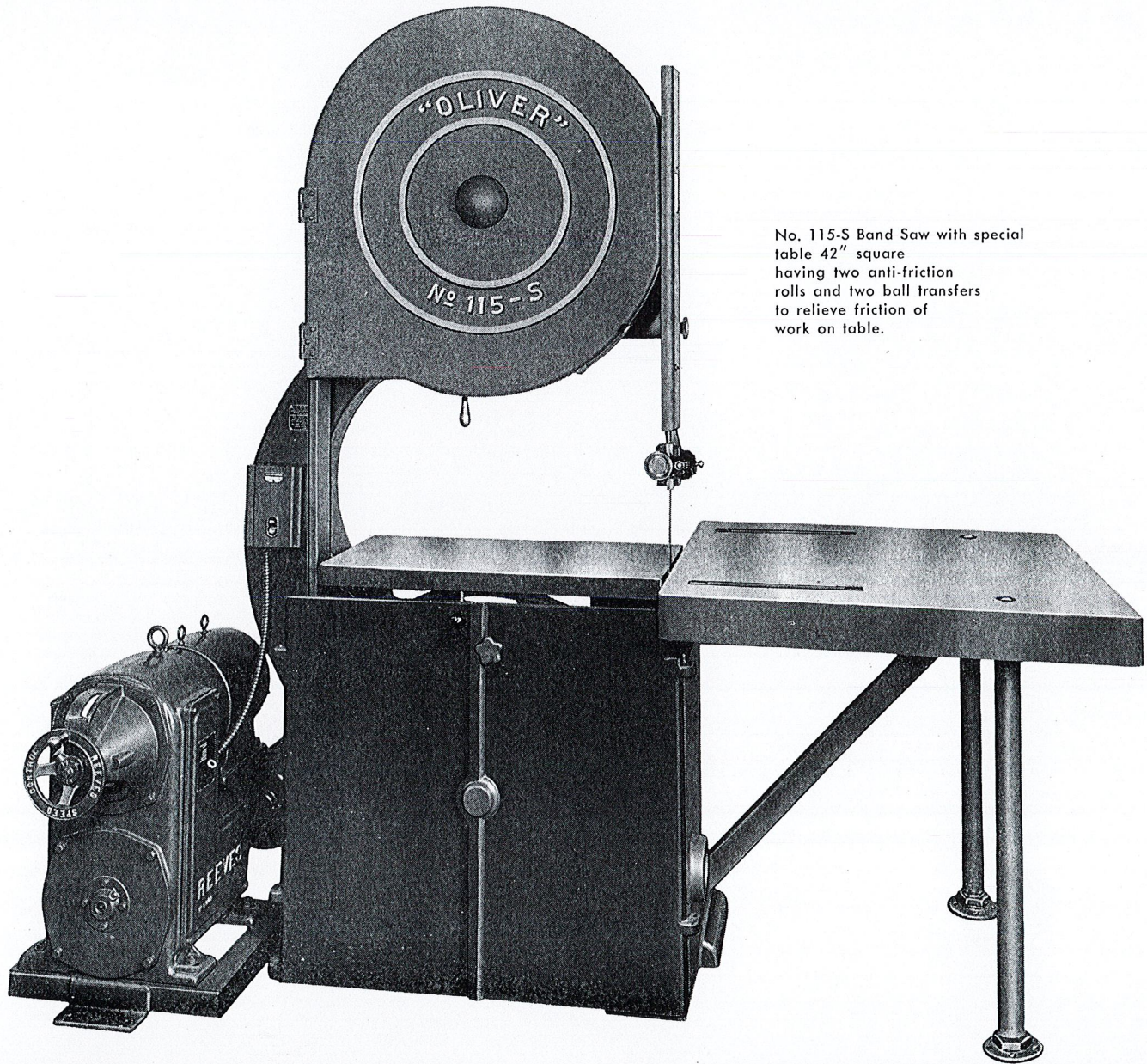


OLIVER

Metal Cutting

Band Sawing Machines



No. 115-S Band Saw with special table 42" square having two anti-friction rolls and two ball transfers to relieve friction of work on table.



OLIVER MACHINERY COMPANY, GRAND RAPIDS 2, MICHIGAN, U.S.A.

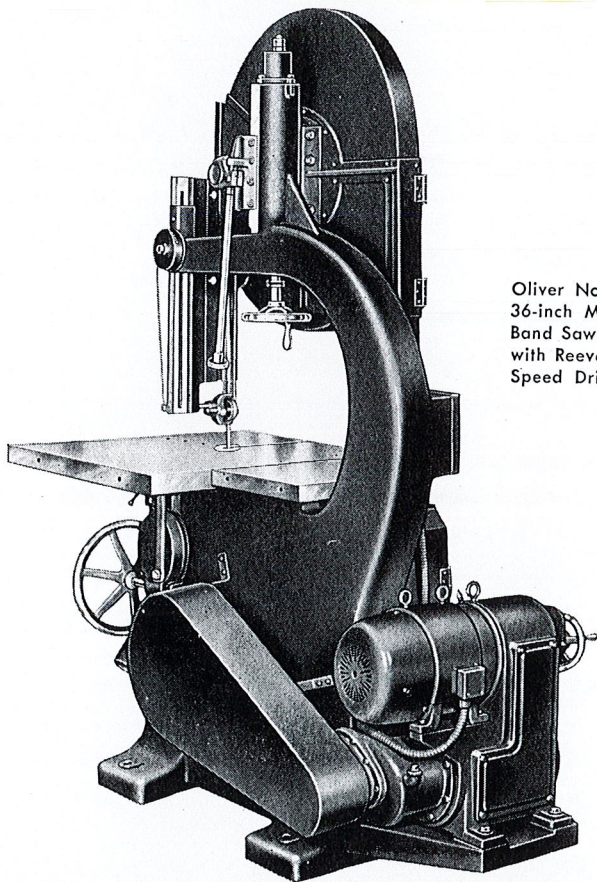
The finest Band Saws to cut soft metals, aluminum, plastics, hard rubber, compositions, sheet steel

Oliver Metal Cutting Band Saws are favorably recognized by users for their excellent design and engineering. Their clean-cut, rigid design, construction, finish and efficiency make them the most serviceable Band Saws built. Careful examination of details is encouraged. Many of these advantages are found only in Oliver Band Saws.

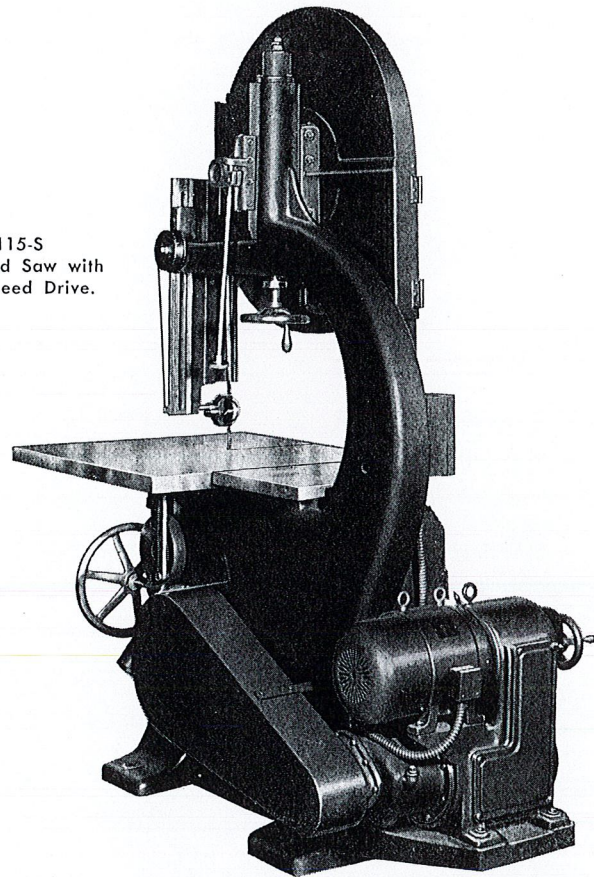
Only the finest ball bearings are used. Principal parts are of unit construction. Castings are made of semi-steel with heavy rib reinforcements to eliminate vibration or distortion stresses. If desired, machines can be furnished to run at special speeds.

Brakes

Both wheels are provided with positive brakes for greater safety. A handy foot lever within easy reach of the operator shuts off the electric current and applies a formed brake



Oliver No. 416-S
36-inch Metal Cutting
Band Saw arranged
with Reeves Variable
Speed Drive.



Oliver No. 115-S
38-inch Band Saw with
Variable Speed Drive.

shoe on the inside of the rim near the floor. It gently but quickly stops the wheels a few seconds after the power is shut off. The brake for the upper wheel is fully automatic. It is normally kept open by the same mechanism that applies tension to the saw blade, and the instant pressure is released (by saw breaking or running off wheel) the formed brake shoe is automatically applied against the inside of the rim of the upper wheel and stops the wheel almost instantly.

No. 115-S Band Saw

This 38-inch Band Saw can be arranged with an extra large main table, as illustrated on cover, for cutting large slabs of material. Main table at right of saw is 42" square, solidly supported. Outer edge of main table has two ball rollers, and inside edge is fitted with two rollers 2½" diameter by 13" long, supported by

needle bearings. Stock rides free on table to assure easy handling. Auxiliary table measures 18" x 36", permanently mounted on base of machine.

A Reeves Variable Speed Unit operates this machine by V-belts—3, 4, or 6 to 1 ratio drives available. A 40 to 1 ratio is also available by interchanging the two V-belt pulleys. Has demountable ring-disk wheels.

Besides the horsepower of motors listed on the last page, the regular No. 115 Band Saw with 5 h.p. 720 r.p.m. motor (or 10 h.p. 600 r.p.m.) is frequently used for cutting metal. Blade speed with 720 motor is 7160 f.p.m. (with 600 motor, 5960 f.p.m.).

Wheels

Oliver Band Saws are made with 38-, 36-, 30- and 18-inch wheels. The two largest machines have wheels of the demountable ring-disk type dynamically balanced to run perfectly true and without vibration at highest speeds. The ring-disk consists of a one-piece aluminum alloy rim unit, finished all over and fastened to the hub by six hollow head, flush cap screws. Saws are provided with a

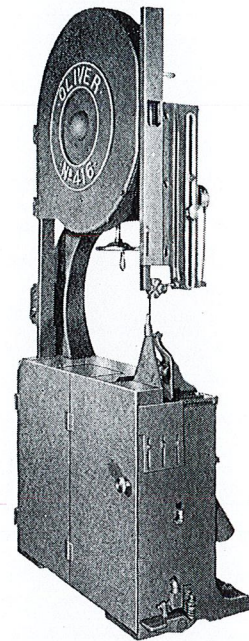
cleaner brush to keep wheel free from dirt.

No. 416-S Band Saw

The Oliver 36-inch Band Saw is offered to do various metal cutting jobs. The No. 416-S illustrated on page two has a deep, semi-steel table 36" square. It is cross-ribbed for strength. The table is mounted on two machined rockers and rocker seat having a tongue and groove fitting. Table tilts 45 degrees to right, 5 degrees to left by handwheel, worm and worm gear self-locking totally enclosed tilting device having index and pointer to register tilt. Auxiliary table, 18½" x 17", is finished and securely mounted with clearance alignment with main table when horizontal.

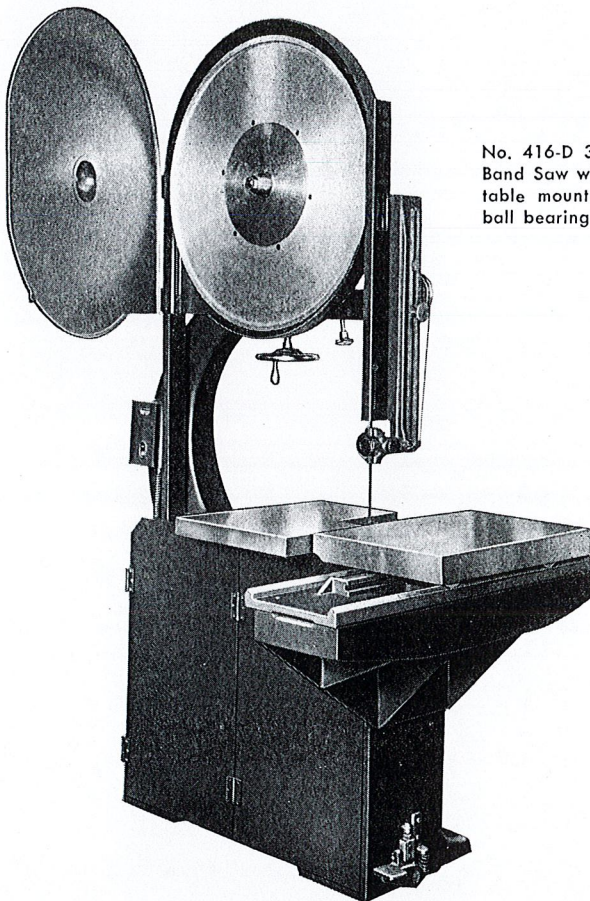
Saw Tension Unit

Proper tension of saw blade is accomplished by an electric tension device. This unit consists of tension arm and micro switch which permits operation of machine only when proper tension is applied to blade. This unit prevents blade breakage and damage to wheel tires by over-tension.



No. 416-T 36-inch Trim Saw for free-hand cutting of stamped or formed parts of aluminum, plastic, sheet steel, etc.

Electric tension control is standard equipment on band saws 30" and larger.



No. 416-D 36-inch Band Saw with rolling table mounted on ball bearing wheels.

Rolling Table

In cutting metal it is sometimes desirable to use a rolling table. The rolling table for the No. 416 Band Saw is 18" wide, 28" long. It is a semi-steel casting, well ribbed and accurately machined. A bracket, mounted to front of base, supports a roller track 54½" long. Roller track contains two machined ways and a stop cast integral with track. The ways receive ball bearing supported wheels mounted to underside of table. Self-contained stops keep table from over-running. A stationary rear table 18" x 24" contains a built-in chute to permit small scrap pieces to slide away.

This unit with No. 416-D 5 h.p. 720 r.p.m. motor is often used to cut metals.

Safety Guards and Doors

The saw blade runs in a fully enclosed metal guard at back of machine which has a narrow slot for inserting blade. The saw is guarded at the front by the guide post, which form a U-shape guard around the saw, and also by the L-shaped shuttle guard which covers the saw down to the work. The upper wheel is totally enclosed in a steel housing, the front

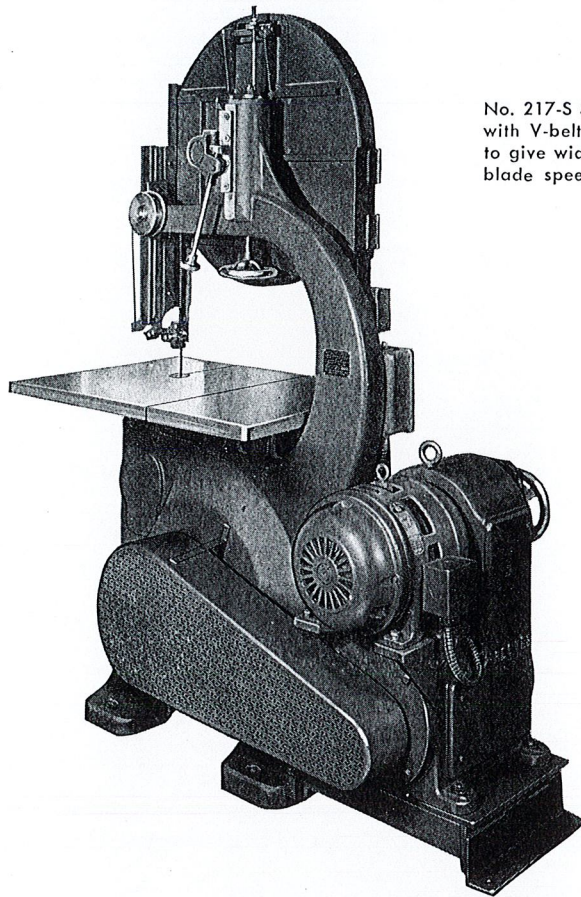
half acting on hinges and swinging out for access to wheel. Lower wheel is totally enclosed having a two-piece steel door at front swinging on hinges. Doors are locked to frame by spring clasps. All moving parts are covered except that part of the blade doing the sawing between guide and table.

No. 217-S Band Saw

The Oliver 30-inch Band Saw is especially built to cut sheet metals, tubings, bars, compositions, hard rubber, wood, etc. Has semi-steel table 26" x 28", cross-ribbed for strength. Table is mounted on two machined rockers and rocker seat having tongue and groove fitting. Table tilts 45 degrees to right, 5 degrees to left, accurately registered by pointer. Auxiliary table is 14" x 16", finished and mounted with clearance alignment with main table when horizontal.

Adjustment

The lower wheel has permanent alignment with frame of machine. Upper wheel has simple vertical screw adjustment fitted with helical springs for saw tension, accurately



No. 217-S 30-inch Band Saw with V-belt drive to give wide range of blade speeds.

indicated. Upper wheel has screw tilting device for tracking blade on wheel.

Motor Drive

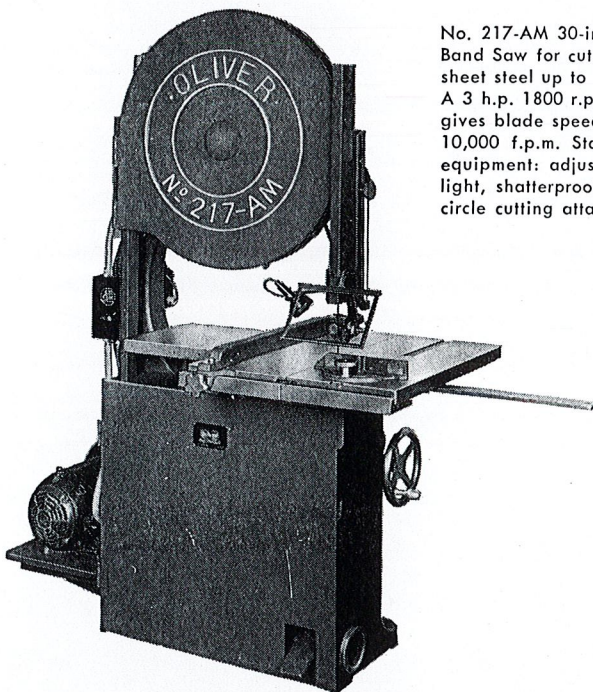
The No. 217 with 3 h.p. 720 r.p.m. motor is often used for cutting metals. This Band Saw is also available with Reeves Variable Speed Drive Unit to drive machine by V-belts, giving a ratio of 3, 4 or 6 to 1 speeds. For special application, speeds as low as 13 r.p.m. or as high as 1200 r.p.m. can be obtained.

Frame

The frame is a one-piece casting in the cored form, strong, durable, free from vibration. The bottom is machined straight, and all other parts finished square to bottom assuring permanent and perfect alignment.

Guides and Post

The post is a one-piece casting. It carries the upper guide and guards face of upper wheel and saw blade



No. 217-AM 30-inch Band Saw for cutting sheet steel up to 1/4" thick. A 3 h.p. 1800 r.p.m. motor gives blade speed of 10,000 f.p.m. Standard equipment: adjustable work light, shatterproof eyeshield, circle cutting attachment.

directly above the guide. Post is counterbalanced by encased coil spring. A small glass window aids operator to track blade on wheel. Has carbide guides above and below table. Carbide faced side guides prevent saw from turning sidewise.

No. 192-M Band Saw

The Oliver 18-inch Metal Cutting Band Saw has many of the refinements developed for the larger Band Saws. It saws sheet steel up to $\frac{1}{8}$ " thick, and other sheet metals, small rods, tubings, soft metals, hard rubber, compositions, woods.

Slow Speeds

For cutting gates of brass, bronze, and semi-soft metals, a slow saw speed is required. A geared head motor is used for 264 ft. per minute.

Capacity

This machine takes 18" between saw and column, 10" under upper

guide. Uses blades up to $\frac{1}{2}$ " wide. By using gauges it cuts parallel up to 11" wide. Cuts off and miters up to $6\frac{1}{2}$ ". Table tilts 45 degrees to right.

Wheels

The aluminum, rubber faced, disk wheels are 18" diameter, $1\frac{1}{4}$ " face. Both ball bearing wheels are completely guarded with heavy metal doors or guards. Speed: 1800 r.p.m. Upper wheel has 4" vertical adjustment.

Table

The cast iron, well ribbed table is accurately machined. Size: $23\frac{1}{2}$ " wide, 20" long. Table tilts 45 degrees to right. Height from base: 20". Height from floor: 38".

Column

Column is a one-piece, cored grey iron casting of box type. It is accurately machined at bottom and all

points where other parts are carried. Height of machine without floor base is 48".

Floor Base

Steel floor base, machined to fit bottom of column, may be omitted if desired. Base is 18" high, making height of table 38" from floor.

Motor

The motor for the No. 192-M is 1 h.p. 1800 r.p.m. totally enclosed 220/440 volts, 3 phase, 60 cycles. Motor for No. 192-MV is 1 h.p., 900 r.p.m. T.E. for 3 phase, 60 cycles, 220 or 440 volts.

Adjustments

Lower wheel is permanently aligned with frame of machine. Upper wheel has 4-inch vertical screw adjustment for tensioning saw, and screw tilting device for tracking blade on wheel. Adjustments are controlled by hand knobs.

Safety Guards

Metal doors with finished inside rims close against finished protruding front edges of cast iron housing, completely enclosing upper and lower wheels. A U-shaped steel guard encases rear part of saw. A U-shaped guard, adjustable with guidepost, combined with an L-shaped steel slide guard at lower end, covers all of front portion of blade not actually cutting.

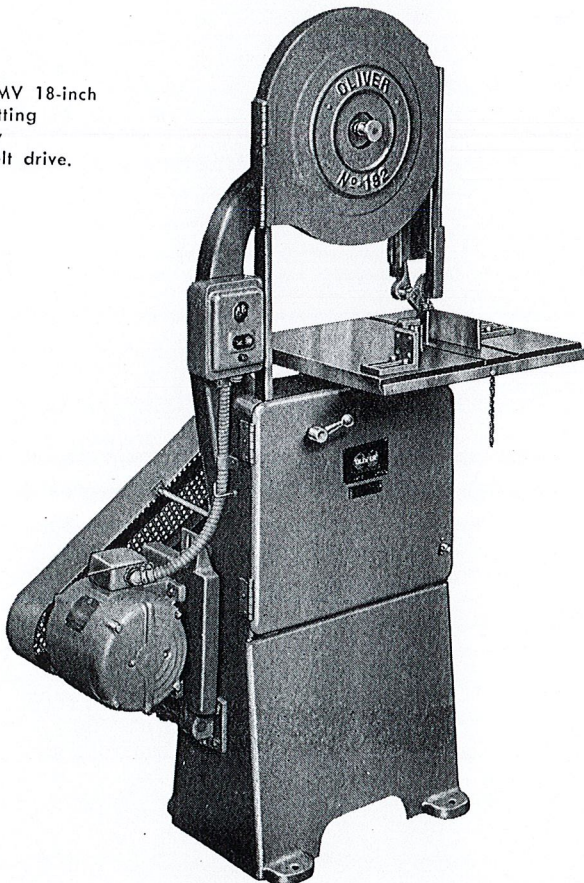
Guides

Carbide guides are furnished below and above table. Carbide faced side guides are adjustable, and prevent saw from turning sidewise.

Equipment

Each machine is equipped with one saw blade $\frac{3}{8}$ " wide, one filling strip for table groove, ripping fence, cross-cut gauge.

No. 192-MV 18-inch
Metal Cutting
Band Saw
with V-belt drive.



GENERAL DIMENSIONS

CAPACITY	No. 192-M	217-S	416-S	115-S
	MACHINE SIZE			
Distance Between Saw and Rear Guide.....	18"	30"	36"	38"
Distance Between Saw and Rear Guide.....	17½"	29¼"	35½"	37½"
Diameter of Wheels.....	18"	30"	36"	38"
Widest Blade That Can Be Used	½"	1½"	2"	2½"
Length of Blade	9'8"	16'	19'6"	20'
Distance Under Saw Guide	10"	15"	22"	21"
Upper Wheel Adjustment	4"	3"	9"	9"
TABLE				
Length and Width	20 x 23½	26 x 28	36 x 36	36 x 40
Tilting Capacity to Right	45°	45°	45°	45°
Tilting Capacity to Left	5°	5°	5°
HORSE POWER				
H. P. Recommended	1	3	5	7½
Speed (R.P.M.)	1800	(See Chart Below)		
OVERALL FLOOR SPACE REQUIRED				
Length	34"	69"	74"	78"
Width	27"	28"	36"	40"
Height to Top of Wheel Guard with Standard Blade	5'8"	6'10"	8'4"	8'7"

VARIABLE SPEED MOTOR UNIT (REEVES) For 115-S, 416-S, and 217-S

CARBIDE SAW GUIDES

No. 3	⅛" to ⅝"	No. 192
No. 4	⅛" to 1½"	No. 217, No. 416, No. 115

3 to 1 Ratio—200 to 600 r.p.m. Wheel Speed
7½ h.p.—No. 6000-F-12—1740 to 580 r.p.m.
5 h.p.—No. 5000-F-12—1740 to 580 r.p.m.
3 h.p.—No. 5000-F-12—1740 to 580 r.p.m.
4 to 1 Ratio—150 to 600 r.p.m. Wheel Speed
7½ h.p.—No. 6000-E-12—1740 to 435 r.p.m.
5 h.p.—No. 5000-E-12—1740 to 435 r.p.m.
3 h.p.—No. 5000-E-12—1740 to 435 r.p.m.
6 to 1 Ratio—100 to 600 r.p.m. Wheel Speed
7½ h.p.—No. 6221-C-12—1326 to 221 r.p.m.
5 h.p.—No. 5221-C-18—1513 to 252 r.p.m.

CODE, WEIGHT, ETC.

CODE	MACHINE DESCRIPTION	WEIGHT IN POUNDS		CUBIC FEET
		CRATED	BOXED	
Selab	No. 115-S 38" Metal Cutting Band Saw	3400	4400	185
Siba	No. 416-S 36" Metal Cutting Band Saw	2500	3650	180
Supoa	No. 416-S with Rolling Table	2600	3750	185
Supab	No. 416-T Trim Saw	2400	3100	118
Sode	No. 217-S 30" Metal Cutting Band Saw	1650	2600	85
Supaf	No. 192-M 18" Metal Cutting Band Saw—1 h.p. 1800 r.p.m. Motor, Blade Speed 8500 f.p.m.	750	950	43
Supah	No. 192-MS 18" Slow Speed Metal Cutting Band Saw—¾ h.p. 56 r.p.m. Motor, Blade Speed 264 f.p.m.	830	1030	50
Supet	No. 192-MV Aluminum Cutting Band Saw—1 h.p. 900 r.p.m. Motor, Blade Speed 1300 f.p.m.	900	1100	43



OLIVER MACHINERY COMPANY
Grand Rapids 2, Michigan, U.S.A.

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