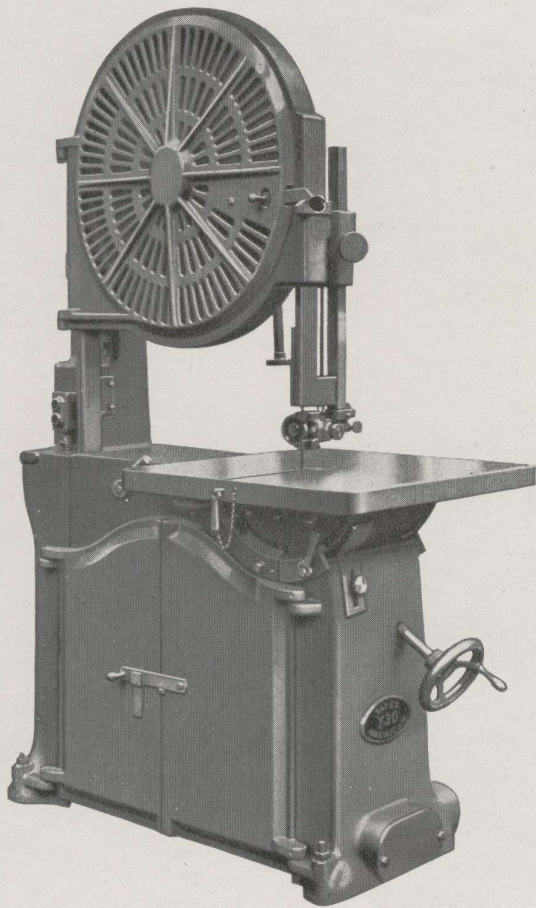
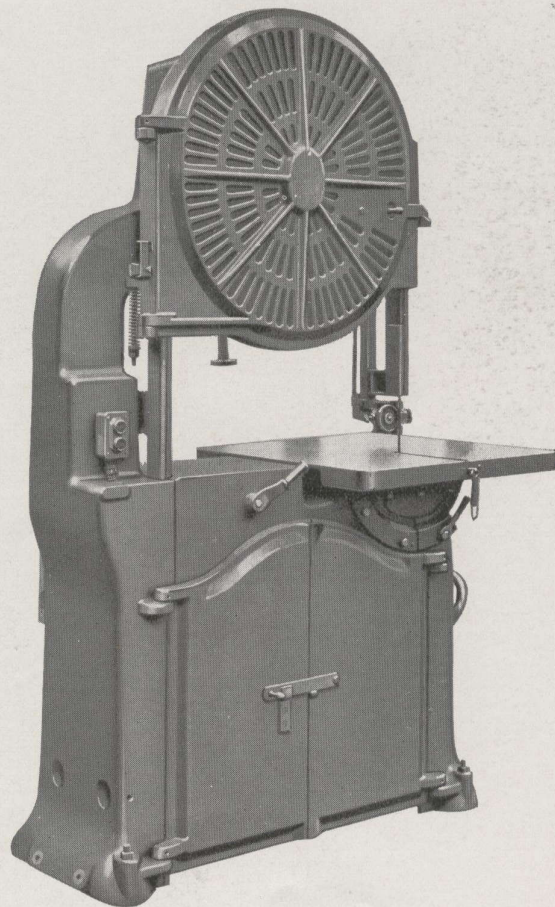

• **YATES-AMERICAN** •



Type Y-30
30 inch high speed
Band Saw



YATES-AMERICAN MACHINE COMPANY
BELOIT, WIS., U.S.A.

YATES-AMERICAN MACHINE COMPANY

Beloit, Wisconsin

Y-30 HIGH SPEED 30" BAND SAW

EMBODYING EXCLUSIVE ENGINEERING FEATURES AND ADVANCED DESIGN.

The Y-30 is the latest band scroll saw unit to be developed by Yates-American. In it are incorporated refinements of design that render it superior to earlier Yates-American models. In addition, it embodies a number of exclusive features not found in band saws of any other make. Unusual solidity and compactness render operation smooth and vibrationless at high speeds. Particular attention has been given to safety as is evidenced in the guards which completely protect every moving part of the machine except at the actual point of cut. While primarily adapted for sawing wood, it will render equally good service in sawing sheet metal, cloth, meat and composition materials.

FRAME

The one-piece core cast base and frame is exceptionally heavy, but so compactly designed that this machine occupies no more floor space than an ordinary lighter band saw. The weight is scientifically distributed so as to eliminate practically all vibration even at highest speeds. The wide, flaring base provides a solid foundation, flat on the floor, with no openings for dirt to get underneath. The combination straight and "goose-neck" type of column supporting the upper wheel yoke assembly has advantages over both ordinary styles, through eliminating overhang and lessening the distance from the yoke gib to the top wheel bearing.

TABLE

The main table measures 28 x 30". Ground to a smooth finish on top, the table rests on a wide, substantially gibbed cradle, rigid in position, that tilts 45 degrees to the right and 10 degrees to the left in response to turns of a hand wheel placed in convenient accessibility to the operator, at the front. The tilting device is indexed and self-locking. The auxiliary table, which is part of the base and level with the main table, measures 13 x 15".

WHEELS

30" diameter dynamically balanced solid disc aluminum wheels, with 1-1/2" face and rubber covered are furnished. They require less power to start than any other type. Disc wheels eliminate the windage that spoke wheels create and obviate the possibility of rims breaking away from the spokes at high speeds. The top wheel is mounted on the top wheel shaft, and the bottom wheel directly on the motor shaft by means of a self-centering sleeve, which permits use of a standard frame motor and facilitates ready wheel removal when necessary. On belt and motor

driven machines both wheels run in Dodge Timken roller bearings, and in the direct motor driven machine the mounting of the top wheel is the same, while a ball bearing motor is used on the bottom wheel. An exclusive method of fastening the rubber bands to the wheel rims makes economical replacement of band possible right on the scene of operation, without having to send the wheel back to the factory for vulcanizing jobs. Vertical handwheel adjustment of the top wheel is provided, as well as handscrew saw tracking adjustment.

BRAKES

A quick-acting, automobile type internally expanding drum brake in the hub of the lower wheel stops the wheel and saw instantly and surely. The brake is operated by means of a hand lever at the front of the machine. Regular brake shoelining is used, and the brake is adjustable for wear, the same as any automobile brake.

STRAINING DEVICE

Regular Yates-American exclusive type knife-edge straining device for the saw blade is featured on the Y-30. Fulcrumed on knife edges, this straining device is extremely sensitive and keeps proper tension at all times. Frictional resistance is minimized, and action to get the varying strains is instantaneous. Uniform tension is maintained by a spring, adjustable to provide suitable tension for the size of the saw blade in use. A gauge and indicator show the proper tension each size saw should have.

GUARDS

Another exclusive feature is that the saw blade and wheels are completely guarded except at the actual cutting point. The top wheel guards are of cast aluminum and of open design, which provides for air circulation, cuts down windage, and is more rigid than screen or sheet metal. The guards are attached to the top wheel yoke by good, substantial heavy hinges, and are adjustable vertically with the yoke. The bottom wheel guard consists of two heavily ribbed iron doors substantially mounted on double hinges. At front and rear the saw is completely enclosed with aluminum guards that telescope into the top guard as the top wheel is lowered.

DRIVE

Three types of drive are furnished.

DIRECT MOTOR DRIVE - This application includes a 3 HP, 900 RPM, AC motor with lower wheel mounted directly on shaft by self-centering device. There is magnetic push button operated control.

MOTOR DRIVE - A 3 HP, 1800 RPM ball bearing AC motor with push button operated control, is mounted on two horizontal shafts projecting from the back of the base and belted to pulley on the lower wheel shaft. The motor bracket is adjustable, eliminating need of a tightener.

BELT DRIVE - This application is furnished with tight and ball bearing loose pulley 10 x 4-1/2", 600 to 1200 RPM.

GUIDES

Wright non-friction roller guides are furnished above and below the table. These guides do not crystalize or disturb the temper and prolong the life of saw blade by being entirely frictionless. If desired the Mohawk or Newall guides can be furnished at a slight extra cost. A point worthy of special mention is the way the upper guide bar is counterbalanced by a special spring sash balance, entirely enclosed within the frame but readily accessible. This sash balance is strong and dependable and relieves the operator of any undue exertion when raising or lowering the upper guide.

STOCK

The machine will take stock 29-1/2" wide from saw frame to saw with the saw guard on; 16" under the guide with the guard on, and 13" with the guard off.

SAWDUST CONTROL

A dust chute is cored down the front of the base to the floor, and thence leads along at the floor line to opening at the back. Sawdust is deflected into the chute by the table cradle, regardless of the tilt of the table. A wood deflector, through which the saw runs, deflects dust into dust duct, preventing it from following the saw and getting between the saw blade and the wheel. An apron cored through to the dust duct near the floor on the inside of the base catches any dust which might escape through the wood deflector. A large opening in the front of the base facilitates sawdust removal when a suction system is not available.

SPECIFICATIONS FOR Y-30

REGULAR EQUIPMENT

WHEELS 30" diameter, 1-1/2" face; upper and lower wheel aluminum disc; rims covered with rubber bands. Bearing - Dodge - Timken.

GUARDS FOR WHEELS Top all aluminum, bottom cast iron. One door above, two below.

BRAKES One hand control braking on drum in lower wheel.

STRAINING DEVICE Patented. Knife-edge type. An index determines proper strain for each width of saw blade.

SAWS One blade furnished; longest 17' 2"; shortest 16' 6"; carries blades from 1/8" to 1-1/2" wide.

GUIDES Top and bottom roller guides. (Wright).

TABLES Main 28" x ^{30"}20", auxiliary 13 x 15", tilting 45 degrees right, 10 degrees left. Tilting device is indexed and separately locked.

STOCK Widest 29-1/2" from saw frame to saw with saw guard on; thickest 16" under guide with guard on and 18" with guard off.

DRIVE Tight and loose pulley, ball bearing 10 x 4-1/2"; 600 to 1200 RPM.

MD. Motor drive includes 3 HP 1800 RPM, ball bearing poly-phase AC motor and push button operated control, motor mounted on bracket on back of machine and belted to arbor including belt and guard.

DMD. Direct Motor Drive includes 3 HP ⁷²⁰~~900~~ RPM, AC poly-phase motor with lower wheel direct on shaft and push button operated control.

WOOD CUTTING

HP 3 HP for light and medium work. 5 HP for heavier work.

SPEED ⁷²⁰~~900~~ RPM regular motor furnished, is suitable for practically all general work. 600, ~~720~~ or 1200 RPM in 3 HP or 5 HP may be furnished on order. 1200 RPM wheel speed may be used effectively on work where there are no sharp curves.

EXTRA EQUIPMENT

CODE

CLODC Solid cast iron lower disc wheel.
CHUML Ripping fence.
CEBOP Splitting gauge and roll.
CEBUR Self feed resaw attachment for 12" wide center
4" thickness.
CHURP Upper and lower Mohawk Guide, instead of Wright.
CHUSR Upper and lower Newell Guide, instead of Wright
Scroll Band Saws

<u>CODE</u>	<u>TYPE</u>	<u>FLOOR SPACE</u>	<u>WEIGHT</u>
AROGS	BD	5'3" x 3'2"	2450
AROHT	MD	6'8" x 3'2"	2700
AROJV	DMD	5'3" x 3'2"	2730