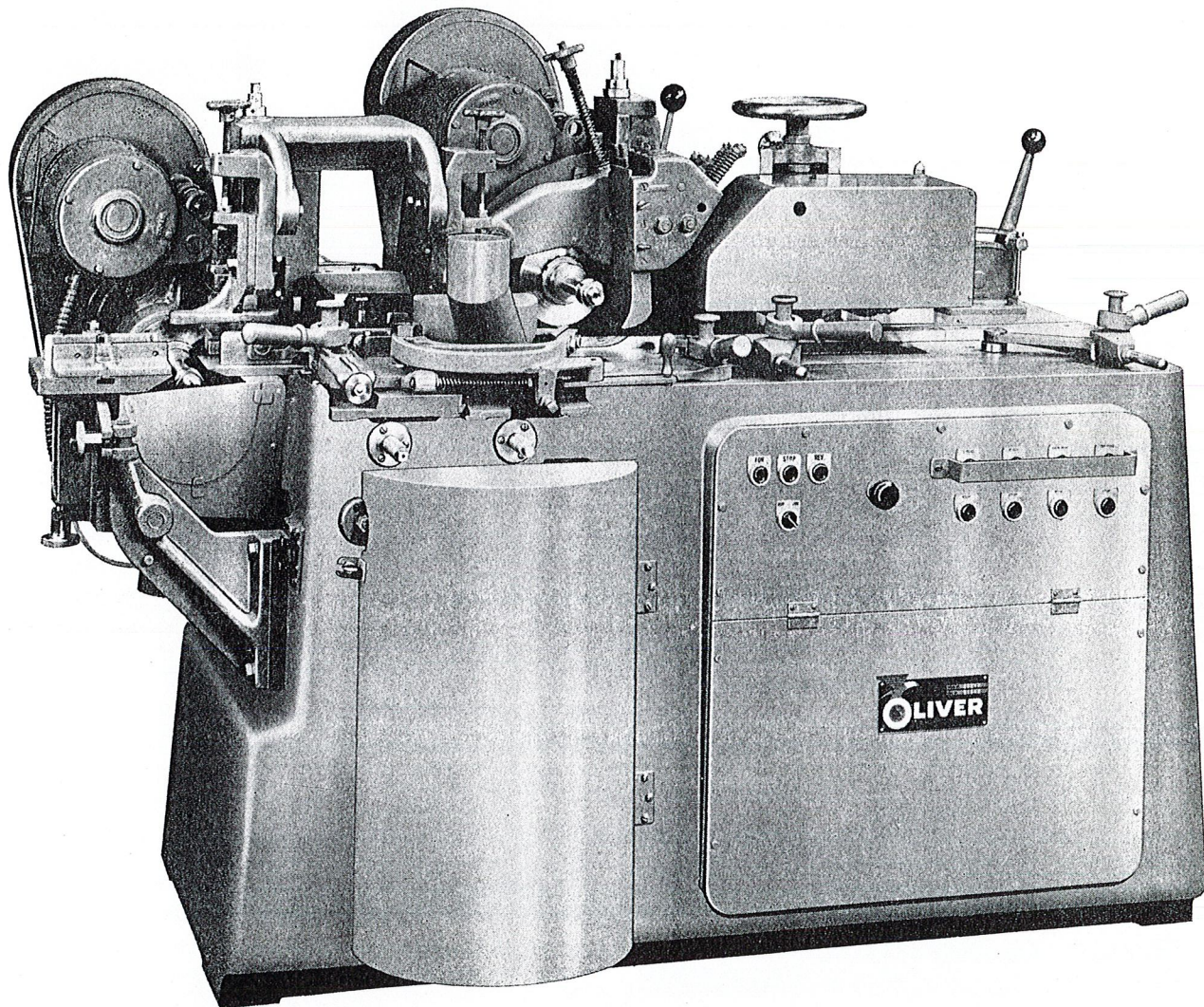


OLIVER

No. 202

ELECTRIC MOULDER



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

Introduction

"Oliver" Machinery Company now offers the new "Oliver" No. 202-V 2" x 4" Moulder as a specially designed, high grade, small size moulder, actually capable of substantially lowering costs of set-ups, operations, maintenance, power, and initial investment—a wonderful machine with amazing performance, simplicity of component parts, ease of operation and dependability. Comparison and study will reveal many hidden values in this new revolutionary 2-inch by 4-inch Electric Motor Driven Moulder.

Capacity

This moulder will take round or square $4\frac{1}{4}$ " top and bottom cutter-heads, and two $2\frac{1}{4}$ " matcher heads, giving surfacing capacity of 2"x4"; however, it is expressly designed and recommended for small mouldings of all shapes and sizes ranging from the smallest to approximately $1\frac{1}{2}$ " in thickness and up to 3" in width. The maximum projection of the bottom head knives is 1", the top head knives is $\frac{3}{8}$ ", and the side head knives is $\frac{3}{8}$ ". The normal yield of the top feed rolls is sufficient for stock variations of $\frac{3}{8}$ ". The standard rate of feed secured through the Reeves adjustable feed drive is any rate of feed desired between 20 and 80 feet per minute by merely adjusting the feed control lever. Other rates of feed can be arranged by special order. Ordinary moulder knives can be used on the square cutter-heads, or $\frac{1}{8}$ " thin knives used in round heads.

Base

Is a strong, rigid, box shaped,

semi-steel casting, machined to receive all other parts. The openings for the top and side heads are recessed with surfaces sloping outward so that dust or shavings cannot collect inside the base. Accurately machined pads support the various units which are very compact and accessible, occupying an unusually small space. The center to center distance from the top head to the bottom head is only 27". On the operating side there is a large opening to accommodate the switch panel. All control buttons and reset levers are grouped symmetrically on this panel, making the machine conveniently and externally operated. The lower portion of the control panel is hinged and can be raised. This contains all switches and controls for the machine. This compact method incorporated here protects controls as well as provides easy accessibility.

Feed Works Motor

This motor is ball bearing and is rated at $1\frac{1}{2}$ H.P., 1800 R.P.M., 2 or 3 phase, 60 cycle, 220 or 440 volt A.C. It is mounted in the base of the machine with a Reeves belt arrangement driving the feed chains. The lever on top of the in-feed table adjusts the belt in the sheaves mounted on the motor shaft, thus varying the rate of feed.

Motor Head Units

Each cutter head spindle is driven by V-belts with very small steel cables moulded in their centers. The standard spindle speed is 7200 R.P.M., but special pulleys can be

furnished to give 5400 or 3600 R.P.M., if desired. No frequency changer is required for this new V-belt drive design. Each spindle is $1\frac{1}{4}$ " diameter to take either straight bore heads or self-centering collets and self-centering heads.

Each of the four head spindles is driven by a separate motor. Side heads each have 3 H.P., and top and bottom have 5 H.P. Motors are totally enclosed fan cooled and have take-up adjustment for steel cabled V-belts. Each set of belts and pulleys is completely guarded. All cutter-head motors operate on either 220 or 440 volt power lines and leads are brought to control panel and from thence to opening in front of base to where they are connected to power line. These motors are ventilated or cooled by propeller type fans which force air between the outside of the enclosing steel jacket and the motor housing. Motor shafts or spindles are of special alloy high carbon steel, machined accurately and ground true.

Cutter-Heads

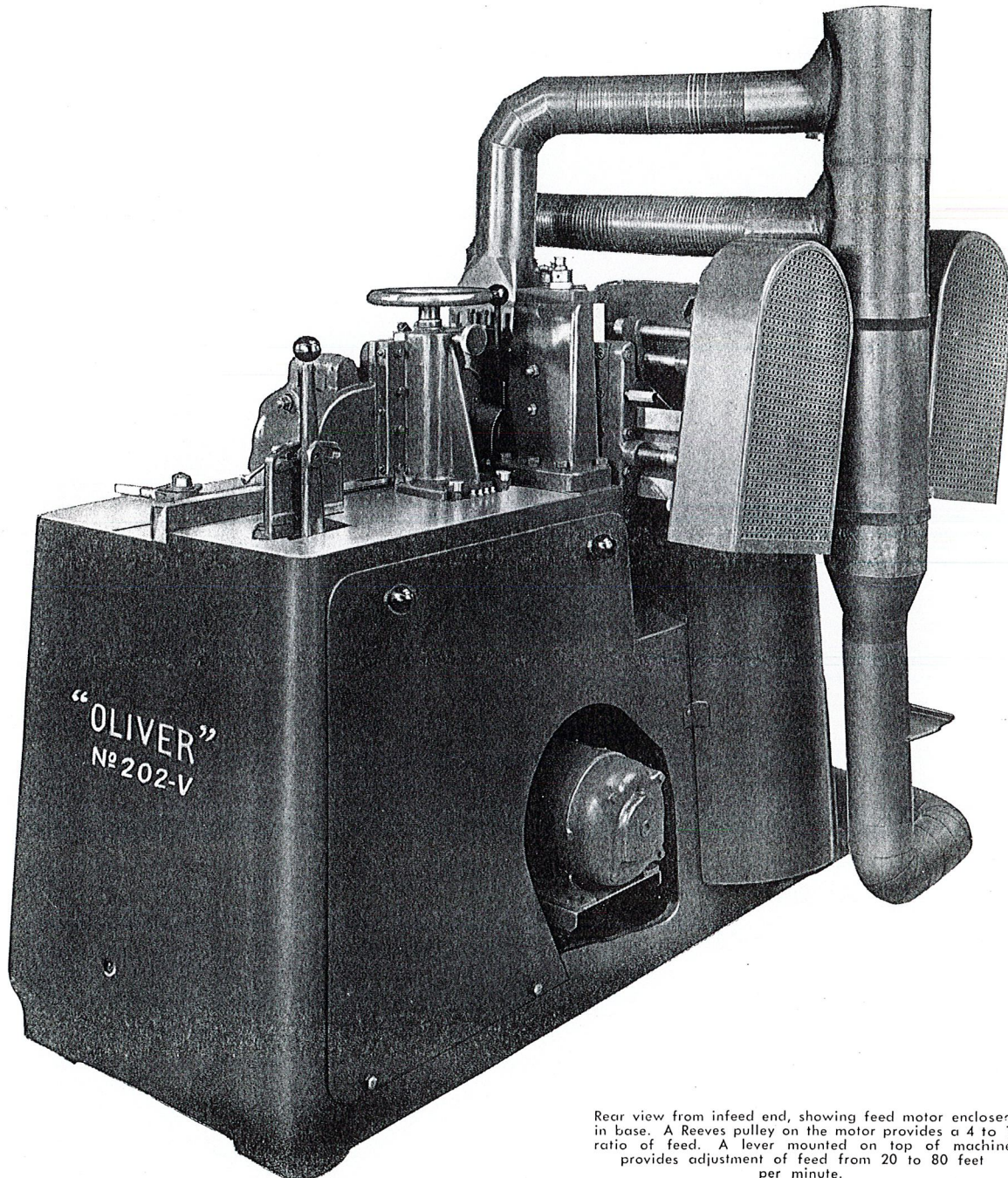
Cutter-heads are furnished as an extra to meet customer's requirements depending on type and variety of work. We offer square or round heads and each with or without self-centering collets. The standard bore is $1\frac{1}{4}$ ". The square heads have 4 T-Slots and come with 2 High Speed plain knives, T-Bolts, nuts and washers. The round heads have 4 thin straight knives for each head. Heads are $2\frac{1}{4}$ " and $4\frac{1}{4}$ " long. The cutting diameter of square heads is from $4\frac{3}{8}$ " to 6". The round heads have a cutting diameter of $4\frac{3}{8}$ ".

Electrical Control

The most modern type of full magnetic automatic Push Button control is totally enclosed in the base in a self-contained, yet easily accessible manner. Each cutter-head and feed works have individual push buttons; but a master button stops current to all heads and feed simultaneously. Magnetic cut-

outs and thermal relays give under-voltage and overload protection. The push buttons are mounted on the base of the machine. The lower half of this panel is hinged and when it swings up the controls are exposed. This arrangement simplifies hookup, wiring, and accessibility, also keeps the mechanism free from dust. All contactors are

reset with a single button located on the outside of the panel convenient to the operator. Flexible conduit totally encloses all wiring and brings all leads to an opening conveniently located on the front of the base providing easy connection to either 220 or 440 volt lines.



Rear view from infeed end, showing feed motor enclosed in base. A Reeves pulley on the motor provides a 4 to 1 ratio of feed. A lever mounted on top of machine provides adjustment of feed from 20 to 80 feet per minute.

Feed Works

The feed works consists of an upper and lower unit. The lower unit is a continuous chain type. This chain is made up of heavy duty links with hardened cross-flites to give a positive gripping action when feeding the stock. Four hardened tracks support and guide the feed chain.

The upper unit is of the roll type, having two 4½" diameter corrugated feed rolls which are chain driven. Roll pressure is adjusted by means of a hand-wheel on the upper feed housing. Entire upper feed works is adjustable vertically on dovetailed gibbed ways for stock thickness.

Feed speeds of 20 to 80 feet per minute are obtained from a variable speed drive arrangement controlled by a lever on top of the machine.

Lubrication

The cutter-heads have life lubricated ball bearings made in double width with single row of balls. This provides space for large amount of lubricant. The ball bearing feed works are lubricated by high pressure method of grease gun lubrication. Both top and bottom feed chain tracks are lubricated from large oil cups. This system insures ample lubrication for the entire machine and if properly taken care of will give complete satisfaction during the life of the machine.

Mechanical Brakes

The spindles are equipped with hand operated, mechanical brakes operating independently on each cutter-head unit. The contact parts of these brakes are good for an indefinite period of long, hard service, but are easily renewable. The brake levers are easily reached from the side of the machine.

Outfeed Table

Has both vertical and horizontal

adjustment. It has an independent adjustment with the line of cut. This table swings down entirely out of the way of the bottom cutter-head, which simplifies set up of lower head knives.

Bed

Consists of steel platens, precision ground top and bottom to a uniform thickness, with chrome finish on top surface of center ware plates. One of the bed plates is directly below the top head, one is attached to the back table, the other two are attached to and move with the matcher slides with independent adjustments.

Chipbreakers

The top head chipbreaker is of the sectional type, has three hard chromeplated steel sections rigidly supported in a boxed-in housing with independent yield of each section up to ¼"; the entire unit swings concentrically, is supported by the top head housing, and moves up and down with the top head, has easy release so as to swing out of the way entirely clear, allowing wide open access to the top head knives. The chipbreaker for the left matcher head is heavily plated with hard chrome on wear surfaces and is of the concentric swinging type, adjustable for different diameters of cut, and although it can be set very close to the knives, it is so arranged as to accommodate itself for variation of stock up to ⅜" without necessity of resetting. A quick release lever swings this chipbreaker in its outermost position for convenience in setting up knives and for releasing side pressure while stock is backed out to clear the machine.

Guides

The long guide is positively lo-

ated, bolted, and pinned in place square with the top and bottom heads, and is chrome finished on wearing surface. Matcher head guides are integral with the matcher plates, which are slotted to allow independent adjustment by means of a hand lever and bolt. The side head guides adjust with the cut, thereby eliminating making new adjustments at every set-up. Suitable independent adjustment is provided when the cutting radius of the heads is changed. A ball bearing roller infeed guide is used to hold the stock against the fence when entering the feed. After the stock leaves the top head there is an adjustable top pressure bar that holds the stock in contact with the table platens until it leaves the outfeed table.

Top and Bottom Cutting of

Bottom Head

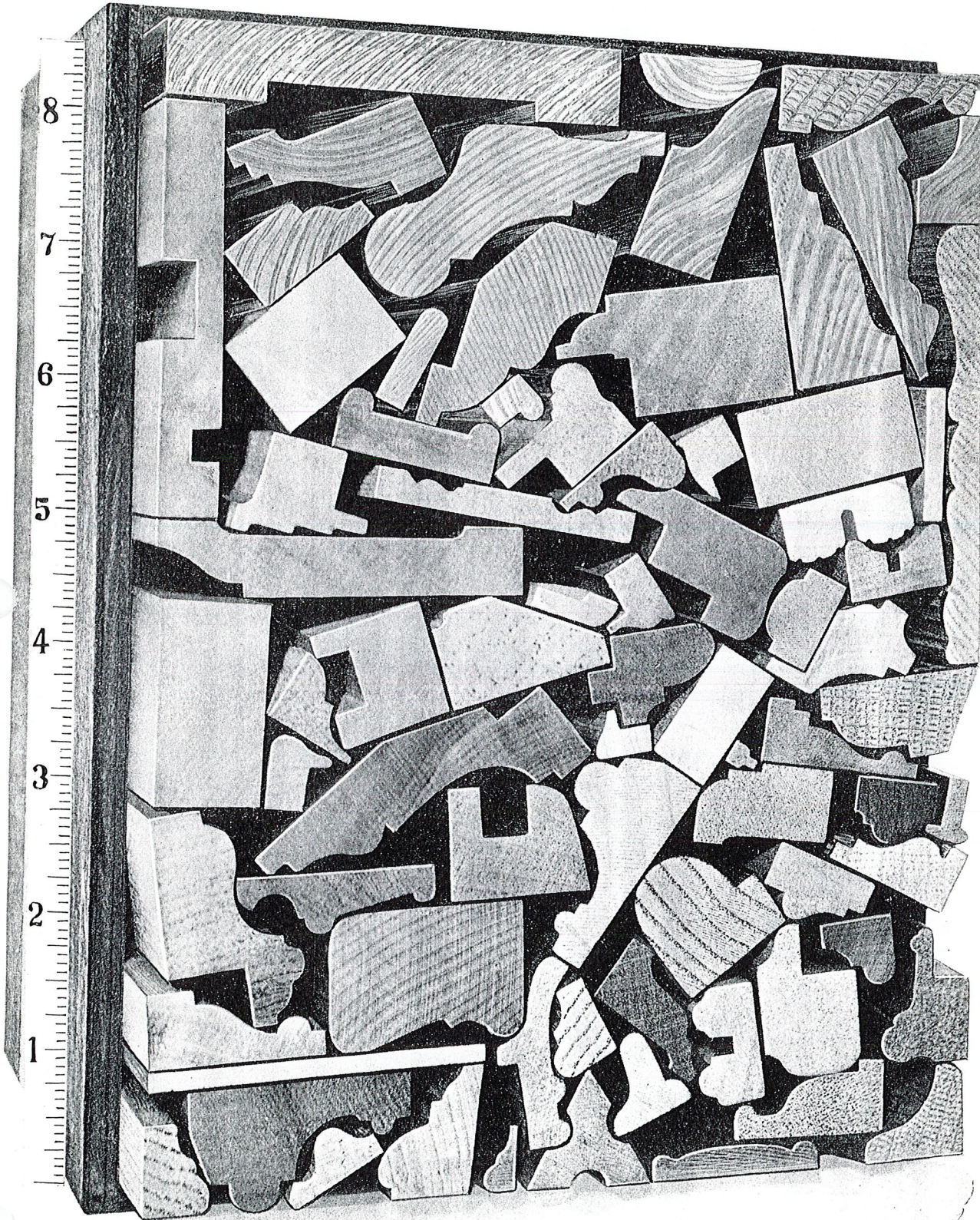
When so required, at a small additional price, we can arrange the bottom head to cut either the top or bottom of the stock.

The change from topside to bottomside cutting is very simple and quickly made. It is necessary only to drop the rear table to allow passage of the yoke and adjust the same by means of the screw with attached wrench. A double throw switch will reverse rotation of the spindle and special arrangement is made to prevent backing off of the arbor nut.

Dust Hoods

Furnished as regular equipment are four short dust hoods arranged to readily connect to the customers' exhaust system. A complete set of piping, terminating in a single outlet and having a floor intake for sweeping chips into the system is available at extra charge. Each connection has an independent shut-off. The intake connections are readily removable for setting knives and fit snugly in place for maximum chip removal.

A BOX FULL OF SAMPLES OF WOOD MOULDINGS ACTUALLY PRODUCED VERY EFFICIENTLY ON "OLIVER" 2" x 4" ELECTRIC MOULDER



OUTSTANDING FEATURES

- Lower operating expense — lower overhead.
- Considerable saving of stock.
- Very little floor space required.
- Full magnetic control.
- One hand lever and clamp controls variable speed of feed.
- Master Push Button stops all motors.
- Rapid set-up speeds production.
- Complete, easy adjustments.
- Adjustable gib mountings for head motors.
- Full automatic oiling for high speed motors.
- High pressure lubrication to rotating parts of feed.
- Feed mechanism 100 per cent ball bearing.
- All heads completely interchangeable.
- Less initial cost of machine and accessories.

SPECIFICATIONS

- Height, without dust hoods 54"
- Floor space, actual footing 28" x 65½"
- Floor space, total over all 46" x 77"
- Maximum width of stock 4"
- Maximum thickness of stock 2"
- Number of cutter-heads 4
- Cutting circle of square heads (round 4¾) 4½"
- Maximum cutting circle for top and bottom heads 6"
- Maximum cutting circle for matcher heads 6"
- Length of top and bottom heads 4¼"
- Length of matcher heads 2¼"
- Variation in size of stock being run ¾"
- Standard rate of feed 20 to 80 f.p.m.
- Rating of head motor:
 - T & B 5 H.P., 7200 R.P.M. at 60 cycle, 220 or 440 volts A.C.
 - Side 3 H.P., 7200 R.P.M. at 60 cycle, 220 or 440 volts A.C.
- Rating of feed motor:
 - 1½ H.P., 1800 R.P.M., 2 or 3 phase.

CODE, WEIGHT, ETC.

CODE	MACHINE DESCRIPTION	WEIGHT IN POUNDS CRATED	WEIGHT IN POUNDS BOXED	CUBIC FEET
Falub	No. 202 "Oliver" 2" x 4" Electric Moulder, 20 to 80 feet per minute, 4 cutter-head motors, one feed motor, exhaust hoods, wrenches, etc.....	5000	6000	—210

EXTRAS

Falub	Piping from Exhaust Hoods to Common Connector (8" dia.).....			
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EXTRAS

New Style No. 202-V Moulder Heads — Regular —
Straight Bore — with H. S. Knives

Size	Type	Bore	Self Centering Collets	Part No.
2¼"	Square 2 Knives	1¼"	with Collets	202-580
			without — Straight Bore	202-680
	Round 4 Knives	1¼"	with Collets	202-780
			without — Straight Bore	202-880
4¼"	Square 2 Knives	1¼"	with Collets	202-581
			without — Straight Bore	202-681
	Round 4 Knives	1¼"	with Collets	202-781
			without — Straight Bore	202-881



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

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