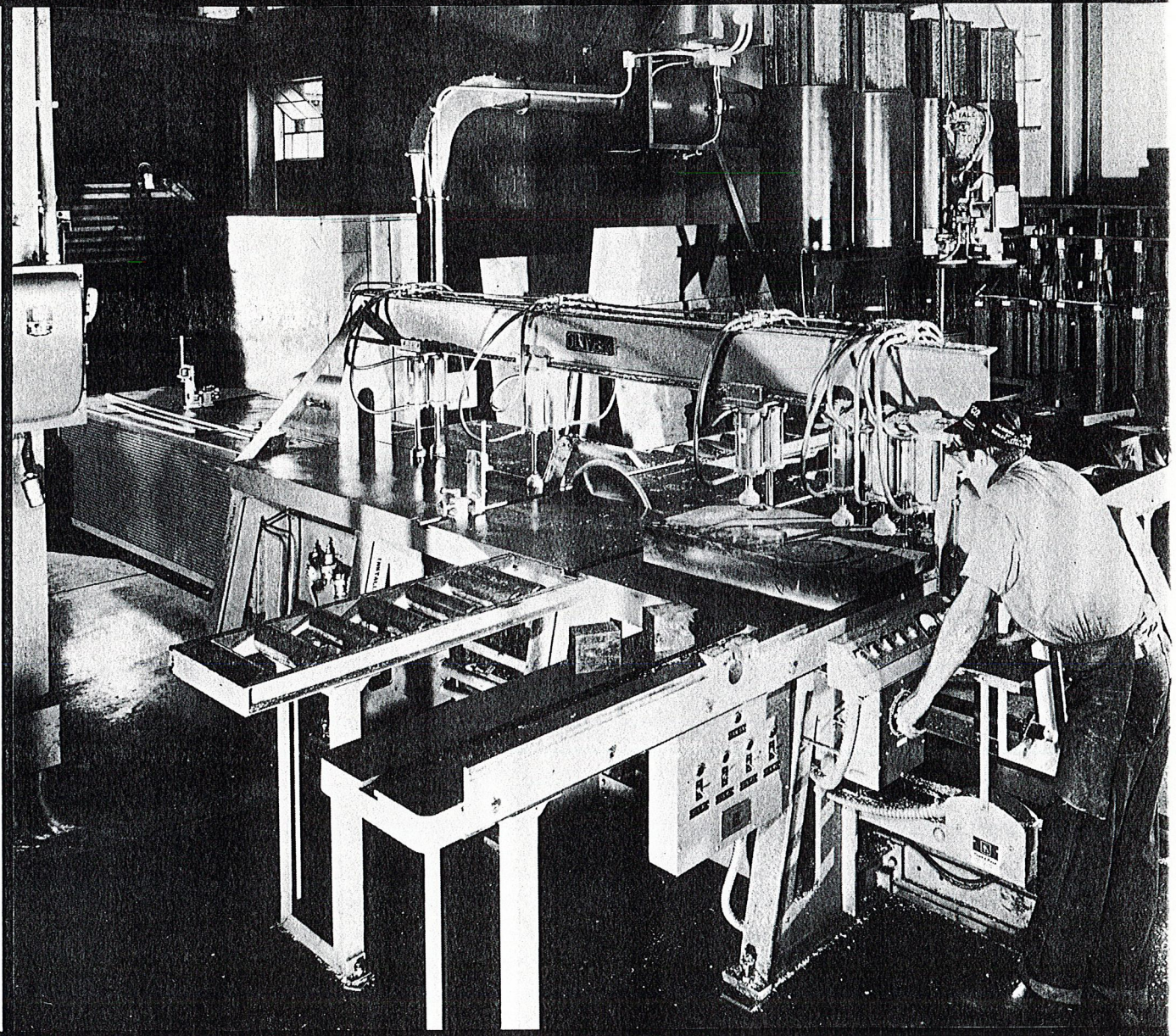


## No. 838 PLATE SAW



# OLIVER

OLIVER MACHINERY COMPANY, GRAND RAPIDS, MICHIGAN



# CUTS LARGE SHEETS AND PLATES OF ALU

## PURPOSE

This machine was designed to meet a demand for a heavy-duty saw for precision cutting of large plates and sheets, of aluminum, bronze, brass, micarta and other nonferrous metals.

The wide experience of our engineers in cutting nonferrous metals and materials can be of invaluable assistance to you. They are able to demonstrate to you how the Plate Saw can reduce your cutting costs and meet demands for accurate work.

## DESIGN

The Plate Saw has a heavy cast iron bed with machined and scraped ways. The entire feed motor and saw motor unit travel on the ways. The material to be cut is placed on the heavy cast iron tables with the saw carriage unit moving along the bed to cut through the material. The machine is built in any length from 4 to 40 feet capacity, or longer in 4-foot increments.

## SAW ARBOR

The saw arbor is ground perfectly true. It measures 1½ inches diameter where the saw is applied, and has collars 9 inches diameter to support the saw blade. The arbor runs in large ball bearings, and is driven by multiple V-belts at 2200 RPM.

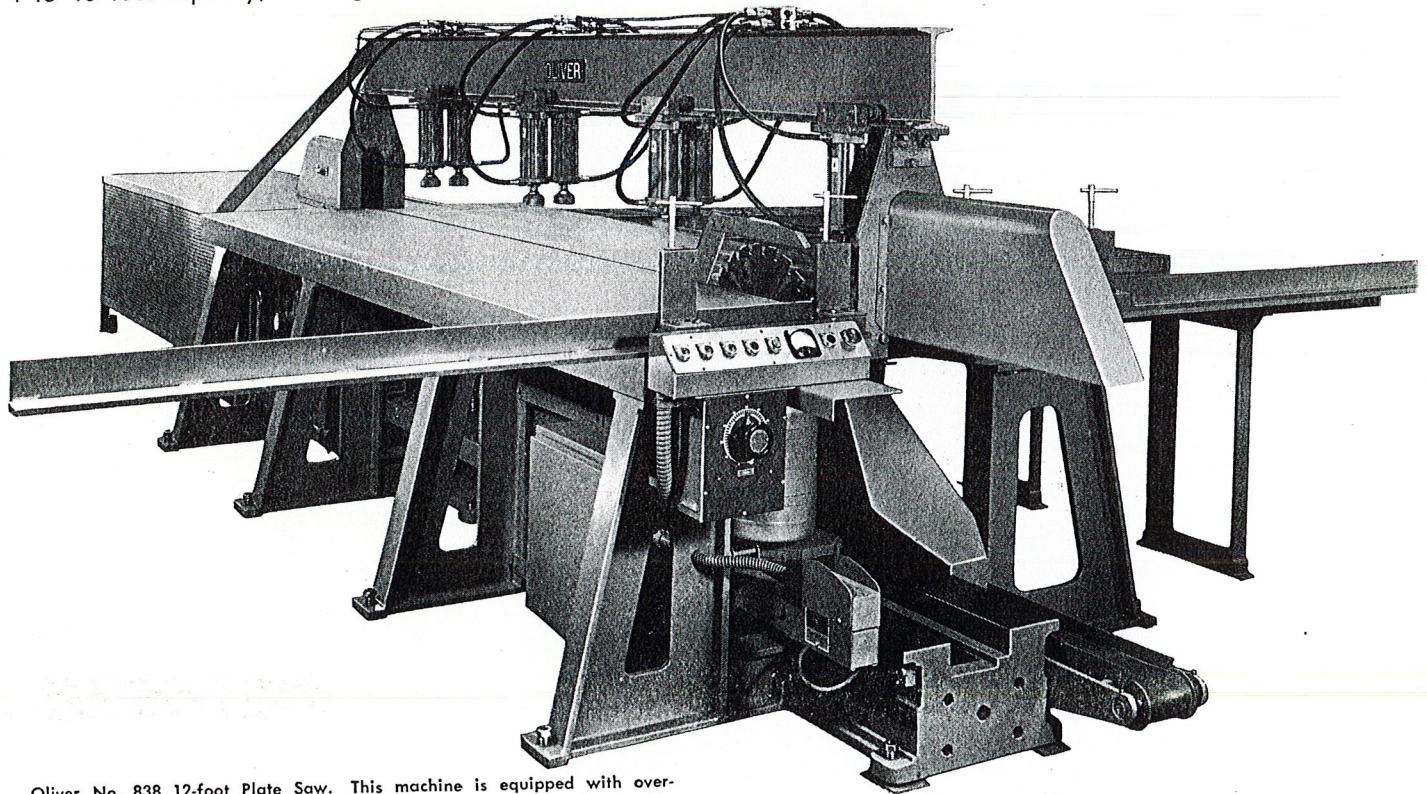
## MOTORS

The saw arbor is driven by 20, 30, or 40 HP, 1800 RPM totally enclosed, fan cooled motor.

The feed motor is a 3 HP DC unit with adjustable speed drive. It is totally enclosed and fan cooled.

## FEED METHOD

Machines larger than 4 feet have a rack and pinion drive with 3 HP variable speed motor unit giving speeds from 5 to 40 feet per minute. On these larger machines the carriage returns at 40 feet per minute.



Oliver No. 838 12-foot Plate Saw. This machine is equipped with overhead air clamps for holding material on each side of saw cut. Clamps ride on ball bearings for quick adjustment to any location. A 13-ft. fence and chip conveyor are extra features.



# INUM AND OTHER NONFERROUS METALS

On machines 4 feet long the saw carriage unit travels on bed by feed screw and nut. A 2 HP variable speed motor unit provides feed speeds of 3 to 18 feet per minute. The return speed of the saw carriage unit on the regular 4-foot machine is twice the feed speed. If desired, a rack and pinion drive with speeds from 1 to 40 feet per minute is available.

## TABLES

The tables are 30 inches wide, and are normally furnished in 4-foot and 12-foot lengths. They are of heavy cast iron construction, ground true, and mounted on cast iron legs on both sides of the saw line. The tables are plain, without T-slots or clamps.

The machine is regularly furnished with table extensions measuring 18 x 48 inches. Each table extension has seven large ball bearing rollers mounted on the right-hand side of the right-hand table for moving stock into position for cutting.

## CAPACITY

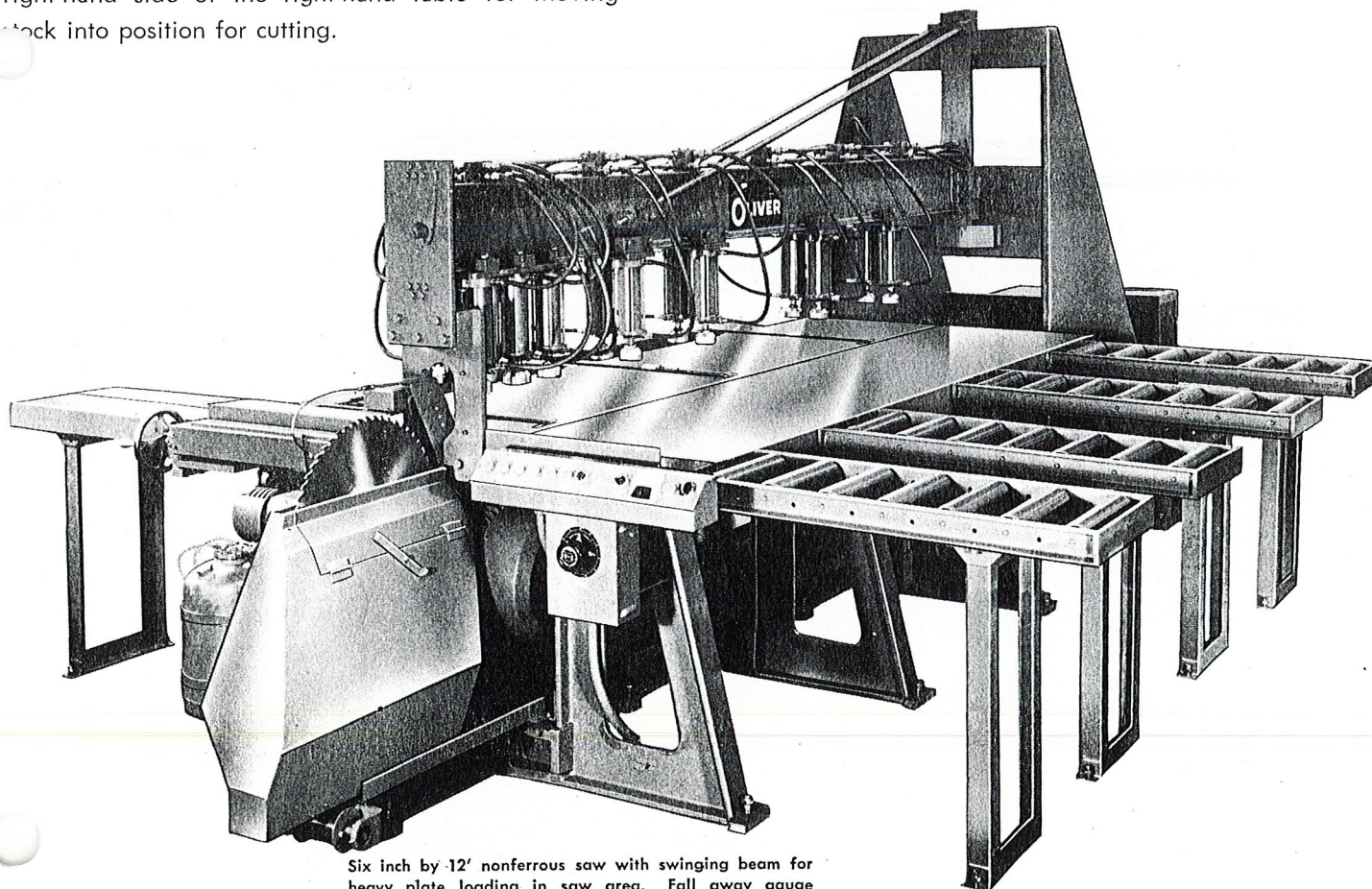
The maximum length of cut made by a 12-foot machine is 12 feet, 1½ inches. The maximum thickness of cut made with a 24-inch diameter saw blade is 6 inches.

## EQUIPMENT

The machine is regularly furnished with a 5-foot fence at front of machine and has a saw guard and a splitter. A Norgen 5-gallon spray lube system directs the spray to the top of the saw blade. All motors have magnetic electrical controls. A full set of wrenches is also furnished.

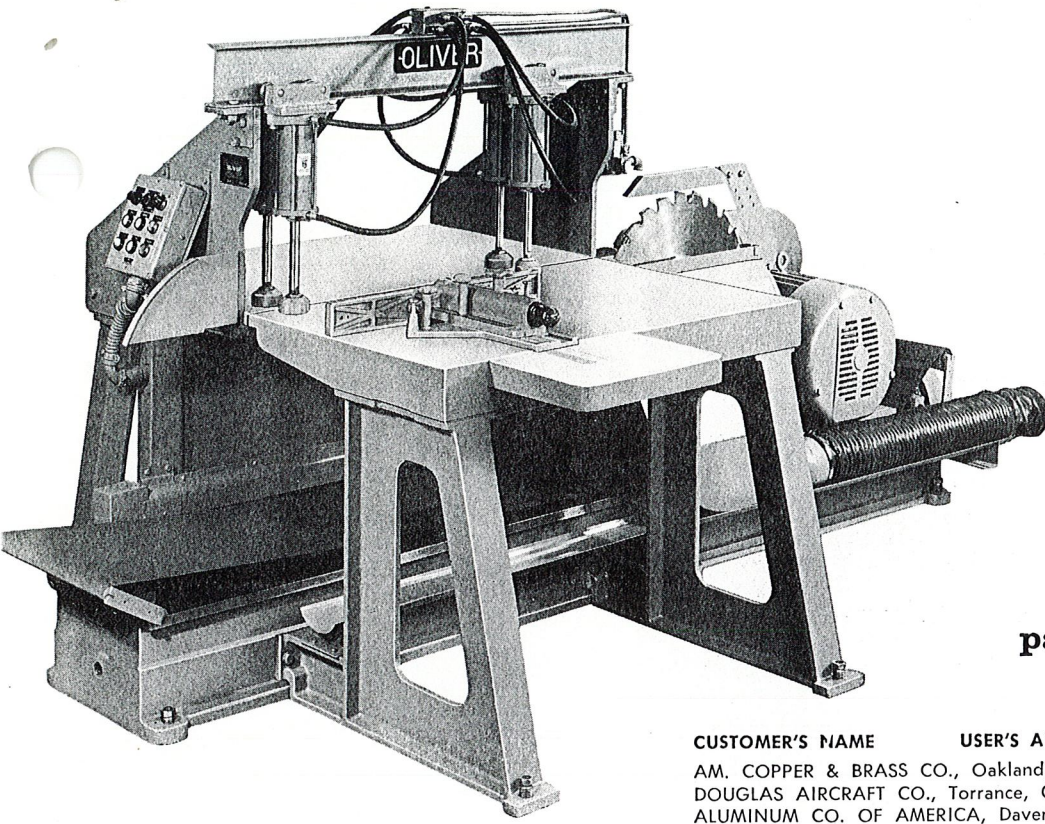
## CLAMPING MECHANISM

All Oliver Plate Saws can be equipped with various types of clamps best suited to individual requirements. Adjustable mechanical clamps can be furnished with T-slots in table. The machines illustrated in this circular show various methods of using air clamps.



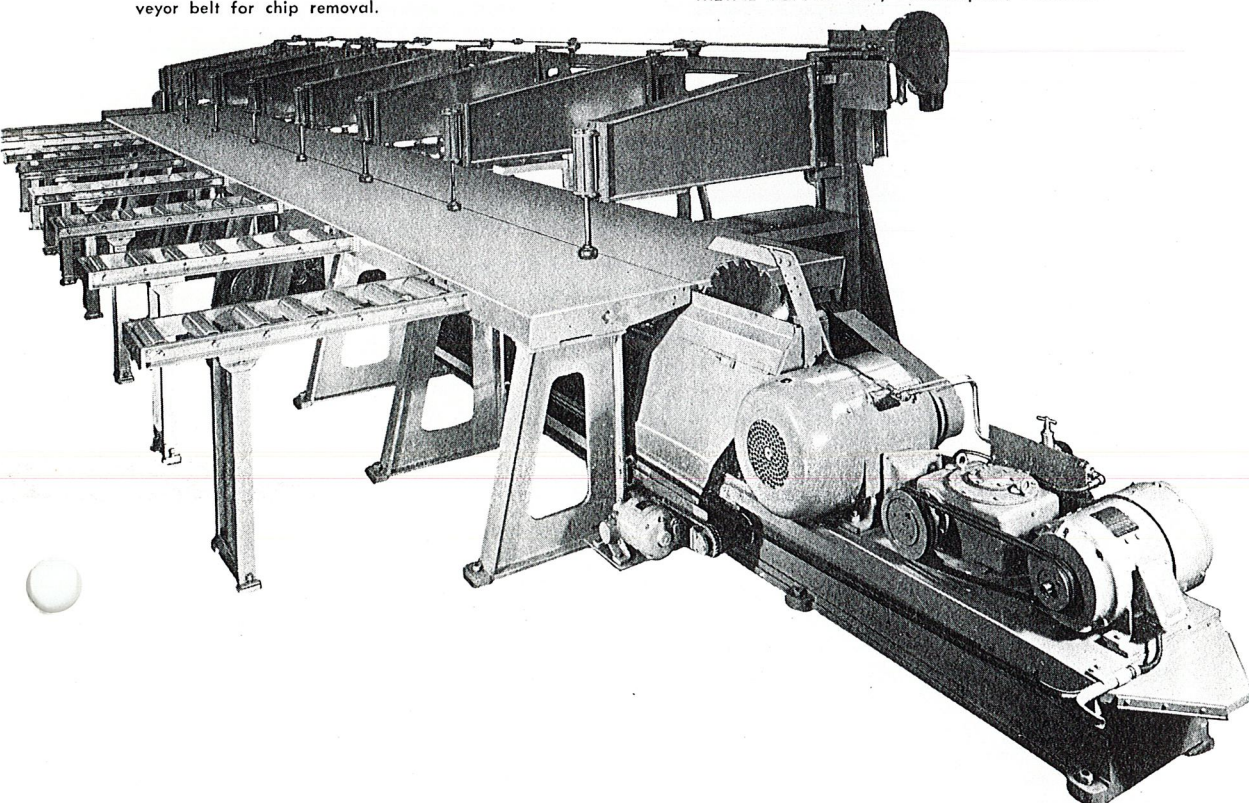
Six inch by 12' nonferrous saw with swinging beam for heavy plate loading in saw area. Fall away gauge stops with direct reading dial on exit side. Gauge stops can be positioned accurately to repeat settings.





Oliver No. 838 4-foot Plate Saw. Two pairs of automatic air clamps are adjustable along the top rail for clamping stock on both sides. The saw blade. Special automatic cycling and type E fence extension plate are furnished as an extra.

Oliver No. 838 40-foot Plate Saw. Eight air clamps will hold any thickness up to 6 inches and automatically pivot 90 degrees for loading and unloading. Machine has power feed conveyor belt for chip removal.



## partial list of users

CUSTOMER'S NAME	USER'S ADDRESS	SIZE MACHINE
AM. COPPER & BRASS CO.,	Oakland, Calif.....	12'
DOUGLAS AIRCRAFT CO.,	Torrance, Calif.....	12'
ALUMINUM CO. OF AMERICA,	Davenport, Iowa.....	12'
ALUMINUM CO. OF AMERICA,	Davenport, Iowa.....	4'
COPPER & BRASS SALES,	Detroit, Michigan.....	12'
MEIER BRASS & ALUM. CO.,	Detroit, Michigan.....	12'
MC DONNELL AIRCRAFT CORP.,	St. Louis, Missouri.....	12'
COPPER & BRASS SALES,	Cleveland, Ohio.....	12'
WILLIAM ORR CO.,	Akron, Ohio.....	12'
WILLIAMS & CO.,	Cleveland, Ohio.....	12'
CLEVELAND ORDNANCE,	Cleveland, Ohio.....	20'
ALUMINUM CO. OF AMERICA,	Cleveland, Ohio.....	12'
BRUSH BERYLLIUM CO.,	Elmore, Ohio.....	12'
DOUGLAS AIRCRAFT CO.,	Tulsa, Oklahoma.....	40'
GENERAL ELECTRIC CO.,	Erie, Pennsylvania.....	4'
WILLIAMS AND CO.,	Pittsburgh, Penn.....	12'
KAISER ALUM. & CHEM. CORP.,	Spokane, Washington.....	40'
BENJAMIN METALS,	Compton, Calif.....	12'
GENERAL DYNAMICS,	San Diego, Calif.....	4'
GRUMMAN AIRCRAFT,	Beth Page, L.I., New York.....	12'
METAL SUPPLY CO.,	Philadelphia, Pa.....	12'