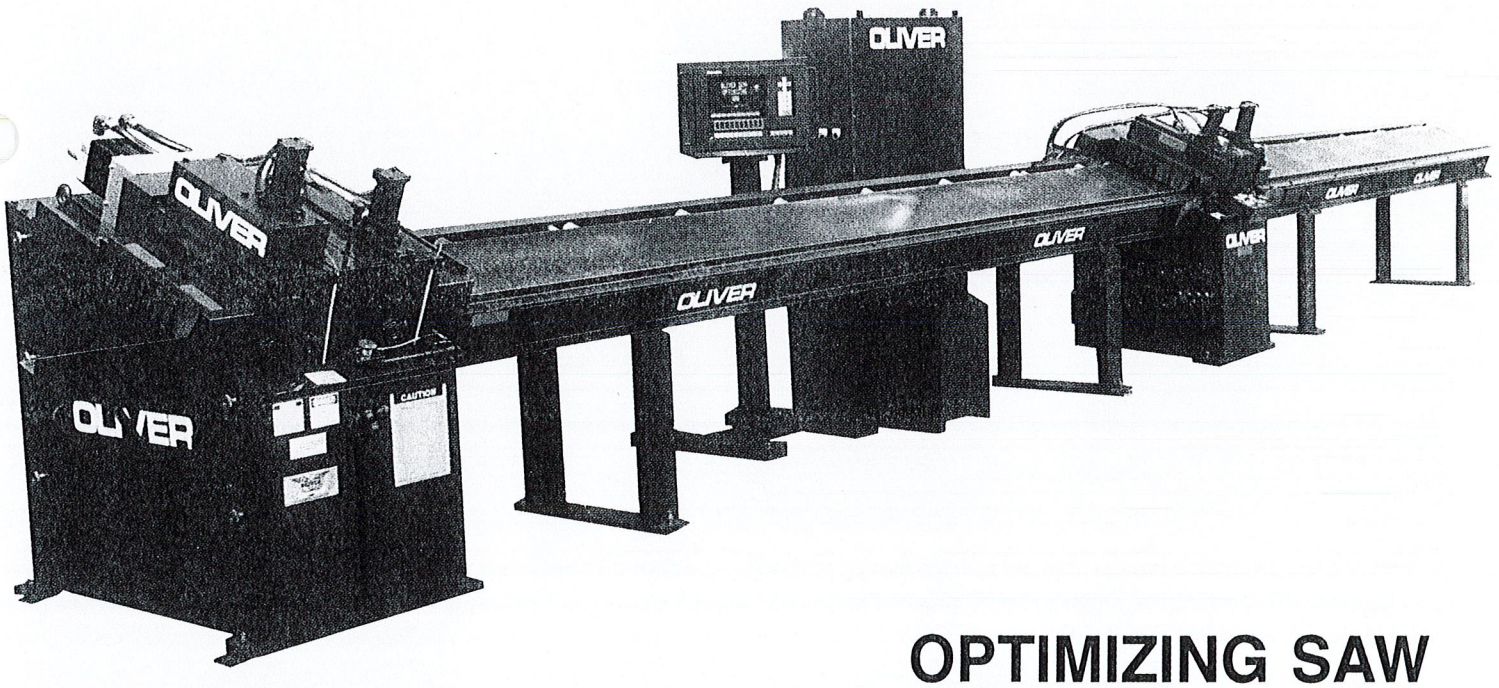
OLIVER



OPTIMIZING SAW
NO. 2694

OLIVER MACHINERY COMPANY 1025 CLANCY AVE. N.E. GRAND RAPIDS, MICHIGAN 49503 U.S.A.

OPTIMIZING SAW NO. 2694

OBJECT: To optimize yield from lumber while cutting to length and removing defects as defined by the operator.

DESCRIPTION: A bill of material is entered into the processor giving lengths and quantities. Up to 20 bills of material may be entered, each with 20 priority positions available. Individual bills of material may be called up at any time for processing, the microprocessor will automatically switch to different bills of material according to widths indicated.

When entering thickness and a constant width, or when using board width reader, printout and display on CRT indicates total board feet processed into machine, total board feet out, and percentage of yield. Lineal, square footage or piece count may be accumulated to control your cuttings. The optimizing can be controlled to select high priority or high quantity entries by assigning priority values to each length requirement.

The operator places marks on the board with a fluorescent crayon marking the beginning and end of each good section on a board.

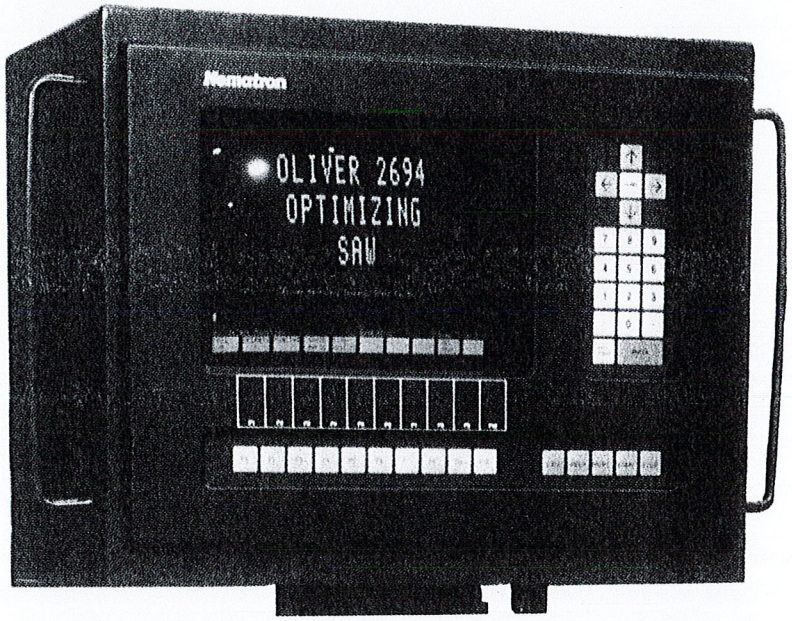
The board is then scanned for mark locations and the best cutting order for optimum yield is calculated.

The board then proceeds through the saw unit and is cut to lengths as required.

The bill of material is continuously updated after each board is scanned.

CRT displays all priorities, lengths to be processed, quantities required, quantities remaining, board or lineal footage processed, percent yield, thickness, board width range for B.O.M. selection, scrap length and sorter table exit location. All display information available as a printout when required.

The bill of material can be entered either in inches or metric.



OLIVER 2694 OPTIMIZER
FEATURES

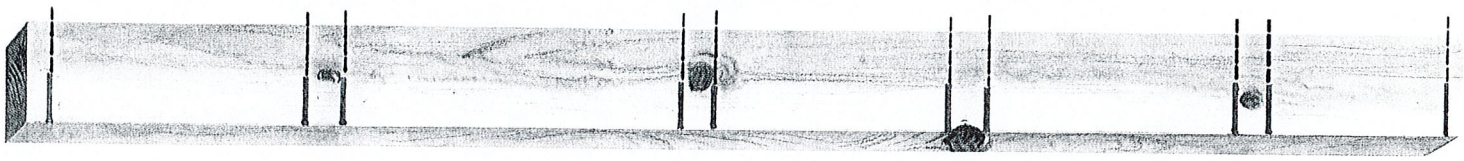
A) CUTTING CAPACITY UP TO 3" x 18".
B) 10 AND 20 H.P. MODELS.
C) UP TO 20 ACTIVE CUTTING LISTS
D) UP TO 20 CUT LENGTHS PER CUTTING LIST
E) EACH CUTTING LIST MAY BE PRIMARY OR SECONDARY GRADE
F) CUTTING LIST SELECTED BY WIDTH.
G) PROGRAMMABLE FINGER JOINT MINIMUM AND MAXIMUM.
H) CUTS SELECTED BY ASSIGNED VALUES.
I) CUT QUANTITIES CONTROLLED.
J) WIDTH READER TO ACCUMULATE BOARD FOOTAGE.
K) PRINTER FOR HARD COPY OF PRODUCTION DATA.
L) INCH/METRIC CONVERSION CAPABILITIES.
M) PRECISION SERVO DRIVE.
N) CONVEYOR FEED SPEED - 300 F.P.M.
O) SAW SPEED - 0 TO 420 F.P.M., DEPENDING ON DISTANCE BETWEEN CUTS.
P) PROGRAMMABLE FEED SPEEDS.
Q) OMIT TRIM OPTION FOR SQUARE STOCK.
R) BUILT IN DIAGNOSTICS FOR TROUBLE SHOOTING.
S) HEAVY DUTY CONSTRUCTION.
T) OPERATOR SAFETY (NO OPERATOR AT SAW LINE).
U) 22 DEGREE CONVEYORS FOR EASE OF MARKING AND MATERIAL HANDLING.
V) OPERATOR FRIENDLY (OPERATOR EASILY TRAINED).
W) INFORMATION SCREEN FOR MATERIAL PROCESSING.
X) MOVEABLE PEDESTAL MOUNTED CONTROL PANEL.
Y) U.S. ELECTRONICS WITH ON CALL TECHNICIANS.
Z) U.S. BUILT AND SERVICED.

METHOD OF OPTIMIZING

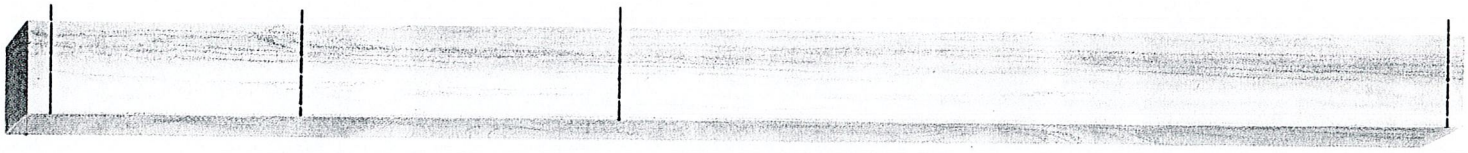
The optimizing saw looks at all variables before proceeding to process scanned material. When scanning material, the overall wood length and width are measured and marked defects and type of marking are identified.

First, the processor will try to satisfy any SGT (save greater than) lengths, then will attempt to satisfy the high priority or hard to get lengths. The processor will then look at remaining good wood and optimize to the priority assigned to each cut length requirement. All variables are continually checked to assure maximum utilization of good wood. Finger joint material is a considered variable according to assigned priority value. The processor will automatically switch to required cut list after reading material width and will optimize primary or secondary grades according to types of marks placed on the material.

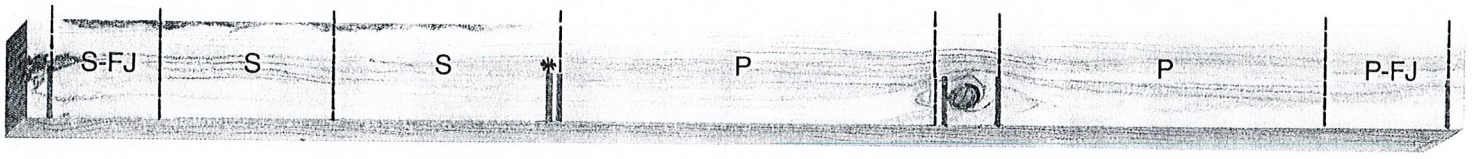
EXAMPLE



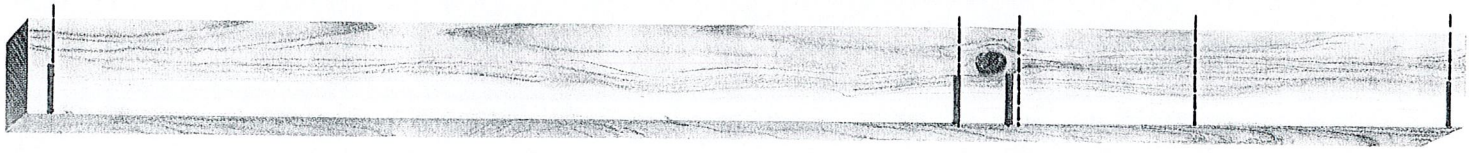
AUTOMATIC DEFECT FOR FINGER JOINT OR S.G.T. (SAVE GREATER THAN)



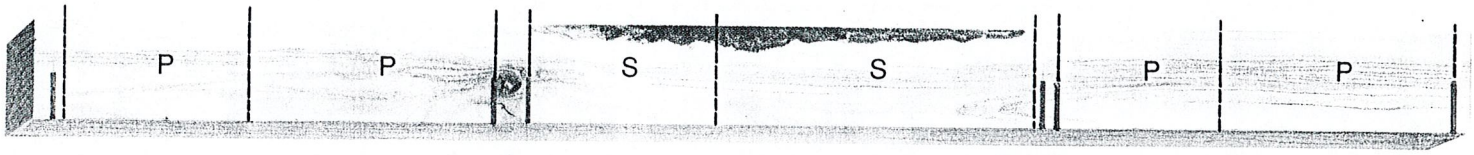
CLEAR WOOD - NO MARKS - OPTIMIZE TO GREATEST PRIORITY VALUE
(TRIM OR NO-TRIM OPTION)



P = SINGLE MARK FOR PRIMARY GRADE W/AUTO FINGER JOINT
S = *DOUBLE MARK FOR SECONDARY GRADE W/AUTO FINGER JOINT



S.G.T. = OPTIMIZE TO GREATEST PRIORITY VALUE - NO F.J.



MIXED PRIMARY AND SECONDARY MARKING

OLIVER MACHINERY COMPANY
1025 Clancy, Grand Rapids, Michigan 49503 U.S.A.
Phone (616) 451-8333 / Telex: 234121
Telefax (616) 451-3085

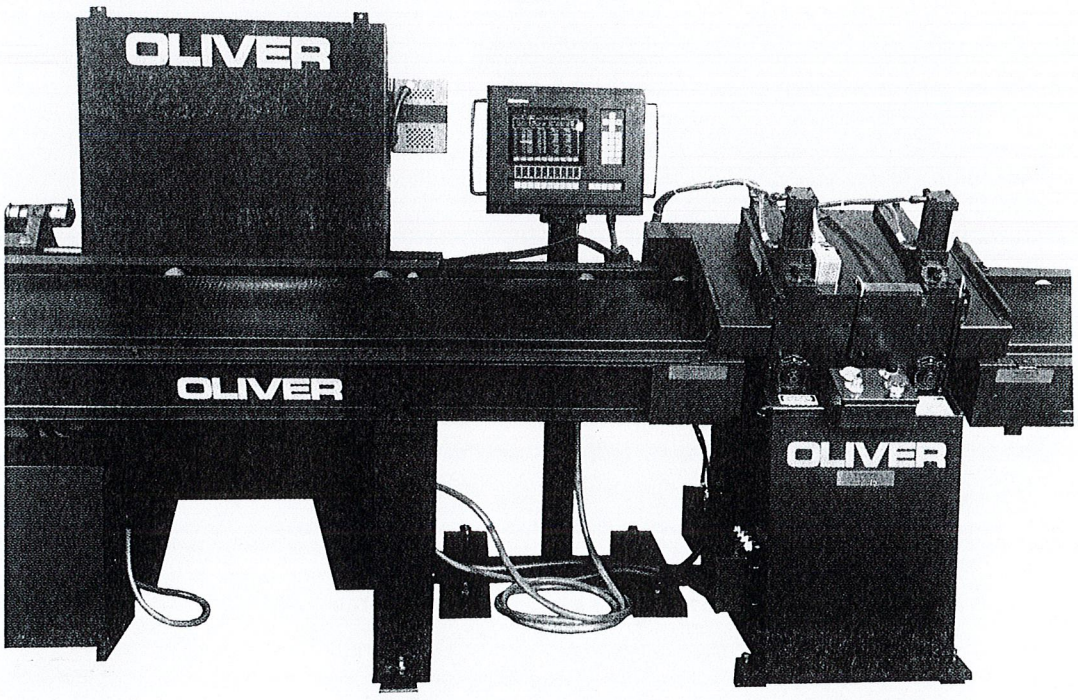
OPTIMIZING SAW
NO. 2694

SPECIFICATIONS:

		2694-8	2694-18
CAPACITY:	MAX.:	*2¼" x 8" (57 x 203 mm)	*3" x 18" (76 x 457 mm)
	MIN.:	½" x 1¾" (13 x 44 mm)	½" x 3" (13 x 76 mm)
SAW BLADE:	DIAMETER:	18" (457 mm)	26" (660 mm)
	R.P.M.:	2800	2100
SAW MOTOR:		10 H.P.—3600 R.P.M.	20 H.P.—1800 R.P.M.
HYDRAULIC MOTOR:		5 H.P.—1800 R.P.M.	5 H.P.—1800 R.P.M.
CONVEYOR MOTOR:		2 H.P.—120 R.P.M.	3 H.P.—1200 R.P.M.
FEED SPEED:		275 FT/MIN (83 M/MIN)	
POWER SUPPLY:		3 PH/60 CY—230, 460, 550 V	
		3 PH/50 CY/380 V	
AIR REQUIREMENTS:		50 P.S.I.	

*Maximum opening, warped boards must not exceed width or thickness

PRODUCTION:	4800 Lin. Ft. (1463 M) per hour	2" x 12" (50 x 305 mm)—
	Based on 12 ft. (3.7 M) boards	3800 Lin. Ft. (1158 M) per hour
	6 cuts per board average	2½" x 14" (64 x 356 mm)—
		3000 Lin. Ft. (914 M) per hour
		3" x 16" (76 x 406 mm)—
		2500 Lin. Ft. (762 M) per hour



OLIVER

OLIVER MACHINERY COMPANY 1025 CLANCY AVE., N.E. GRAND RAPIDS, MICHIGAN 49503 U.S.A.
TELEPHONE NO. 616-451-8333 (MICHIGAN) 1-800-253-8108 TELEX NO. 23-4121 FAX 616-451-3085