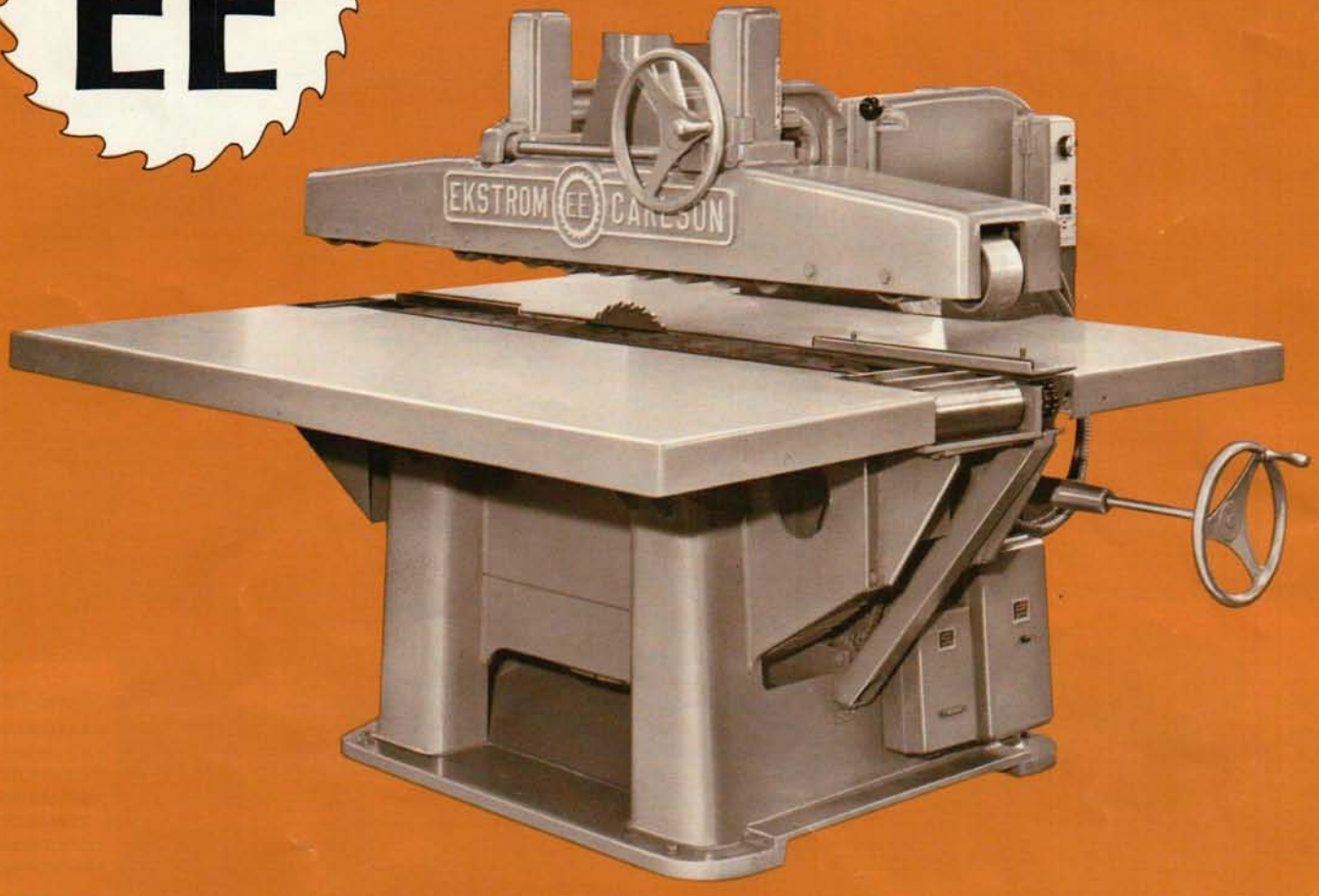
Kathy's
Ref File

STRAIGHT LINE CHAIN FEED GLUE JOINT EDGING SAW

MODEL **EE**

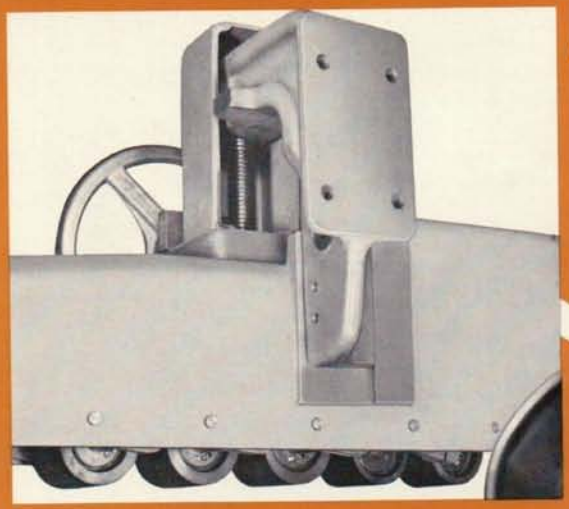
THE SAW THAT SOLVES YOUR EDGING PROBLEMS

RANDOM LENGTH AND WIDTH OF LUMBER
EASY ALIGNMENT FOR USE WITH CONVEYORS
HIGHER PRODUCTION RATES
SYSTEM EDGES BOTH EDGES OF BOARD
CONTROLLED EDGE CUTS – MINIMUM STOCK WASTE
BETTER MATCHED GLUE JOINTS
FEED RATES INFINITELY VARIABLE TO 280 FPM



Ekstrom, Carlson & Co.
1400 Railroad Ave. Rockford, Ill. 61110 Phone 815-968-0961

MODEL EE

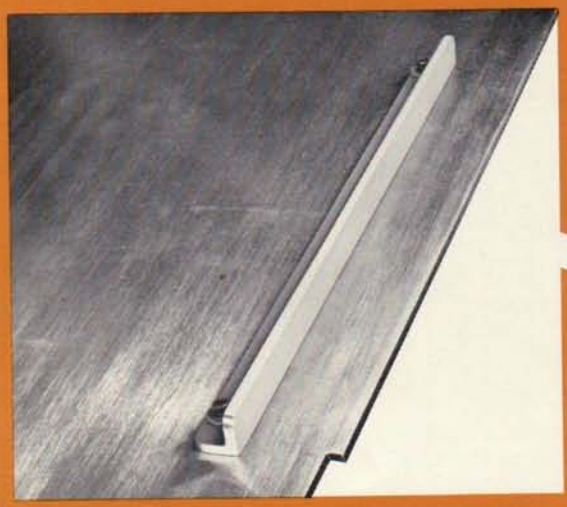


V-TYPE VERTICAL WAYS

As in the Model "E" Rip Saw the pressure bar housing vertical movement is guided through the use of V-type ways. Lift screws are used to provide the vertical movement either up or down. The V-ways are then clamped together assuring a positive locked position not dependent on the screws for maintenance of position.

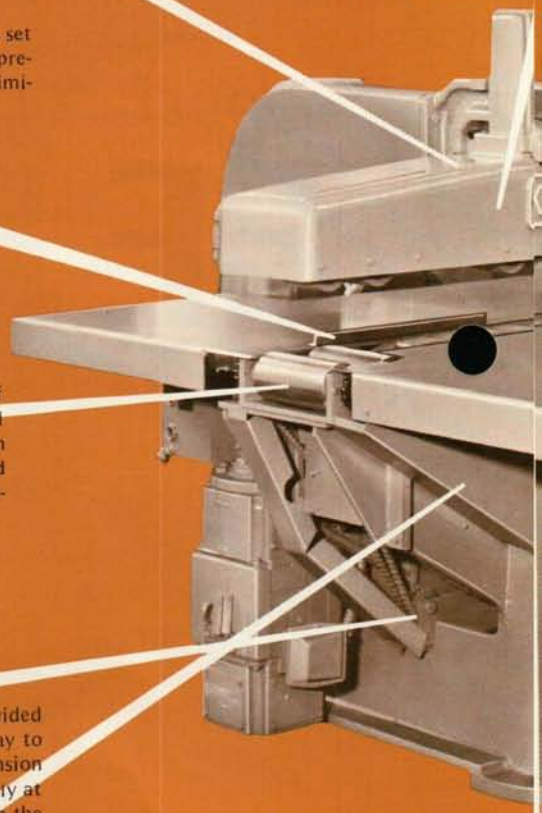
ELONGATED PRESSURE BAR HOUSIN

The enlongated pressure b
guidance of the stock acr
All rollers are spring loade
Incorporated into this hous
in their unique bracket.



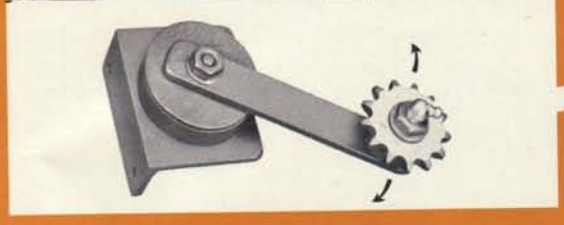
OUTFEED FENCE

This out-feed fence is not a guiding fence and is set slightly behind the in-feed fence guide line. It prevents short stock lengths from skewing and eliminates any tendency to jam up.



OUTFEED ROLLERS

The outfeed rollers provide a continuance of feed from the end of the feed chain to and clearing the saw table and preventing any jam up on the outfeed end. The rollers are powered by the same single loop chain to assure syncronized feed rate.



COIL SPRING TENSIONED SPROCKET ARM

A coil spring tensioned sprocket arm is provided for maintaining the proper amount of free play to guarantee long life of the chain. Proper tension also assures that all rollers rotate simultaneously at the same rate of speed in synchronization with the feed chain speed.

ADJUSTABLE PRE-SET TORQUE CLUTCH

The chain driving sprocket is equipped with an adjustable pre-set torque clutch. This is not a slip clutch under normal conditions but is a safety device to allow slippage of the feed rollers in the event of an obstructed conveyor on the out-feed side.

Note that all five feed rollers are driven by a common chain from the chain sprocket which is in turn driven by the same shaft that drives the feed chain. This assures that all feed rollers are synchronized with the feed speed.

The two smaller sprockets shown at the bottom of the picture rotate in opposite directions guiding the chain through the rectangular tube for return to the other end. All the in-feed and outfeed rollers are driven by the single loop chain.

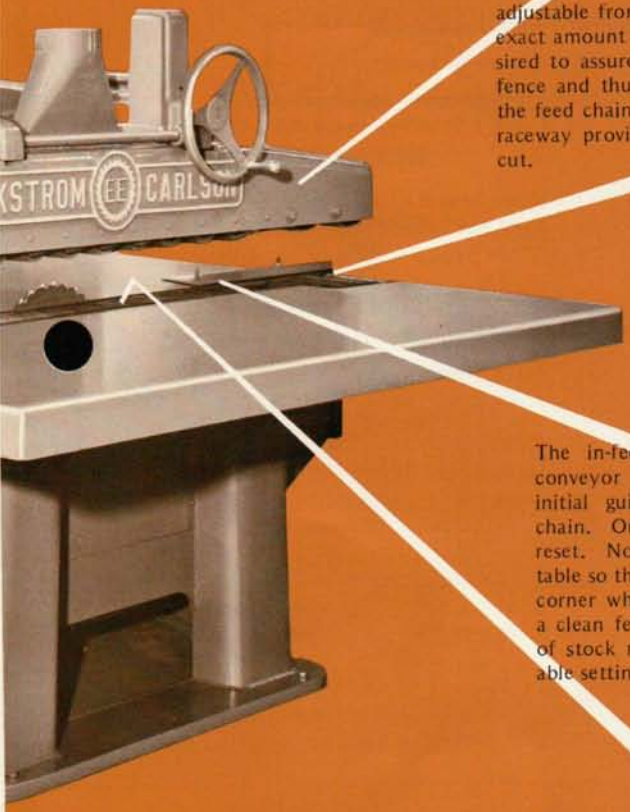
DUAL POSITIVE LUBI

An automatic metered
is provided to chains an
fed to a thick felt pad an
the chain passes, wiping
V-grooves at the same
lubricator is driven by th
in relation to the chain

more at higher feed ra
oil feed to saw spindle
running. An opening i
to pad and brush for
Sight gauge registers the

EDGING SAW

housing assures the proper
the entire saw table length.
nd have a full inch of yield.
are the lead rollers mounted



CATION SYSTEM

ced feed lubrication system raceways. In addition, oil is brush in the base over which n oil and cleaning the chain me. Since the forced feed procket shaft, oil is rationed peed, less at low feed rates,

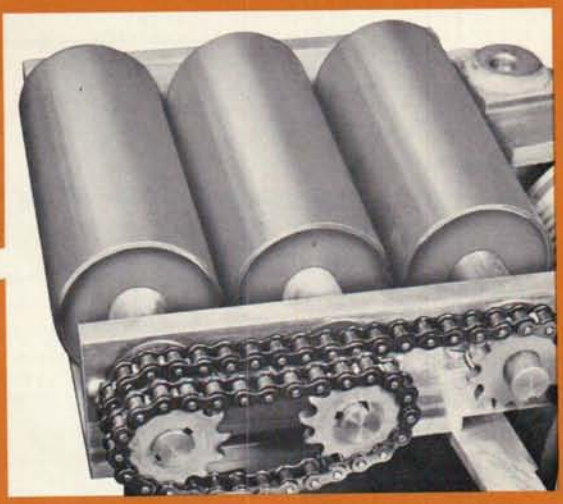
. A solenoid valve controls eeding only when spindle is he saw base provides access spection and maintenance. mount of oil in the reservoir.

FLOATING ROLLERS

This unique bracket allows the rollers to "float" vertically upon entrance of the stock thus assuring the proper light pressure required in conjunction with the lower canted feed rollers to "lead" the stock against the fence. Hold-down spring tension can be adjusted, as can the angle of these rollers, to match the lower feed rollers. Swivel bearings allow the adjustment to any angle by simply loosening two bolts, adjusting, and re-tightening. These simple adjustments permit the lead rollers to be set at the optimum position for the smoothest of operation.

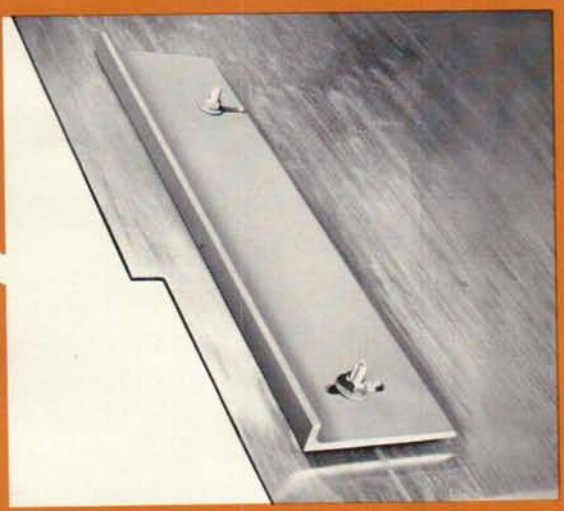
TRIPLE LOWER INFEED ROLLERS

Triple lower infeed rollers are chain driven and are adjustable from zero to five degrees to provide the exact amount of side inclination necessary and desired to assure that stock will be snug against the fence and thus properly aligned for insertion into the feed chain. After insertion, the feed chain and raceway provide the guidance for the straight line cut.



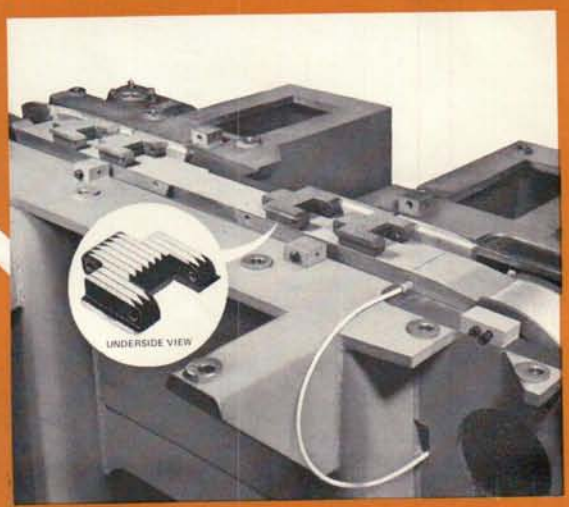
ADJUSTABLE IN-FEED FENCE

The in-feed fence is adjustable for ease of conveyor alignment. It also provides the initial guidance of the stock into the feed chain. Once positioned it is not necessary to reset. Note that the fence is open above the table so that saw dust cannot accumulate in the corner where fence meets table. This assures a clean fence at all times. The actual amount of stock removal is determined by the adjustable setting of the saw arbor.



GUIDING V-GROOVES

Links are pictured here un-assembled to show the guiding V-grooves on the raceway. Mating V-grooves on the underside of the chain links assure that all links must travel in the straight line of the raceway. Some clearance is designed into the links so that when pinned together each link can follow the V-grooves without interference from each other. Note that pressure fed metered oil line enters at the beginning of the raceway and thus provides adequate lubrication for the entire length as it does also on the Model "E" Rip Saw.

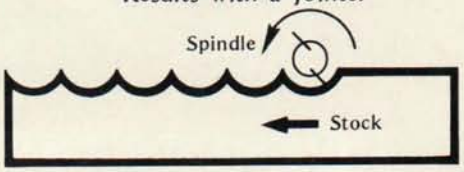


The Ekstrom Carlson Model "EE" Edging Saw Produces Better Glue Joint Edges.

Whenever you observe a successful high production automated machine line you will find that the Ekstrom Carlson Model "EE" Edging Saws have replaced the jointers that were previously used for the finishing of edges of hard and soft wood boards for glued up panels.

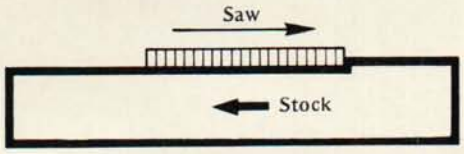
Since rotating knives on a jointer spindle make only intermittent contact with the stock, they produce a scalloped finish. Undesirable slower feed rates and higher RPMs of the spindle can reduce the amount of scallop to a degree, but because of the mechanics involved, cannot eliminate it entirely. The "beating" of the knives against the edge of the stock forces the grain inward, especially when the knives become dull. The "beating" of the knives also makes it difficult to guide the stock through a straight line cut. The Model "EE" Edging Saw does not produce "chip out" or "splintering" when the grain angles into the blade as a jointer does.

Results with a Jointer

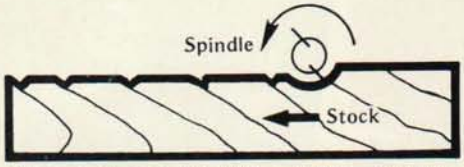


Scallops (shown exaggerated) can not be entirely eliminated.

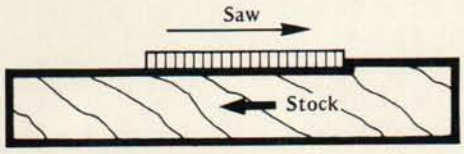
Results with Edging Saw



It is difficult to show an exaggerated straight line.



"Chip out" is a potential problem. Splitting also can result.



Direction of the grain has no effect on the cut.

When a jointer is used, and knots and defects will later be rip sawed out of the boards, the result will be that a jointed edge and a sawed edge must be glued together. Because of the difference of the two dis-similar edges the joint will not glue up well. Both the Edging Saw and the Rip Saw produce a similar edge and result in a very strong glue joint. The Ekstrom Carlson Edging Saw can be set to produce straight line cuts to be compatible with the type of glueing equipment being used.

Boards can be processed on an Edging Saw at a feed rate averaging 225 FPM. Acceptable results cannot be accomplished on a jointer in excess of 110 FPM. The Edging Saw therefore out-produces the jointer two to one.

Since the amount of stock to be removed is not contingent on the width of the saw blade, a wider and heavier blade is used and eliminates any possibility of deflection away from the side pressure of the cut.

The stock passing through an Edging Saw lays flat upon a wear surface four inches wide as opposed to the jointer wear surface of only one inch wide. Understandably, the Edging Saw will maintain productivity and accuracy for a longer period of time.

Many of the other desirable features of the popular Ekstrom Carlson Model "E" Rip Saw are incorporated in the Edging Saw.

The Ekstrom Carlson Model "EE" Edging Saw is equipped with a 30 HP saw arbor motor which will withstand the heaviest of feed rate and chip removal requirements.

The Model "EE" Edging Saw can be used in tandem with a Left Hand Model to edge both sides of the stock, without interruption, in a powered conveyor line. It is a perfect companion to the Model "E" Rip Saw which has the advantage of fast fence setting for use in defecting and random width ripping.

The "EE" Edging Saw can be set to remove a minimum of stock on each board and all waste is in the form of sawdust.

SPECIFICATIONS OF THE MODEL "EE" EDGING SAW

For additional features and specifications see the Model "E" Rip Saw Bulletin

Horsepower	30
Max. Thickness of cut	3 1/4"
To cut thru 3" stock requires saw blade diameter	16"
Recommended saw width	3/8"
Weight	4800 lbs.
Shipping weight	5200 lbs.
Boxed for export	6050 lbs.
Volume for export	334 cu. ft.

Pressure roll diameters:	
2 ea. Canted lead	5"
3 infeed, 2 outfeed	3 1/2"
4 center	3 1/8"
Feed Roll Diameters:	
3 infeed, 2 outfeed	3 1/2"
Spindle dia. between brgs.	2 11/16"
Distance between brgs.	21 5/16"

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