



“Heavy-Builts”

Hasko

Flooring and Woodworking Machinery Since 1930

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DESCRIPTION

(Subject to Conditions of Sale)

Hasko Model HSLF High Speed Lateral-To-Lineal Feed System

(For Continuous Feeding of Random Length Strips and/or Short Block Material to Matchers or Moulders)

OVERVIEW:

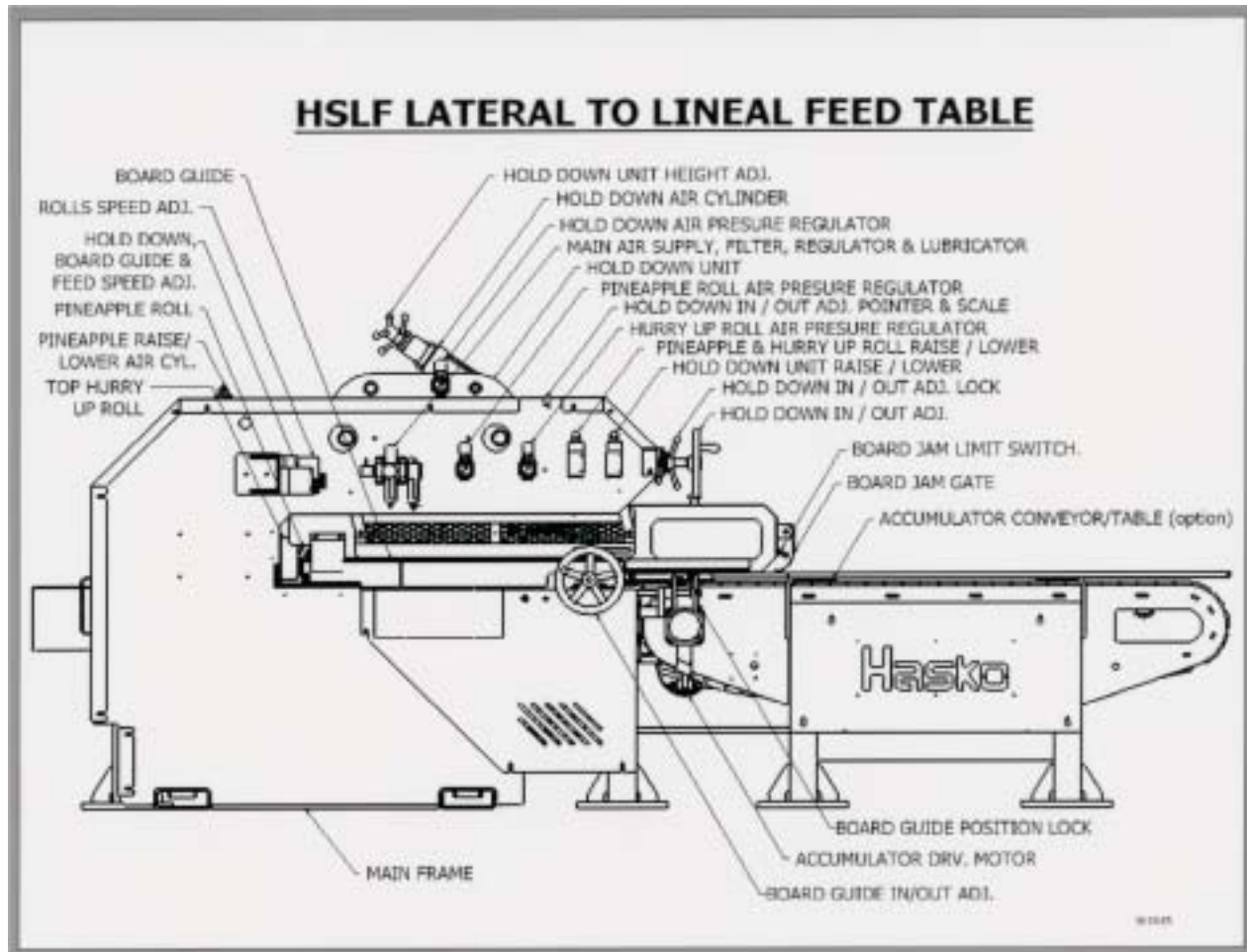
The **Hasko HSLF** high speed hydraulically driven Lateral-to-Lineal Feeding System is designed for continuous automatic feeding of random length (6" wide x 2" thick max.) strips to matchers and moulders operating at medium-to-high feed speeds 200-400 Lineal Feet Per Minute (optionally to 600 FPM). It is exceptionally well suited for those applications requiring random lengths of rough or dressed hardwood and softwood strips and is extraordinarily effective with short block material that commonly is unmanageable. The **HSLF** facilitates improved grade yield by reducing operator (feeder) efforts. The **HSLF** automatically “gap free” positions the strips and accelerates them forward without the help of an operator. The primary function of the operator (feeder) is to rotate or turn incoming material and to determine the best strip face that will produce the optimum grade or yield. Since the operator’s station is not in close proximity to the machine, pinch point hazards are greatly reduced; thereby, improving an overall safer operation. An optional Accumulator conveyor may be added to facilitate the board strip grading process and for creating a smooth transition to the Feed Table.

OPERATION:

The system consists of a hydraulically driven dual-strand infeed chain deck with a hydraulic driven triple upper hold-down chain system that traverses the board strips into a pineapple roll case. Upper hold-down chains can be raised via an air cylinder to relieve jams. The **HSLF** pineapple roll case incorporates an upper pineapple roll and upper knurled / hard chromed hurry-up roll, and are each individually driven by a direct coupled hydraulic drive motor. For easy clearing, the upper rolls are air tensioned and raised via a quick release valve. The lateral fence or board guide is also a hydraulically driven chain which helps guide strips to the pineapple and also enhances strip transfer from a lateral direction to a linear direction. The standard version has seven lower hydraulic driven spiral rolls and a longer version is available for applications running a high percentage of 14' to 16' lumber. A hydraulic motor is direct coupled to the 3rd bottom roll, and the remaining rolls are linked and driven via “V”- belts with idler sheaves to provide belt tensioning.

MACHINE SAFETY, GUARDING, OSHA - Subject to Conditions of Sale

HSLF Lateral to Lineal Feed System



HASTRAK™ HOLD-DOWN CHAIN ASSEMBLY:

The **Hastrak™** lateral assembly consists of an upper hold-down chain unit, lower infeed chains, and a powered board guide unit. The upper chains are hydraulically powered and used to hold board strips against the lower lateral infeed chains to convey or move board strips from a lateral position into a linear roll feeding system. The chains are equipped with an infeed jam detection plate to minimize board over-lap and reduce the possibility for infeed jams.

The hold-down unit has a specially designed pneumatically controlled lever mechanism that allows the chains to be raised and lowered for clearing jams (**Hasko Quick-Clear™**), and is equipped with independent spring loaded plungers that push against the chains. These plungers are self adjusting and will allow the chains to automatically compensate for side-by-side board thickness variations of up to 1/2" while still maintaining the integrity of the unit pressure against the board strips.



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The hold-down unit is also equipped with a hand wheel “in” and “out” adjustment to position the hold-down chains closer to or further away from the pineapple roll depending upon the width of material being run. To provide extra hold-down pressure while boards transition from the hold-down chains to the pineapple roll, a set of secondary chain idlers (one for each chain) has been added.

BOARD GUIDE UNIT:

Mounted beside the lower conveyor chains in the main frame is a chain and a set of sprockets referred to as the Board Guide Unit. These sprockets and chain are hydraulically powered and are used to guide board strips as they are conveyed or moved from the lateral position into the linear roll feeding system. This motorized chain guide also helps board strips transfer smoothly as they exit in the linear direction and reduces the possibility for jams. The Board Guide Unit is also equipped with a hand wheel “in” and “out” adjustment to position the board guide exiting sprocket and chain closer to or further away from the top hurry up roll. It is also equipped with adjustments that allow it to be moved closer or further away from the hold-down chains.

OPTIONAL ACCUMULATION TABLE (HSAT):

As an option, a **Hasko HSAT** (High Speed Accumulation Table) may be added for delivering board strips to the **HSLF** Feed Table. This table is independently driven by its own 1-1/2 H.P. gear motor with inverter drive control. This option helps an operator achieve the best possible yield or grade by providing the extra time and space needed for inspecting and turning board strips. The operator is also enabled to close any gaps that occur between board strips and move them to the even-end board guide. The Accumulation Table is automatically controlled by an array of photo eyes that are mounted to the side of the center chain beam located on the hold-down chain assembly. When all photo eyes become blocked and are detecting board strips (a full backlog condition), the accumulator conveyor automatically stops and will restart as soon as any of the photo eyes become clear of board strips. This feature keeps the **HSLF** Feed Table full while preventing pile-ups and jams. A secondary dual foot switch is also provided to manually over-ride the photo array. The foot pedals are preset to operate at either of two speeds (normal and high speed), and may be adjusted during production via inverter controls. A gate activated limit switch located at the front of the hold-down unit is provided to stop the **HSLF** Feed Table & optional **HSAT** in the event that boards are accidentally double stacked.



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Hasko HSLF FEED SYSTEM:

GENERAL STANDARD SPECIFICATIONS

Capacity:

Width: 2" (minimum) to 6" (maximum).

Thickness: 1/2" (minimum) to 2" (maximum).

Minimum Length: 10".

Feed Speeds: Infinitely variable to match moulder through-feeds of 200-400 FPM (standard) or to 600 FPM (optional).

Rolls:

(7) Shafts with one 6" diameter X 9" long spiral cast iron lower infeed rolls (**HSLF-L**) (Long Machine).

(5) Shafts with one 6" diameter X 9" long spiral cast iron lower infeed rolls (**HSLF**) (Standard Machine).

(1) Shaft with one 6" diameter upper ductile iron pineapple roll. (Carbide optional).

(1) Shaft with one 6" diameter X 2.5" upper knurled and chromed hurry-up roll.

(1) Shaft with one 4" diameter X 6" wide lower spiral roll before pineapple roll.

(1) Shaft with one 4" diameter x 9" wide lower spiral roll below pineapple roll.

(1) Shaft with one 4" diameter X 6" wide lower hurry-up exit roll.

Hydraulics:

25 H.P. 1800 R.P.M. totally enclosed fan cooled motor.

30 H.P. 1800 R.P.M. totally enclosed fan cooled motor. (Optional).

1-1/2 H.P. 1800 R.P.M. totally enclosed fan cooled motor for Accumulation Table (Optional).

Pump is direct coupled to motor -tank mounted.

60-gallon hydraulic reservoir.

25 (30 optional) gallons per minute at 1750 P.S.I. maximum operating pressure.

1/4 H.P. fan cooled heat exchange unit.

Flow valve for 50-575 feet per minute forward (optional to 750). Reverse preset at 75 feet per minute.

Final Drives:

(1) Hydraulic motor direct coupled to pineapple shaft.

(1) Hydraulic motor direct coupled top hurry-up roll shaft.

(1) Hydraulic motor direct coupled to lower linear feed spiral roll.

Remaining lower rolls driven via "V"-belts with take-up idlers.

(1) Hydraulic motor direct coupled to lateral feed chain fence (Board Guide Unit).

Lateral deck chains are chain driven through a heavy duty gear reducer coupled to a hydraulic motor.

Top lateral hold-down chains are "V"-belt driven through a gear reducer coupled to hydraulic motor.

Electrical:

Nema 12 enclosures, with magnetic relays and controls for 460/60/3 voltage (standard). (Others, optional).

All control circuitry is 110 volt.

PLC (programmable logic controller) functions.

Hydraulic unit and electrical panel locations other than standard floor plan are optional.



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Pneumatics:

Top rolls are each air tensioned via 2-1/2" X 3-1/2" cylinders and individual regulators using 7-18 P.S.I. lift pressure.

The hold-down unit is air tensioned via a 4" x 4" stroke.

Four-way, two-position valves raise and lower rolls & lateral top hold-down unit.

All regulators, filters, and lubricators are mounted on machine.

Dimensions and Weights (overall and approximate):

Standard Machine—15.5' long x 8.75' wide x 6' high and weighs approximately 5200 pounds.

Long Machine—19.5' long x 8.75' wide x 6' high and weighs approximately 5500 pounds.

Hydraulic Unit Weight—approximately 1150 pounds (with oil).

Accumulation Table—optional, (sized to customer application).