

"Heavy-Builts"



Hasko

Flooring and Woodworking Machinery Since 1930

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DESCRIPTION

(Subject to Conditions of Sale)

Hasko HSEM MEDIUM-TO-HIGH PRODUCTION END MATCHERS

(For Random Length Unfinished Solid Wood Strip or Plank Flooring)

FEATURES:

Superior and day-to-day consistent squaring is achieved as a result of **Hasko's** extremely rigid steel fabricated end matching station frames that are designed for easy access, set-up, and maintenance. Large dovetail slides and Joyce jacks provide superior rigidity and precise adjustment of the upper hold-down rails. All cutter motors are arranged on large dovetail slides with precise vertical and horizontal adjustment. The top and bottom tongue motors can be raised or lowered as a unit, or individually, for easy set-up changes. Electronic inverters are standard equipment on each cutter motor providing overload protection, electronic spindle braking, and spindle speeds to 5000 RPM. A PLC controller coordinates machine functions. An air-cooled Nema 12 Panel at the rear of each machine frame is hinged and serves as an access door for groove and top and bottom tongue motors. This panel also houses the inverter controllers, PLC, disconnects, and other motor and system controls.

1. New standard "off the shelf" arbor motors.
2. Full vertical and lateral adjustment on all cutting motors.
3. Each motor slide axis has a numerical scale and pointer that promotes fast setups and changes.
4. Heavy steel fabricated end matcher beds are precisely machined to ensure end-matching accuracy. Bed/chain wear surfaces are UHMW lined.
5. Trouble free spring loaded plungers and hard steel ribbon system ensures positive squaring to lug.
6. Our exclusive 4-1/4" pitch steel alloy end matching chain will receive 3-1/4" face flooring between lugs.
7. Large diameter chain drive sprockets provide long life, positive feed and trouble free reversing.
8. Heavy cast iron hold-down assembly incorporates removable, hardened hold-down bars.
9. Excellent dust extraction through improved dust hood design.
10. Lug chain driven by standard "off-the-shelf" shaft mount gear reduction unit. (Standard feed speed is preset at 152 lugs per minute.)
11. A limit bar, electrically interlocked, is incorporated onto each hold-down assembly to protect machines from damage due to mis-loaded or over-thick boards. If activated, feed system will stop, reverse until clear, and stop until the problem is corrected and feed forward is reactivated by each machine operator.

ORIENTATION:

Standard for Solid Strip Flooring - Tongue: RIGHT - Groove: LEFT - Board Orientation: FACE UP.

BOARD REFERENCE:

The board reference is established on the board's top "face". A trouble free spring and plunger system will load the spring steel ribbons on each side of bed for hold-up to upper platens.

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

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HSEM End Matchers

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STANDARD SYSTEM (INDIVIDUAL BEDS)

A separate bed and drive is provided for each Tongue and Groove End Matcher. 8' minimum bed length recommended in order to provide adequate loading space in front of hold-downs. This system offers great versatility to manufactures requiring medium production capability as systems can arrange for particular product, production and floor space needs or limitations. Standard feed rate is preset at 152 lugs per minute. (See below for optional material handling conveyors)

IN-LINE BED ARRANGEMENT: (UP TO 50' Shaft to Shaft)

Both the tongue and groove end matchers are arranged on common in-line bed system. Minimum bed length of 30' is recommended for this system. This provides 15' of even-ending space (minimum recommended) between the tongue and groove end matchers and approximately 4' of loading space in front of the first end matcher.

With this in-line system (when arranged with optional slat bed conveyors, even-ending device, and positive speed_control provided through the use of inverter controllers) **boards never leave the lug**, resulting in a smooth, controlled transfer between tongue and groove units.

This system can be provided with either tongue or groove unit first and bed lengths up to 50' depending on your production requirements and material flow.

FEED DRIVE SYSTEM:

A shaft mount gear reduction unit sized for your system powers **Hasko HSEM** chain beds. Standard feed rates are preset at 152 lugs per minute. (Other gear reduction units are available for speeds up to 175 lugs per minute). A TRICO solenoid controlled automatic oiling system provides lubrication to chain, bed, and sprockets.

ELECTRICAL:

The tongue and groove units each have a 460 volt/60 cycle/3 phase, NEMA 12, air cooled, control panel with interlocked disconnect, fused 110 V control circuitry. A magnetic reversing starter is provided for the feed motor. Inverter controllers for each spindle/cutter motor provide variable speed control; overload protection, and spindle/cutter braking. All control logic is provided by solid state PLC controller. The PLC controller provides precise control and sequencing of the end matcher and associated optional slat bed and even-ender conveyors.

A push button control panel is mounted on each end matcher for easy access to machine control functions. For safety on in-line systems, both end matcher operators must simultaneously press feed start button to activate feed forward of the feed chain. A control interlocked anti-thickness limit bar promotes safety and prevents machine damage due to over-thick or mis-loaded/lapped boards.

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HSEM End Matchers

HSEM and PFEM-SW STANDARD SPECIFICATIONS:

(Updated: 7/18/05)

MOTOR SPECIFICATIONS:

Standard Requirements: 460 volt - 60cycles - 3 phase

Groove Unit:

5 HP WEG* 3450 rpm Trim Saw
5 HP WEG* 3450 rpm Groove Unit

Tongue Unit:

5 HP WEG* 3450 rpm Upper Tongue
5 HP WEG* 3450 rpm Lower Tongue

* INVERTER CONTROLS FACILITATE SPINDLE SPEEDS TO 5000 RPM ON THESE MOTORS*

* INVERTER CONTROLS FACILITATE DYNAMIC BRAKING ON THESE MOTORS*

CHAIN BEDS:

18' and Under	-----	5.0 HP Shaft Mounted Gear Reducer
19' - 29'	-----	7.5 HP Shaft Mounted Gear Reducer
30' - 39'	-----	10 HP Shaft Mounted Gear Reducer
40' and Over	-----	15 HP Shaft Mounted Gear Reducer
Feed Speed	-----	152 Lugs per minute (standard)
		Up to 175 Lug per Minute - Optional

TOOLING:

(Tooling is optional --- See tooling diagram)

<p><u>Trim Saws (both units):</u> 10" - 12" saws Climb Cut</p>	<p><u>Tongue Saws:</u> (2)10" Tongue Saws Climb Cut (top & bottom)</p>	<p><u>Groove Saw:</u> 8"-10" Groove Saw Conventional Cut</p>
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(1.5" bore, bolt on tooling---all saw units.)

CAPACITIES:

Longest Material:	-----	Individual Beds with 7' Wide Conveyors = 8' Individual Beds with 11' Wide Conveyors = 12' Individual Longest Recommended = 12'-16' In-Line Systems = 8.5'
Shortest Material	-----	9-1/2"
Thickness (Min/Max)	-----	3/8" - 2"
Widest between lugs (standard 4.250 chain)	-----	3-5/8"
Widest skipping every other lug	-----	7-7/8"
Widest skipping every two lugs	-----	12-1/8"