

"Heavy-Builts"

# Hasko

Flooring and Woodworking Machinery Since 1930

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DESCRIPTION

(Subject to Conditions of Sale)

## Hasko HSEM-C EndMaster HIGH PRODUCTION RANDOM LENGTH END MATCHING CENTER FOR UNFINISHED SOLID WOOD STRIP & PLANK FLOORING (WITH AN INTEGRATED *Hasko* CROSSOVER SYSTEM)

(Standard Systems With & Without Defecting Stations)

### 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.

**Hasko's** key to accurate squaring and trouble free operation is facilitated by dual end matching beds (one for each station) that incorporate our large 6.000" pitch x 5" wide x 2" thick heavy duty end matching chain, the **Hasko** pressure system, and a precisely machined bed system. **Hasko's** dual feed chains are independently square to their respective tongue or groove end matchers. Synchronization is required only for sweep bar alignment.

With **Hasko's** Cross-Transfer System featuring its exclusive **Mat-Veyor**, the flooring makes a smooth, controlled, and automatic transfer between tongue and groove units. This system can be offered as open (for defecting at each end matching station) or closed (for no defecting).

1. New standard "off the shelf" saw/cutting 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. **Hasko** 6.000" pitch x 5" wide x 2" thick end matching chain with 4.75" between lugs.
7. Exclusive extra-wide 5" chain to end match stock as short as 7-1/2" in length.
8. Large 21" diameter chain drive sprockets provide long life, positive feed, optimum dampening, and trouble free braking.
9. Heavy cast iron hold-down assembly incorporates removable, hardened hold-down bars.
10. Excellent dust extraction through improved dust hood design.

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

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11. Lug chain driven by a shaft-mounted gear reduction unit that is driven by 15-25 H.P. electric motor with standard feed rate range of 80-225 lugs per minute – optionally in excess of 225 lugs per minute.
12. An electrically interlocked limit bar is incorporated onto each hold-down assembly to protect machines from damage due to mis-loaded or over-thick boards. If the limit bar is activated, the feed system will stop and will not restart until the problem is corrected by the machine operators.

### 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.

### Hasko CHAIN, BED, and CROSS TRANSFER MATERIAL HANDLING SYSTEM

Both the tongue and groove end matcher stations are integrated with a **Hasko** cross transfer board traversing system that provides smooth automatic positioning (lateral transfer) of random length boards to each of the end matching stations. **Hasko's** key to accurate squaring and trouble free operation is facilitated by dual end matching beds (one for each station) that incorporate our large 6.000" pitch x 5" wide x 2" thick heavy duty end matching chain, the **Hasko** pressure system, and a precisely machined bed system. Traversing bars are attached to end matcher chain lugs and span the distance between the dual chain systems. Lateral transfer rollers and **Hasko's** exclusive **Mat-Veyor** traverse the boards to the opposite end matching station while they are channeled between the traversing bars. With this set up the flooring makes a smooth and controlled transfer between tongue and groove units. This system can be provided with either the tongue station (right) or the groove station (left) as first machining station as required by your production requirements and material flow.

### FEED DRIVE SYSTEM:

**HSEM-C** End Matching Centers utilize a 15-25 H.P. electric motor feed drive system that drives a large gear reduction unit. Feed rates are variable with standard feed rate range of 80-225 lugs per minute and optional in excess of 225 lugs per minute. A solenoid controlled pressurized automatic oiling system provides lubrication to chains, beds, 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 110v control circuitry. Electronic inverters are provided for each cutter motor providing overload protection, electronic spindle braking *as required by OSHA and ANSI standards*, and spindle speeds to 5000 RPM. A PLC controller coordinates machine functions. A hinged NEMA 12 panel at rear of each machine frame serves as an access door for groove motor and the top and bottom tongue motors. This panel also houses the Inverter Controllers, PLC and Disconnects. A touch screen control panel is mounted on each end matcher unit for easy access via a pivot arm assembly. A control-interlocked anti-thickness limit bar promotes safety and prevents machine damage due to over-thick or mis-loaded boards.

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### HSEM-C SPECIFICATIONS:

(Updated: 2/13/07)

#### MOTOR SPECIFICATIONS:

Standard Requirements: 460 volt - 60cycles - 3 phase

#### Groove Unit:

5 H.P. WEG\* 3450 rpm Trim Saw  
5 H.P. WEG\* 3450 rpm Groove Unit

#### Tongue Unit:

5 H.P. WEG\* 3450 rpm Upper Tongue  
5 H.P. 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:

25' System	-----	15 H.P. Shaft Mounted Gear Reducer
28' System	-----	15 H.P. Shaft Mounted Gear Reducer
43' System	-----	20 H.P. Shaft Mounted Gear Reducer
48' System	-----	20 H.P. Shaft Mounted Gear Reducer
Feed Speed - Infinitely Variable	-----	Range of 80-225 Lugs per Minute (Standard) In Excess of 225 Lugs per Minute (Optional)

#### TOOLING:

(Tooling is optional --- See tooling diagram)

<p><b><u>Trim Saws (both units):</u></b> 10" - 12" saws Climb Cut</p>	<p><b><u>Tongue Saws:</u></b> (Two) 10" Tongue Saws Climb Cut (top &amp; bottom)</p>	<p><b><u>Groove Saw:</u></b> 8"-10" Groove Saw Conventional Cut</p>
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(1-1/2" bore, bolt on tooling---all saw units.)

#### CAPACITIES:

Longest Material	-----	8' (longer is optionally available)
Shortest Material	-----	7-1/2"
Thickness	-----	1/2" - 2" (Optional 5/16" - 2")
Widest between Lugs	-----	4.75"
Widest skipping Lugs	-----	10.75"
(Remove every other chain lug)		
Special Capacities	-----	Inquire