



IMH-DM-1500	IMH-DM-2000	IMH-DM-3000
<b>Machine specification</b> Over board magazines 2 pcs Under board channels 3 pcs Nail boxes 1 pcs Individual nailers 6 pcs Clinching plate 1 pcs Minimum ceiling height 4 400 mm	<b>Machine specification</b> Over board magazines 2 pcs Under board channels 3 pcs Nail boxes 1 pcs Individual nailers 6 pcs Clinching plate 1 pcs Minimum ceiling height 4 400 mm	<b>Machine specification</b> Over board magazines 2 pcs Under board channels 3 pcs Nail boxes 1 pcs Individual nailers 6 pcs Clinching plate 1 pcs Minimum ceiling height 4 400 mm
<b>Dimension of material</b> <b>Over boards:</b> Tickness 12-35 mm Width 75-145 mm Length 600 - 1500 mm <b>Under boards:</b> Tickness 16-35 mm Width 75-145 mm Length 600 - 1400 mm	<b>Dimension of material</b> <b>Over boards:</b> Tickness 12-35 mm Width 75-145 mm Length 600 - 2000 mm <b>Under boards:</b> Tickness 16-35 mm Width 75-145 mm Length 600 - 1400 mm	<b>Dimension of material</b> <b>Over boards:</b> Tickness 12-35 mm Width 75-145 mm Length 600 - 3000 mm <b>Under boards:</b> Tickness 16-35 mm Width 75-145 mm Length 600 - 1400 mm
<b>Performance</b> Change over time 3-15 minutes Deck boards: 600 - 1500 mm 25* boards / min Wings 0-100** mm	<b>Performance</b> Change over time 3-15 minutes Deck boards: 600 - 1500 mm 25* boards / min 1501 - 2000 mm 20* boards / min Wings 0-100** mm	<b>Performance</b> Change over time 3-15 minutes Deck boards: 600 - 1500 mm 25* boards / min 1501 - 2000 mm 20* boards / min 2001 - 3000 mm 17* boards / min Wings 0-100** mm

\* Using both deck board magazines

\*\*In the length of the over boards. Other dimensions of wings, contact IMH.

## Usage

Production of wooden decks for 4-way pallets. Can also be used for 2-way pallets, see options below.

## Function

Over and under boards are laid in their magazines from where they are fed to the nailing position. Two separated operations make it possible to position them individually. The two over board magazines allow two different kinds of boards to be used (different widths and / or quality). Nails are clinched, which means that they are bent and returned back up into the under board. This is done across fibre direction to give extra strength. We recommend 10-15 mm oversized nails to have enough length for them to reach back up into the under board. The finished deck is pushed forward by the deck behind.

The release function of boards from the over board magazines and the nail picking are pneumatic. All other operations, incl. individual nailing guns, are hydraulic and the machine has its own hydraulic unit. The machine is controlled and monitored by its own PLC via an operator's panel.

**Nail dimensions**

IMH nail boxes can handle following nail dimensions. Each ordered nailbox will be set for one selected nail dimension.

Diameter	2.1 - 4.2 mm
Length	40 - 100 mm
Quality	Machinery

**Electrical connections**

Voltage	3 Phase 400 V 50 Hz
Main fuses	3 x 63 Ampere / Delay Action
Power consumption at 100% capacity	15 kWh

**Pneumatic connections**

System pressure	6-10 bar
Nominal working pressure	6-7 bar
Air consumption at 100% capacity	250 L / min

**Operators side**

To the right of the machine when looking in the production flow. The machine can be constructed to have the operator on the left side if needed.

**Options**

<b>Products</b>	<b>Remarks</b>
Super speed	<i>Over board capacity increased from 25 to 35 pcs / min (max 1400 mm under boards).</i>
Extended platform	<i>Extra space for nail storage.</i>
Extra nail box and fast change over	<i>Standard 1 pcs, max 3 pcs.</i>
Extra nailers	<i>Standard 6 pcs, max 12 pcs.</i>
Automated side feeding of over boards	<i>Removes 1 of 2 magazines. Side feeding can have more magazines added.</i>
4 under board channels	<i>2 center channels are individually, manually adjustable. 1 with own manual change over system.</i>
5 under board channels	<i>The center channel is fixed.</i>
2.5 channel sections per channel	<i>Standard 2 sections. Under board length increased from 1400 to 1700 mm.</i>
3.0 channel sections per channel	<i>Standard 2 sections. Under board length increased from 1400 to 2100 mm.</i>
Double motorized change over when 5 channels	<i>Middle fixed, 1 and 5 with own change over, 2 and 4 with own change over.</i>
2-way pallet option added on channels	<i>Positioning over boards higher for 2-way under boards.</i>
2-way pallet only	<i>No clinching plate included.</i>
Hydraulic boom lifter	<i>Boom can be lifted faster. Recommended when 2-way pallet option has been added.</i>
Extra long wing size of over boards	<i>Extended sliding bars for over board magazines (300 instead of 100 mm).</i>
Pallet outfeed gripper	<i>Needed when channel conveyor is added after deck machine.</i>