

Deck Machines



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

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 nailers, 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.

February 16th, 2023

IMH Machinery AB Kaveltorpsgatan 2 SE-714 31 KOPPARBERG Sweden Telefon / Telephone +46(0)580-886 60 Telefax +46(0)580-886 78 Bankgiro 5981-2180 Org. Nr 556978-3508 VAT-nr SE556978350801 E-mail info@imhmachinery.se www www.ihmmachinery.se

1(2)



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

February 16th, 2023

IMH Machinery AB Kaveltorpsgatan 2 SE-714 31 KOPPARBERG Sweden Telefon / Telephone +46(0)580-886 60 Telefax +46(0)580-886 78 Bankgiro 5981-2180 Org. Nr 556978-3508 VAT-nr SE556978350801 E-mail info@imhmachinery.se www www.ihmmachinery.se