

MOBA

GRADING - PACKING - PROCESSING

Moba Robotics

MR 40 Tray Palletiser

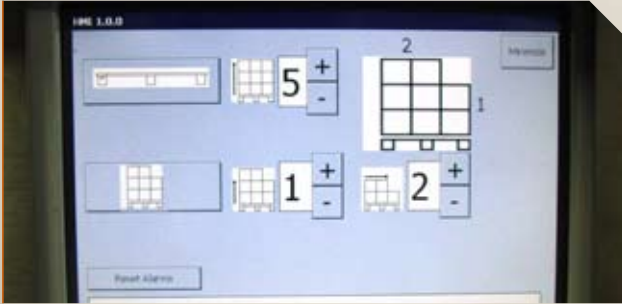


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User friendly touch screen

Optional handling of paper trays



MR 40 Tray Palletiser

MR 40 Tray Palletiser is a system which automatically places a row of stacks, 6 trays each on a pallet. The MR 40 is capable of palletizing stacks of trays coming from 1 or 2 farmpackers or packing lanes from an egg grading machine. It has a max capacity of 108,000 eggs (300 cases) per hour and can process both plastic and paper trays and stacks on wooden pallets with cardboard layer pads, as well as on the Egg Cargo System™ (ECS).

The gripper head can pick up layer pads and empty pallets, to automatically create a full pallet. The gripper head is also capable of palletizing stacks with two different row-pitches at the same time, for example plastic and paper trays. When the MR 40 has 2 pick-up points and a minimum of 2 pallet loading positions, different trays can be processed simultaneously.

If cardboard layer pads are used, the stacks can be rotated 90 degrees per layer. By doing this, top- and bottom side of the tray-cups are exactly opposite. In this way the trays carry the stack weight and not the eggs. This results in a more stable pallet with less risk for cracks during transport.

It goes without saying that a tray palletiser system speeds up the actual palletizing process. The stacks enter one by one and when the fourth stack has arrived, the stacks are picked up and placed on the pallet by means of patented pick up forks. Its unique construction means that the stacks are not slid into position, but are put down in exactly the right position. The pins then are withdrawn effortlessly from underneath the trays. The special roller conveyors at the pick-up position ensure that the batch to be picked up is always exactly positioned, regardless of the conditions such as tray quality or air humidity.

When installed, the robot is calibrated with respect to the number of pallet loading positions. This is necessary to

make sure that the MR 40 always places the stacks at the right position onto the pallet. Also the robot then knows whether the pallet is completely horizontal, or maybe a little off. When palletizing, the robot is able to compensate for pallet positions that are not completely level. This feature enables the MR 40 to make the pallet completely straight always, no matter what.

The pallet loading positions can also be fitted with an automatic pallet transport system that is low enough to offload the pallets with a simple pallet jack. The basic pallet transport can carry 2 full pallets (1 loading and 1 full), within the robot's safety fence. When required, the pallet transport system can be extended outside the robot cell in combination with a muting function of the safety screen.

Standard features

- 1 fixed palletizing position on floor. The robot can handle height differences in case of non-horizontal floor
- 1 position for empty pallets; the pallet handling is capable of corrective positioning in case of slant stack of pallets; maximal 12 pallet high
- 1 cargo layer pad storage position
- Suitable for the Eggs Cargo System™ (ECS)
- Maximum pallet height: 6 layers (ECS) or 5 layers of stacks in case of paper trays; 12 stacks per layer
- Safety fence with sliding doors

Double safety features



Optional base plate for weak floors

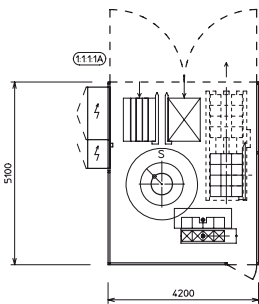


Options

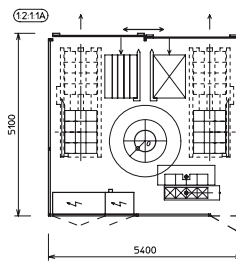
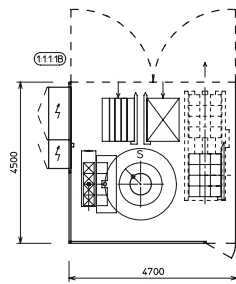
- Automatic pitch adjustment in the gripper head
- Cardboard layer pad store for paper trays
- Extra palletizing positions on floor, maximum 4 pallet loading positions
- Palletising with automatic pallet output conveyor inside safety fence (1 loading and 1 full pallet)
- Automatic pallet transport extension for 2 full pallets, including safety sensor screen for transport outside safety fence
- 2 pickup points instead of 1 in case of 2 farmpackers or grader inputs
- Integrate-able weighing function to measure full pallet weight
- Simultaneous loading of 2 different trays or sizes, in combination with 2 pick-up points and a minimum of 2 pallet loading positions.*
- Extra layer pad storage
- Extra empty pallet stack
- Enlarged base plate, in case of weak floors

**) In case a simultaneous production also requires other pallets and layer pads, restrictions may occur.*

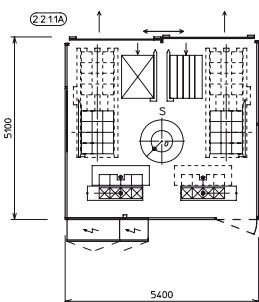
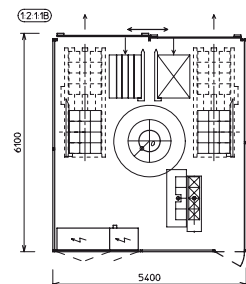
Standard layouts MR 40 (auto-pallet transport is optional)



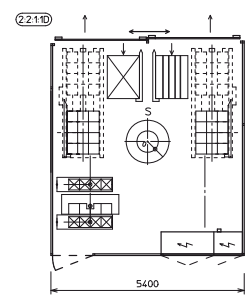
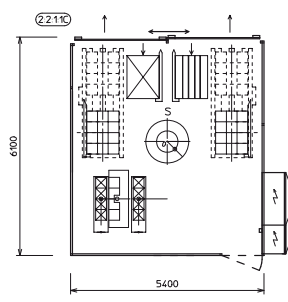
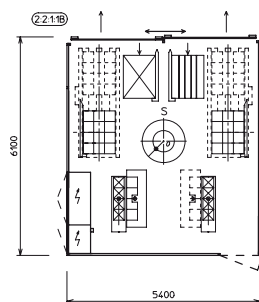
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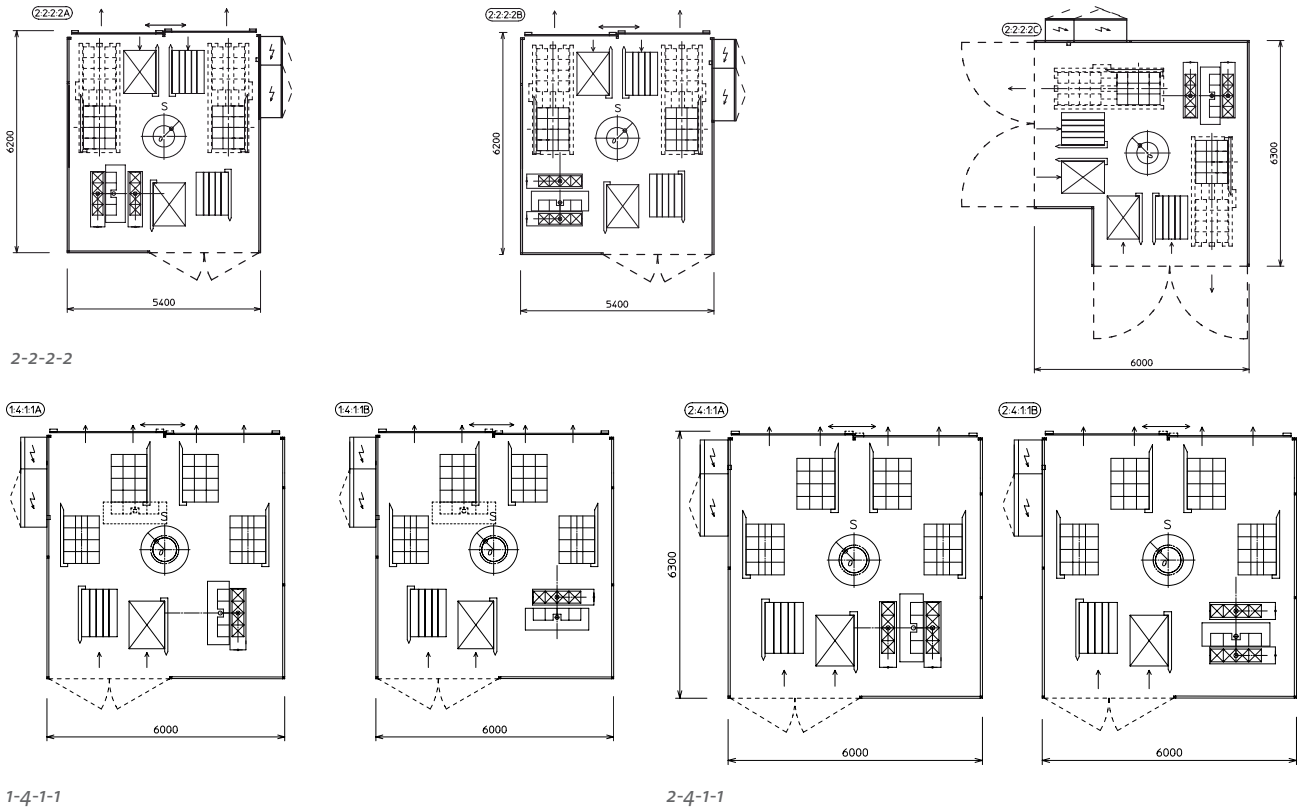


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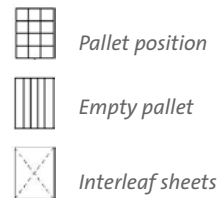


2-2-1-1





Dimensions	See layouts
Capacity	Max. 108,000 eggs (300 cases) per hour
Power	11 KVA
Voltage	200 – 230V 3ph + N 50-60 Hz Or 380 – 415V3ph + N 50-60 Hz
Air	Capacity: 0.4 m ³ /hour (ECS) Capacity: 1.6 m ³ /hour (Paper trays) (defined as free air with pressure of 1 bar) 6.5 – 8.5 bar, dewpoint 3°C (an air dryer is recommended)
No. of Layers	ECS max. 6 layers Paper trays max. 5 layers Plastic other than ECS max. 5 layers



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