

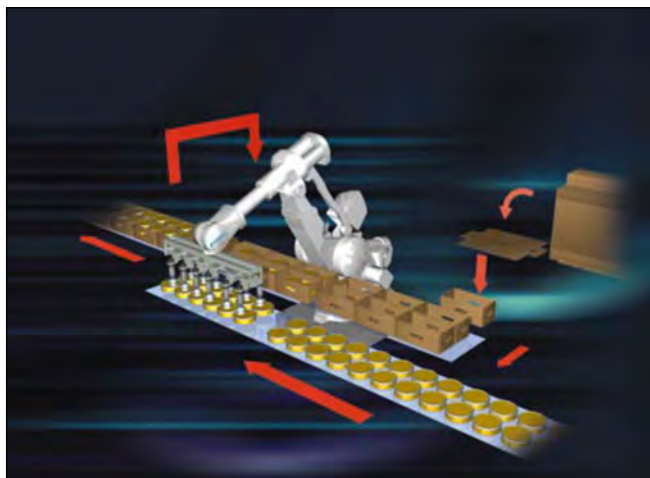


MA-ROB 260

PICK & PLACE ROBOTIZED UNIT

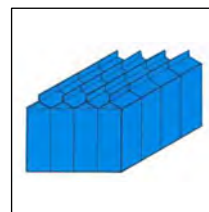


Technical characteristics



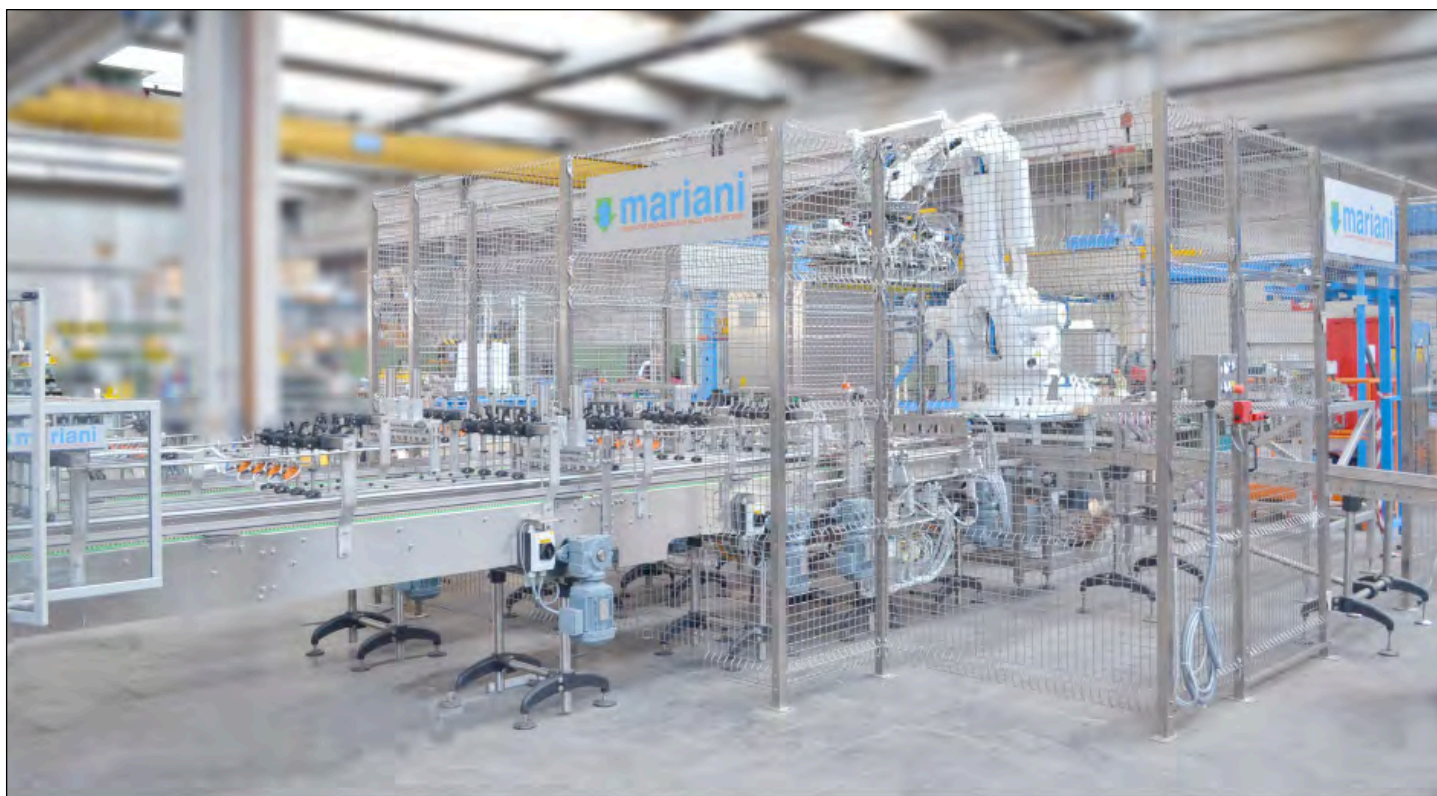
Electronically controlled MA-ROB-260 unit designed to collect and insert a wide range of packages in various sizes into boxes in different formats.

Nominal output max. 40 cycles per minute, according to the product and application.



Technologically advanced machine with 4 axis arm configuration and articulated parallelogram linkage, allowing high performance and absolute precision placement.

The robot has been designed for applications which require high flexibility, accurate movement repetition and quick format changeover.



Functional characteristics

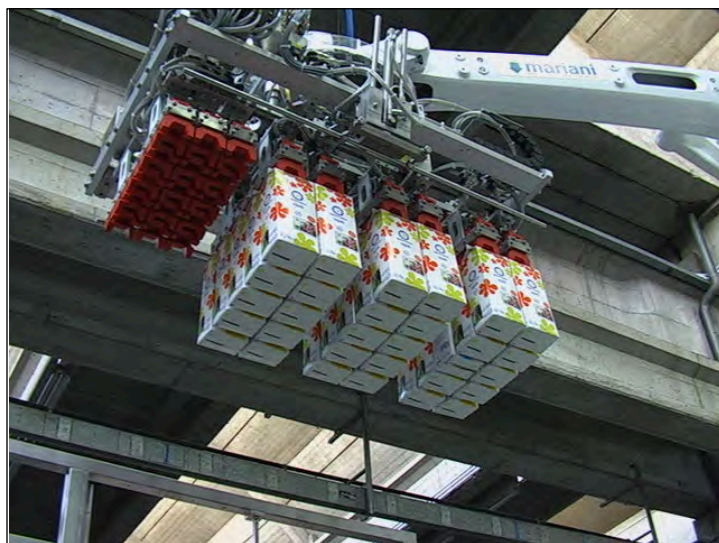
Handled products	Gable Top/Brick
Output (example)	From 6.000 to 14.000 ph + 20%
Plastic crates format	A. 3x4 B. 4x4 C. 2x5 D. 3x5 E. 4x5



The operating area and the carrying capacity make this robot particularly suitable for handling small packages grouped

- **Reliable – High production up time**
- **Fast – Short cycle times**
Design optimized for packing in combination with motion control ensures short packing cycle times.
- **Accurate – Consistent parts quality**
The robot has best in class accuracy and accurate conveyor tracking performance resulting in excellent pick and place accuracy.
- **Strong – Maximized utilization**
The robot is optimized for packing application and combines compactness and high speed with a 30 kg payload capacity.
- **Versatile – Flexible**
Low on weight and height, the robot easily fits into compact packing lines applications.

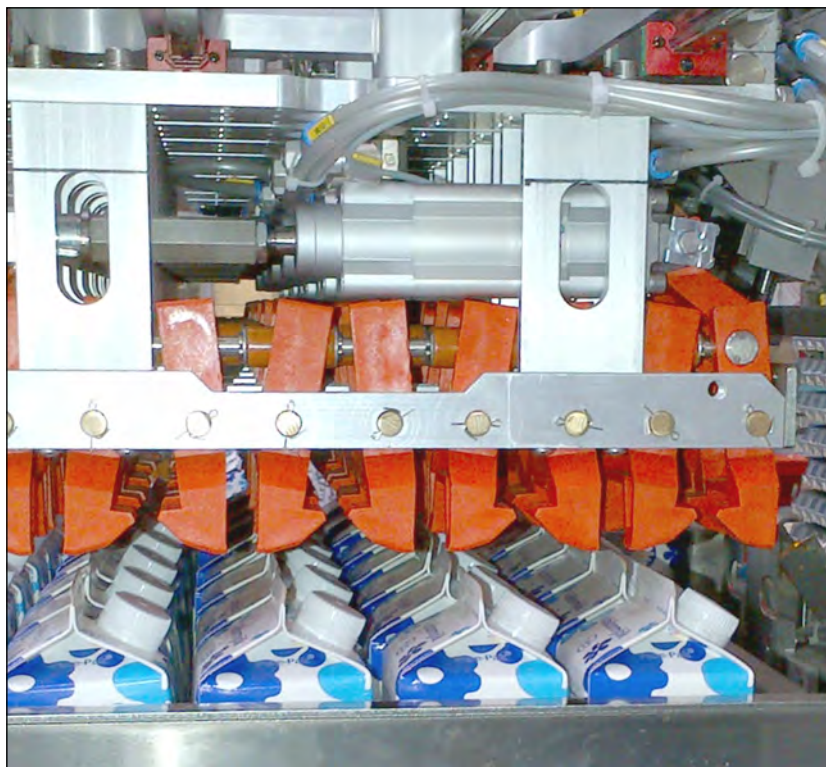
Machine characteristics



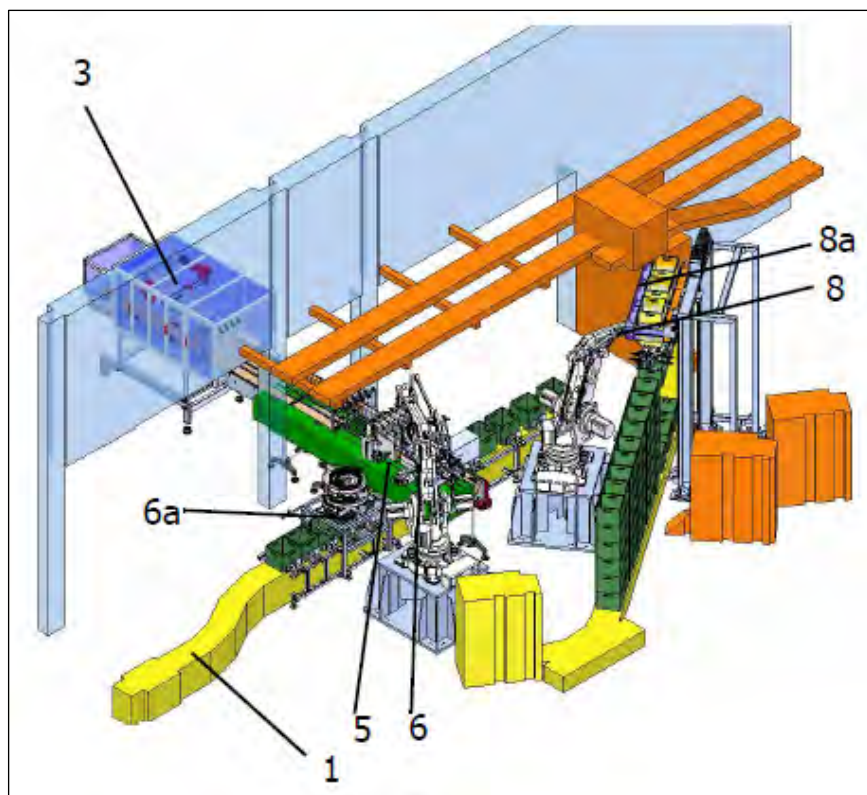
- the gripping head, complete with safety devices, is designed according to the product to be handled and its specific application
- evolutionary electronic control with easy access to operator interface
- optional: interlayer or bottle dividers inserting device

Machine with compact size designed with minimum overall dimensions which offers the most simple method for product infeed

Customised options can be designed upon request.

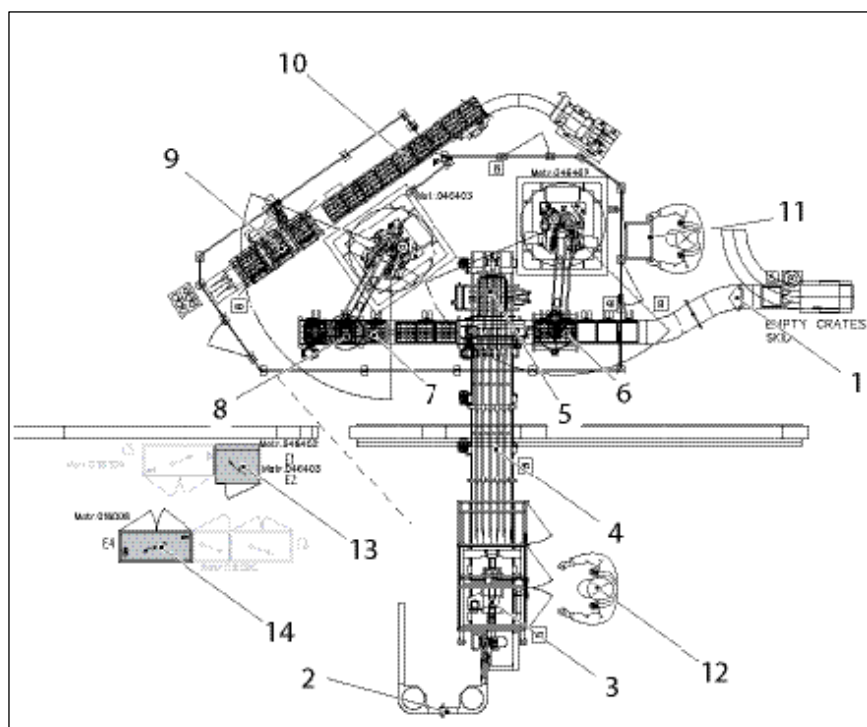


Working cycle



Crate filling working cycle

- The empty crates reach the robot station on conveyors (1),
- The products at infeed are loaded onto the conveyors (2) and then onto the diverter (3).
- The diverter (3) distributes the products to the 4 lines at infeed (4);
- The products are sent to the preformation and pick-up area (5) (32 Elopak 4x8 packs).
- Once formation has been completed, the robot (6) comes down and picks up all the products.
- Once the products have been picked up, during the lifting and shifting movement towards the deposit zone, the head distances itself so as to separate the 2 formations to be deposited.
- The head positions itself in the (6a) area above the 2 empty crates and deposits the product into the crates.



Machine data

Specification

Robot version	Reach (m)	Handling capacity (kg)	Load offset (mm)
MA-ROB 260	1.56	30	300
Number of axes	4		
Protection	IP67		
Integrated signal supply	23 poles, 50V DC; 10 poles, 250V AC		
Integrated air supply	1/3 inch hose, max 8 bar		
Controller	IRC5 Single cabinet , IRC5 Dual Cabinet , IRC5 Panel Mounted		

Performance (according to ISO 9283)

Position repeatability RP (mm)	
MA-ROB 260	0.1

Technical information

Physical

Dimensions robot base	723 x 600 mm
Total height	1493 mm
Robot weight	340 kg

Environment

Ambient temperature for robot unit	+5° C (41° F) to + 45° C (113° F)
Relative humidity	Max. 95%
Noise level	Max 70 dB (A)
Safety	Double circuits with supervisions, emergency stops and safety functions. 3-position enable device

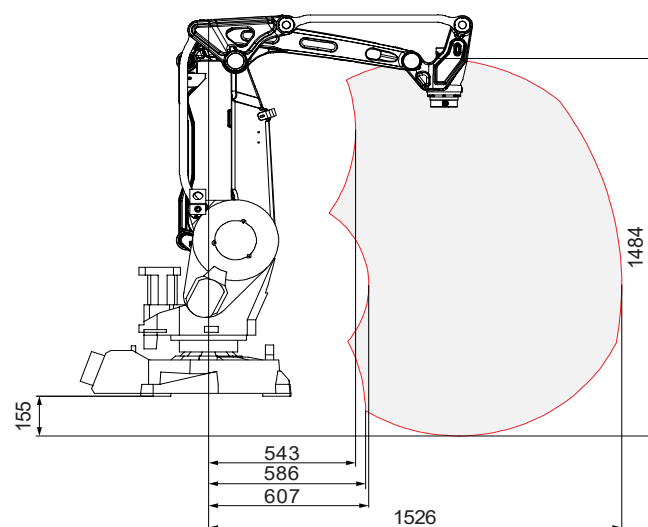
Emission	EMC/EMI shielded
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Data and dimensions maybe changed without notice.

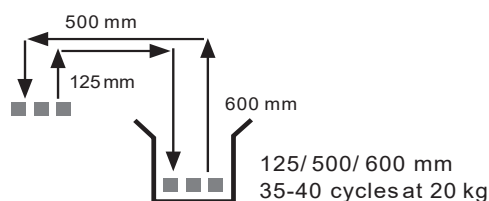
MA-ROB 260

Axis	Working range	Max velocity
Axis 1	+180° to -180°	153°/ s
Axis 2	+85° to -28°	175°/ s
Axis 3	+119° to -17°	153°/ s
Axis 6	+400° to -400°	342°/ s

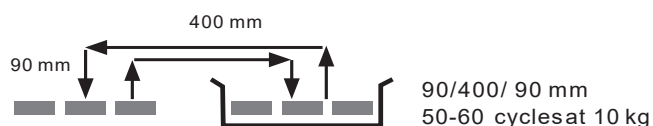
MA-ROB 260, working range



Park cycle



Park cycle



Machine layout

