



M. AU

HANDLE APPLICATOR MACHINE





Technical overview

CARRY HANDLE SOLUTIONS FOR ALL THE MARKET'S NEEDS

The packages with a self-adhesive handle is easy to grab, to lift, to hold & carry. It improves comfort, customer experience, logistic operations, brand and product communication. Our attitude to continuously improve our products and develop new solutions, provides opportunities for our customers to differentiate their products and optimize their production capabilities.

MAIN SOLUTIONS

1. TOP HANDLE on PET bottles bundle;
2. TOP HANDLE on canton packs bundle;
3. TOP HANDLE on canton packs with caps bundle;
4. CARTON BOX HANDLE on carton boxes of various dimensions and surfaces;



1



2



3



4

Functional characteristics

The M. AU single arm handle applying system is a brand-new generation of handle applying machines.

Mariani has launched a revolutionary innovation on the Handle Applying Machines market.

The SINGLE ARM HANDLE APPLYING SYSTEM is based on a servo-motors driven architecture, where the handle applying arm precisely tracks the pack ensuring an high accuracy of the application and a longer reliability of the machine over its lifetime.

This new concept, previously available only for the high-speed applications, has been extended to the complete all machine range, starting from the low speed models up to the high-speed ones, reaching a production capacity up to 120 packs per minute. Absolutely the FASTEST handle applying machines on the market.



ELECTRONIC SINGLE ARM MACHINES' MODELS

SINGLE LANE

Machine model	M. AU-1.25	M. AU-1.40	M. AU-1.55	M. AU-1.70	M. AU-1.85	M. AU-1.100	M. AU-1.120
L1 mm conveyor length)	1.600	1.600	2.400	2.800	2.800	3.300	3.300
SPEED (up to)	25 ppm	40 ppm	55 ppm	70 ppm	85 ppm	100 ppm	120 ppm

DUAL LANE

Machine model	M. AU-2.40	M. AU-2.55	M. AU-2.70	M. AU-2.85	M. AU-2.100	M. AU-2.120
L1 mm conveyor length)	1.600	2.400	2.800	2.800	3.300	3.300
SPEED (up to)	40+40 ppm	55+55 ppm	70+70 ppm	85+85 ppm	100+100 ppm	120+120 ppm

TRIPLE LANE

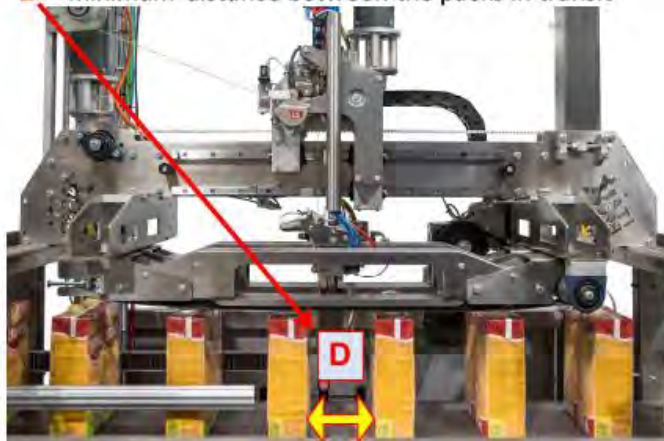
Machine model	M. AU-3.40	M. AU-3.55	M. AU-3.70	M. AU-3.85	M. AU-3.100	M. AU-3.120
L1 mm conveyor length)	1.600	2.400	2.800	2.800	3.300	3.300
SPEED (up to)	40+40+40 ppm	55+55+55 ppm	70+70+70 ppm	85+85+85 ppm	100+100+100 ppm	120+120+120 ppm

The actual achievable production speed is related to the size, shape and rigidity of the packages to be processed and the total length of the handle to be applied.

Mariani S.r.l. responds to the Customer's specific needs by also manufacturing the traditional electro pneumatic machines' models, when required.

SINGLE-ARM VERSION (servomotor driven)

D = minimum distance between the packs in transit



D = 100mm → reduced speed of the packs in transit into the machine during the handle application cycle.

ADVANTAGES

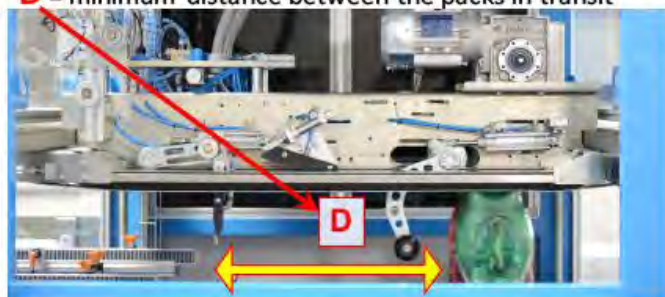
- High flexibility in respect to the type and dimensions of the product to be worked;
- Lower linear speed of the packs in transit into the machine during the handle application cycle;
- Higher efficiency;
- Higher accuracy and application repeatability over time;
- Fully compatible with the "premade carry-handle" on different pack formats;
- Consistency of the machine performances over the time;
- Reduced compressed air consumption level.

LIMITATIONS

- Typical customer's resistance vs. Innovative technologies.

TRADITIONAL VERSION (with electro-pneumatic cylinders)

D = minimum distance between the packs in transit



D = 600mm → HIGHER speed of the packs in transit into the machine during the handle application cycle.

ADVANTAGES

- Traditional system already present on the market since the second half of the 80's, therefore well-known from the customers.

LIMITATIONS

- Reduced flexibility on products with different size (change format parts);
- Higher linear speed of the packs in transit into the machine during the handle application cycle;
- Low flexibility respect to the variation of the handle size on different formats;
- Problems while using the "prelaminated carry-handle" on different pack formats "unbalanced adhesive on packs";
- Problems on performances, efficiency and application accuracy due to the variation of the pneumatic cylinders reaction in the medium term;
- High compressed air consumption level.

Machine data

M. AU TECHNICAL FEATURES

Electric requirements	400 V, 50 hz, 15 kVa, Power requirement: 8 kw, Ip 44
Compressed air requirements	6 bar minimum, clean, dry, consumption: 12 m³/h
Format changeover	From 5 to 10 minutes according to the packing arrangement.

Machine layout

