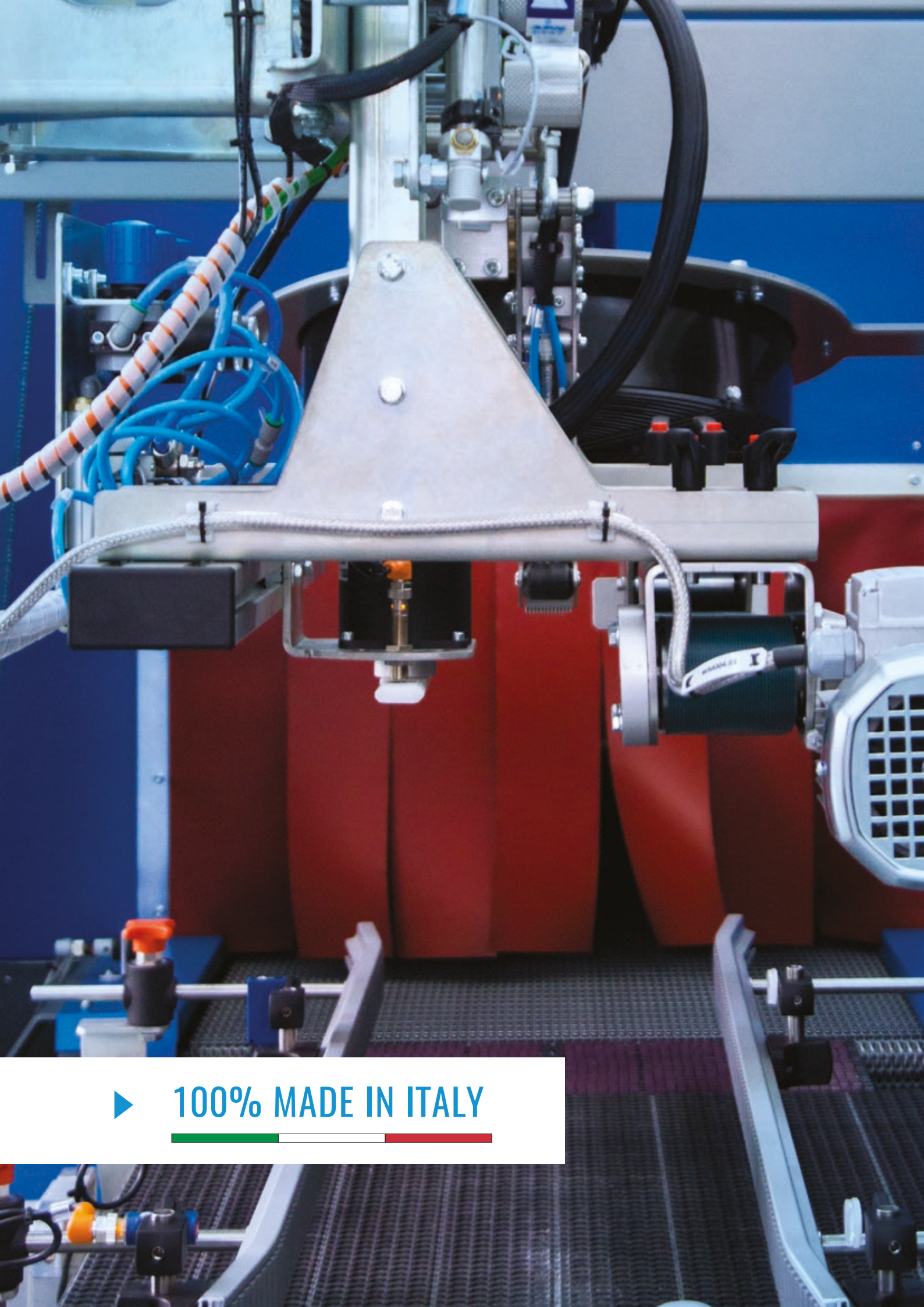
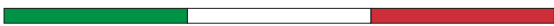


BE DIFFERENT
IN A CROWDED PACKAGING WORLD

HANDLE APPLICATORS PRODUCT RANGE



▶ 100% MADE IN ITALY



MACTEC HANDLE APPLICATORS NUMBERS

<p>6</p> <p>Families of Handle Applicators</p> 	<p>+ 20</p> <p>Models</p> 	<p>2</p> <p>Know-how: Handle applicator + Self-adhesive carry handle</p> 
<p>100</p> <p>Packs per minute (*)</p> 	<p>18.000</p> <p>Packaging applications per hour (**)</p> 	<p>19 kg</p> <p>Up to 19 kg packaging hold (***)</p> 
<p>3</p> <p>Configurations: Single, double and triple lane</p> 	<p>2</p> <p>Technologies: pneumatic and electronic</p> 	<p>100%</p> <p>Consumables available on the market</p> 

(*) Top application in single lane configuration. The speed of application may vary according to the kind of packaging.

(**) Top application in triple lane configuration. The speed of application may vary according to the kind of packaging.

(***) Data from Alimac, international manufacturer of self-adhesive carry handle.

This data may vary according to the application and the kind of packaging.



MACTEC HANDLE APPLICATORS

Mactec Handle Applicators are designed for **energy savings**.

Mactec is an Italian manufacturer of **automatic Handle Applicators** (or Handle Applying Machines), for the application of innovative self-adhesive carry handles on packaging.

All our machines are compliant with the **International safety standards** and are equipped with a complete system of safety device.

The production line will benefit of **operating efficiency** while the Operator will benefit of reduction in labour, time and low budget maintenance.

SINGLE AND MULTI-PACKS

Mactec machines can process a wide range of products of **various dimensions, shapes and surfaces**: all types of multi-packs (Pet bottles, cans, bricks) and single unit products (gallons, carton boxes, etc.) of various dimensions and surfaces.

The **markets** where to apply the adhesive carry handles are various: beverage, food, milk, wine, alcohol, household cleaning, personal hygiene, chemical products and pharmaceutical industries, constructions, and so on.

Handle Applicator.



CORE BUSINESS: TOP QUALITY AND RELIABILITY

The **core-business** of Mactec is Handle Applicators:

- Mactec presents **one of the widest range** of automatic Handle Applicators worldwide.
- Mactec produces **reliable** and **top quality equipment**, thus ensuring the highest levels of Products and Services.
- The **machine/self-adhesive carry handle interaction** is at one of the highest levels on the international market.



A handled packaging with the **self-adhesive carry handle** is easy to grab, lift, hold and carry and improves comfort, customer experience, brand and product communication, logistics operations, product differentiation, and sales.

HANDLE APPLICATORS PACKAGING SOLUTIONS

THE MACTEC SYSTEM: A COMPETITIVE ADVANTAGE.

Mactec works in close contact with Alimac, the international market leader in manufacturing self-adhesive carry handles since 1990.

Both companies are part of the same Corporate Group. The mutual sharing of their **2 core-technologies** is very open and covers the entire manufacturing cycle of Handle Applicators.

The outcome of this synergy is the **Mactec System**. It gives the customer 2 advantages:

- The **highest levels of tape-machine interaction**, resulting in a high quality application while reducing critical issues and ensuring process continuity.
- Fully customized and **Complete Turnkey Solutions** that combine key-elements: the machine solution, the self-adhesive carry handle solution and a wide array of services related to both technologies.



*Handle Applicators and
Self-adhesive carry handle.*

THE TURNKEY SOLUTION

This **ready-to-buy solution** amounts to a complete tailor-made packaging project where the customer is involved at all steps.

The customer will benefit from **a single point of contact** to guarantee easy communication and support for all kinds of issues: machine, carry handle tape, packaging application, production line, consulting, customer care.

It features 8 key activities:



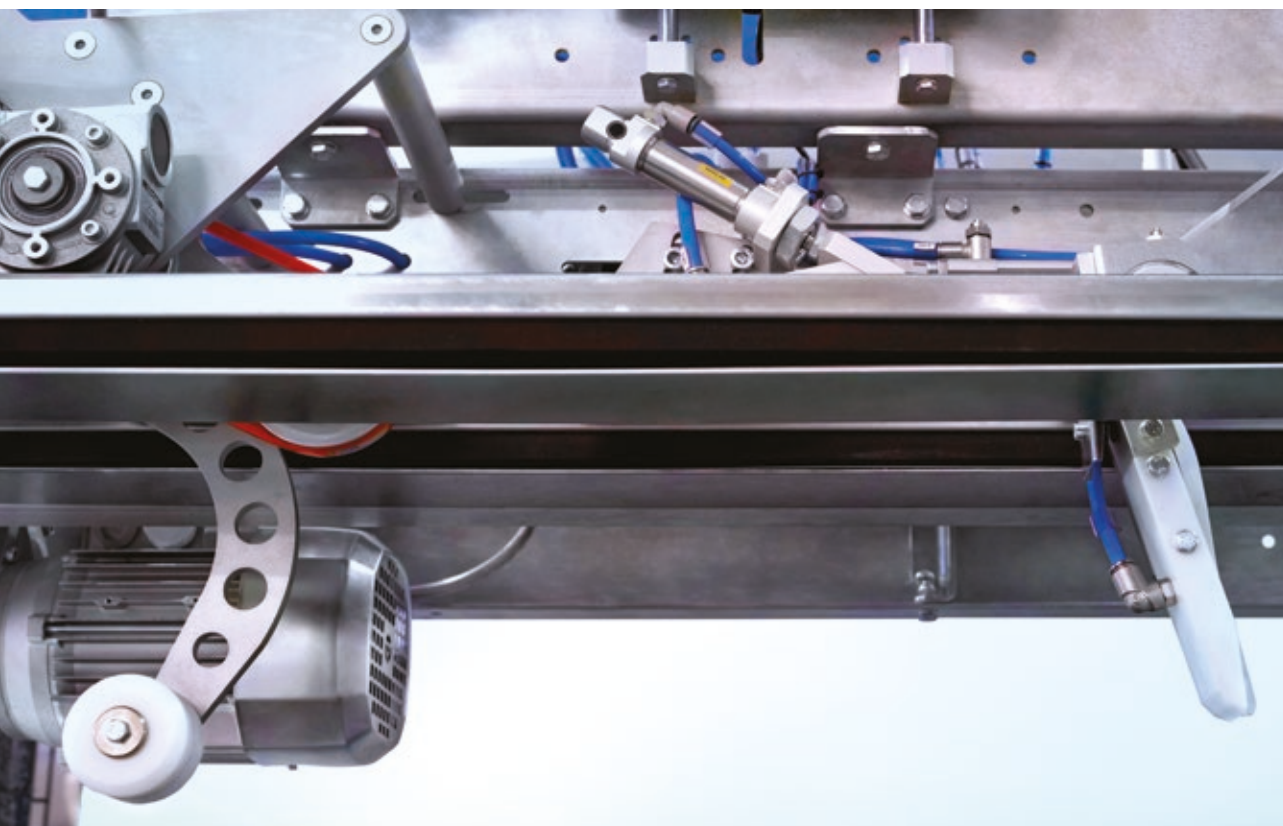
The Turnkey Solution is featured by 8 key activities. 

HANDLE APPLICATORS KEY FEATURES

SUITABLE FOR WHATEVER PRODUCTION LINE

Not only **large companies**, but also **small and medium production plants** can easily place the Handle Applicator on their lines:

- The Mactec Handle Applicators are **space-saving**, designed and built for **minimal global impact** on the existing production line.
- Mactec machines match the needs of any production line **up to 100 packs per minute** (Top and Side applications).
- Dimensions are **customizable** and **special projects** can be carried out on demand.
- The **Consulting Service** optimizes the placement of the machine in the existing production line.



Top application head.

EASE AND ECONOMIC MAINTENANCE

Maintenance is easy and cost-effective:



Easy access to the inner parts. The intervention of the operator is quick and easy: time-saving and reduced labour.



Easy disassembling of the parts: no waste of time.



The **Mactec System** reduces critical issues thanks to the best cutting process, tape positioning and tension.



The **same spare parts** are used for the right side and the left side of execution, and for all the models within the same family.



The **Mactec Maintenance Program** is designed to extend the machine's lifetime and guarantee ROI.



Minimal maintenance time: budget control, no waste of time, and reduced labour.

All the Handle Applicators can be used as simple "conveyor belt" on the production line, without necessarily applying the self-adhesive carry handle.

PERFORMANCE CONTROL SYSTEM

Mactec Handle Applicators are equipped with many performance control systems.



Infeed alarm. When the machine does not receive the packs from the production line for a pre-set amount of time, the machine shuts down.

Jamming alarm. When there is a slow-down of the handled packs flow towards the palletizer (or another machine), the Handle Applicator stops.

Alarm for **failed coupling** of the back insert (usually cardboard) on the adhesive carry handle. This alarm is activated in the case of traditional self-adhesive carry handles requiring the coupling phase.

Alarm for **failure to apply** the carry handle on the packaging.



Control System.

TECHNOLOGIES

Mactec Handle Applicators are operated by 2 technologies:

- **Pneumatic** models. These work with a **compressed air system**. Designed for production lines with a capacity of up to 75 packs per minute (top application, single lane), they guarantee an excellent cost/performance ratio.
- **Electronic** models. These use a modern servo-driven technology: the application head has one arm operated by **two servomotors**. This is the best solution for precise high-speed applications (up to 100 packs per minute).

PACKAGING FORMAT CHANGEOVER

All the Handle Applicators are equipped with a **Plc software** (= program logic controller) with an **easy-to-use multi-language touch screen** that manages and checks all the machine operations.

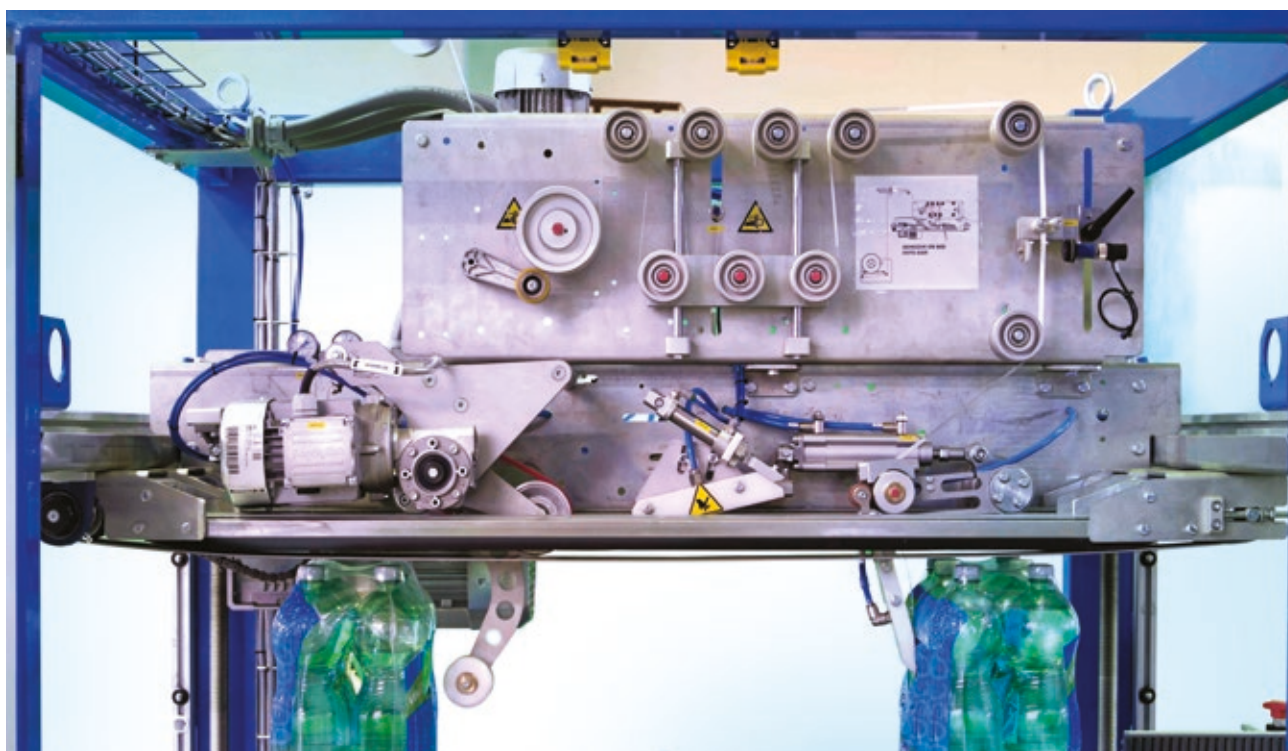
The packaging formats are first set up via the touch screen thereby reducing time and effort.

It is sufficient to **select a new format** on the touch screen.

It is also possible to connect the Handle Applicator via **internet** to make checks and assistance operations in remote.



▶ *Plc software.*



▶ *Pneumatic models are the best solution for applications up to 75 packs per minute.*

A COMPLETE PRODUCT RANGE OF HANDLE APPLICATORS

100% Made in Italy.

The last generation of Mactec Handle Applicators **meets all the market needs** in terms of speed, applications, shape and dimensions of the packaging, kind of technology, machine dimensions, and other relevant elements.

All the models are **automatic** and available in **single, double** and **triple lane**.

The Mactec Handle Applicators range consists of **6 product families**, each of them includes various models and versions:

TOP FAMILY

The traditional application on the top of the packaging



SIDE FAMILY

Application at 90°, on the side of the packaging



OBLIQUE FAMILY

Application up to 30° of the packaging



CONSUMABLES: SELF-ADHESIVE CARRY HANDLES

The **handle width** ranges from 25 mm to 37,5 mm. The hold is **up to 19 kg** (*).

Self-adhesive carry handles can be transparent, in a solid color or printable in various colors: logo, brand, slogans, writings, sale promotions, QR codes, barcodes. Mactec **recommends using Alimac self-adhesive carry handles**, as they are already tested

on the machines, but our customers are free to choose and apply whatever other consumable products they find on the market.

Mactec Handle Applicator equipment applies all kind of self-adhesive carry handles in commerce:

- **Standard (Traditional)**. This solution requires the coupling process of the two distinct components (self-adhesive tape + back insert) on the Handle Applicator.
- **Pre-laminated (Pre-made or Pre-handled)**. This handle does not require the coupling of the two components by the Handle Applicator, as it has already been manufactured as one piece, a "ready to use" product.

CARTON FAMILY

Application on carton boxes of various dimensions and surfaces



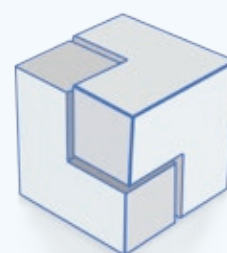
BOTTOM FAMILY

Application on the bottom of water dispensers



SPECIAL PROJECTS

Double-head Handle Applicator



(* Source: Alimac Group Spa, 2016. That data can vary according to the kind of packaging.



TOP FAMILY

The Top Application Family applies the self-adhesive carry handle **on the top** of the packaging.

Both pneumatic and electronic models are available in single, double and triple lane versions. The top application is very versatile and well-suited for many sectors, such as Food & Beverage, Tissue, and others.

Technical Details

MODEL	SPEED (ppm)
M1 - A	20 - 25
M2 - A	40
M3 - A	55
M4 - A	75
M5 ELECTRO - A	100
M2 - B	40 + 40
M3 - B	55 + 55
M4 - B	75 + 75
M5 ELECTRO - B	100 + 100

A: single lane - B: double lane

ppm: packs per minute (in function of product dimensions)



USAGE

This application makes easier to grab and lift the **packaging on the ground**.

Consumers benefit from higher levels of customer care for handling **heavy packaging**.

It facilitates grabbing and carrying **bulky products**: increased comfort and impulse purchase effect.

SIDE FAMILY (90°)

The Side Family applies self-adhesive carry handle with an angle up to **90°**, **on the side of the packaging**. Pneumatic and electronic models are available in single, double and triple lane versions.



USAGE

The side application is for all packaging where the shape or size makes a **lateral handle more comfortable** for lifting, grabbing and carrying the packaging.

One of the most common usages is for **slim and tall packaging** (i.e. Tissue sector).

It is also frequently used in **multi-packs**, such as the 24 can pack (i.e. Beverage sector).

This application is useful for **pulling the packaging off a crowded shelf**, as it is easier to notice it, grab it, and pull.

Technical Details

MODEL	SPEED (ppm)
M1 S - A	20 - 25
M2 S - A	40
M3 S - A	55
M4 S - A	75
M5 S ELECTRO - A	100
M2 S - B	40 + 40
M3 S - B	55 + 55
M4 S - B	75 + 75
M5 S ELECTRO - B	100 + 100

A: single lane - B: double lane

ppm: packs per minute (in function of product dimensions)



OBLIQUE FAMILY (30°)

The Mactec Oblique Family applies the self-adhesive carry handle with an angle **up to 30°**.

Pneumatic and electronic models are available in single, double and triple lane versions.

All these models include an **Arc Shape Device** to have always a self-adhesive carry handle with a perfect "loop" shape, ready to be carried

Technical Details

MODEL	SPEED (ppm)
M1 TL - A	20 - 25
M1 TLH- A	50
M2 TLH- A	70
M5 TL ELECTRO - A	95
M1 TL - B	25 + 25
M1 TLH - B	50 + 50
M2 TLH - B	70 + 70
M5 TL ELECTRO - B	95 + 95

A: single lane - **B:** double lane - **H:** higher speed

ppm: packs per minute (in function of product dimensions)

Oblique application for single bottle 4-5 lt (other formats to be tested)



USAGE

Frequent application on **gallon bottles**: they can be stacked without damaging the carry handle.

Increasing of **usage occasions of the product**: it is easier and more comfortable to carry the gallons for outdoor activities (excursions, events, and so on).

Impulse purchase effect: more gallons (or packs) with the same hand in one easy gesture.

Other common applications are on **multi-packs**, such as carton bricks and small size packaging in bundles.

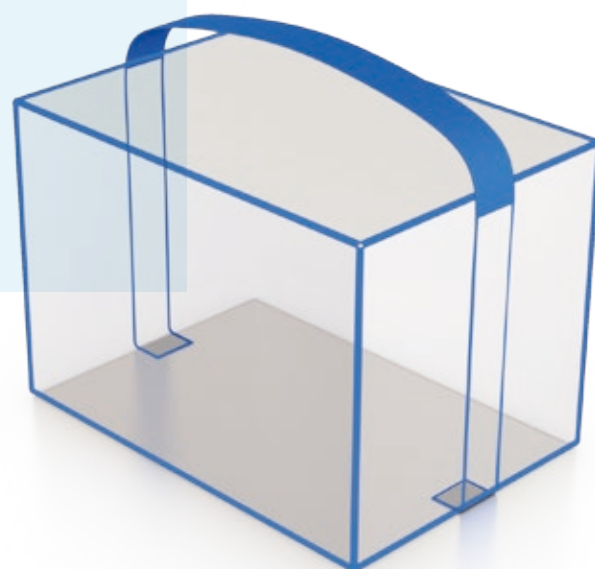
CARTON FAMILY

(Wrap around applying machines)

The Carton Family applies the self-adhesive carry handle on **carton boxes**, as they are generally very uncomfortable to grab, lift and carry, both in logistics operations and for end-consumers.

This application requires great attention, because there are **diverse kinds of cardboards and many surface treatments**.

The **application head** is equipped with a special long arm to apply the handle underneath the pack. The **main conveyor** is divided into 2 smaller parallel conveyors: in the gap the long arm applies the self-adhesive carry handle.



▶ USAGE

This application is **from the top to the bottom** of the carton box, wrapping under the box for 20-30 mm per each side.

These models apply a **longer self-adhesive carry handle** with an extraordinary width (up to 37.5 mm), ideal, for example, for corrugated cartons.

Useful as **material reinforcement** and **superior comfort** of carton boxes already equipped with a paperboard handle.

A foamed self-adhesive carry handle is also available.

Technical Details

MODEL	SPEED (ppm)
M1 WRAP - A	20 - 25
M1 WRAP H - A	30 - 35
M5 WRAP ELECTRO - A	50
M1 WRAP - B	25 + 25
M1 WRAP H - B	30 + 30
M5 WRAP ELECTRO - B	50 + 50

A: single lane - B: double lane - H: higher speed

ppm: packs per minute (in function of product dimensions)

BOTTOM FAMILY



The Bottom Family applies the self-adhesive carry handle on the **bottom of the packaging**, making it easy to carry while capsized.

The **application head** is positioned on the bottom of the machine instead of on the top. The **conveyor belt** is divided into two parallel belts to allow space for the transit of these large bottles.

The Bottom family offers pneumatic and electronic models in single, double and triple lane versions.

Technical Details

MODEL	SPEED (ppm)
M1 BO - A	25
M2 BO- A	40
M3 BO- A	55
M4 BO- A	75
M5 BO ELECTRO - A	90
M1 BO - B	25 + 25
M2 BO - B	40 + 40
M3 BO - B	55 + 55
M4 BO - B	75 + 75
M5 BO ELECTRO - B	90 + 90

A: single lane - B: double lane

ppm: packs per minute (in function of product dimensions)



USAGE

This application is very useful for grabbing, lifting, and positioning **mineral water bottles** on the dispensers located in offices all over the world.

Improvement of logistics: **less effort and time** to carry and place on the dispenser.

The **weight** of the bottle held is up to **19 kg**. Several tests were carried out.

It is applicable to any pack requiring a hold on the bottom.

SPECIAL PROJECTS

As Special Project, Mactec also manufactures a handle applicator with **double application head**, for example Top and Side, mounted on the same machine.

This solution is very versatile, as it is useful in production lines where there is insufficient space available for two machines and there are many different formats requiring diverse applications.

The **Combi machine** is a special project: the combination of the Handle Applicator + Shrink Wrapper as a unique machine.

The Combi makes possible the post-oven application of the self-adhesive carry handle, giving 3 key-advantages:

- Application of any kind of self-adhesive carry handle in commerce.
- Performing all the 5 applications: top, side, oblique (tilted), carton and bottom.
- Use of the arc-shape device, very useful for the "loop" of the self-adhesive carry handle on top flat packaging and oblique applications (i.e. gallons).



Special Project: Combi.



MACTEC OPTIONS

All models.



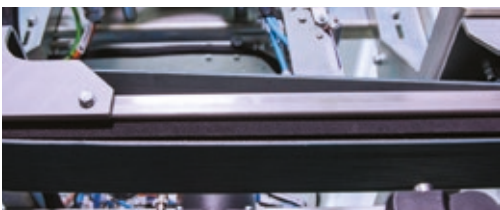
Web connection (via Ethernet), for remote assistance.



External electrical cabinet, for production lines with centralized electrical panels.



Air conditioning on electrical cabinet, for warm countries.



Motorized height adjustment on handle applying head, when the operator changes the packaging format.



Adjustable distance between the handle applying head center-lanes, for double lane models.

Handle-loop shaping device (Arc), it facilitates making the arched shape of the carry handle.

Stainless Steel frame.



SERVICES AND CUSTOMER CARE

Mactec is a customer-oriented company. It provides **full 360° worldwide support** to each and every Customer to help optimize their investments, including:

- **Pre-sales Consulting.**
- **Installation Services.**
- **Training.**
- **Maintenance Service Program.**
- **Remote and Local Assistance.**
- **Spare Parts.**

The **Maintenance Program** is a routine maintenance service to ensure 100% efficiency over the long term and optimize the investment.

Minimizing and control of the operational **budget**.

Slow-down the wear on the machine with timely interventions and expert advice.

More time for the customer to spend growing his own business.

▶ *All the services are provided in the local language.*

DIMENSIONS & TECHNICAL DATA

DIMENSIONS M (top application)

STANDARD VERSIONS (mm)	M1-A	M1-side	M2-A	M3-A	M4-A	M5-A	M2-B	M3-B	M4-B	M5-B
L1 (conveyor length)	1600	2230	2400	2400	2800	3272	2400	2400	2800	3274
L2 (total length)	2460	3000	3260	3260	3660	3272	3260	3260	3660	3274
W (width)	1200	1400	1465	1465	1465	1337	2205	2205	2205	2764

A: single lane - B: double lane

Dimensions of other Families are under request and vary according to the type of packaging.

Technical Data M1 (all the families and related models)



Machine speed	up to 25 packs/min per lane (*)
Installed Power	2,5 kW ÷ 5k W (single/double lane)
Power Supply	400 VAC - 50Hz - 3Ph + N + G
Auxiliary Voltage	24 V DC/AC
Electrics IP	IP54
Air Supply	6 bar
Air consumption	100 NL/min ÷ 200 NL/min
Working temperature	+ 8°C ÷ + 40°C

(*) M1 TLH: up to 50 packs/min per lane - M1 Wrap H: up to 35 packs/min per lane

Technical Data **M2, M3, M4** (all the families and related models)

Machine speed	up to 75 packs/min per lane
Installed Power	2 kW ÷ 3,4 kW
Power Supply	400 VAC - 50Hz - 3Ph + N + G
Auxiliary Voltage	24 V DC/AC
Electrics IP	IP54
Air Supply	6 bar
Air consumption	250 NL/min ÷ 960 NL/min
Working temperature	+ 8°C ÷ + 40°C

Technical Data **M5 ELECTRO** (all the families and related models)

Machine speed	up to 100 packs/min per lane
Installed Power	9 kW ÷ 15 kW
Power Supply	400 VAC - 50Hz - 3Ph + N + G
Auxiliary Voltage	24 V DC/AC
Electrics IP	IP54
Air Supply	6 bar
Air consumption	100 NL/min ÷ 250 NL/min
Working temperature	+ 8°C ÷ + 40°C



WHY MACTEC?

7 GOOD REASONS TO CHOOSE A MACTEC HANDLE APPLICATOR



The core business of Mactec is Handle Applicators: high quality and reliability.



Mactec System is unique on the market: the best synergy and combination of 2 core-businesses of the same Corporate Group, Handle Applicator + Self-adhesive tape carry handle (Alimac).



Turnkey Solution: just one focal point at 360° for any technical and marketing aspect of the project.



High Value Proposition: full range of Handle Applicators, Applications, Services.



High Performance: application is safe, fast, precise, regular on a wide range of single packs and multi-packs.



Customer-oriented company: consulting, tailor-made solutions, customer care, customer as a long-term partner.



A full range of Products, Services and Applications.





7 GOOD REASONS TO APPLY A SELF-ADHESIVE CARRY HANDLE

The self-adhesive carry handle gives advantages to **Managers** who want:

- To **innovate** their packaging and **stand out** over competitors.
- To improve the **Customer Experience** with the Brand offering an additional “caring tool” and removing the negative effects of alternative handling systems.
- To **make shopping easier** to some end consumers in handling heavy packaging, ground-level packaging, large-size packaging.
- To increase **Sale Volumes**: more packages in the same hand in one easy gesture (i.e. gallons).
- To increase **Impulse Buying**: more visibility, reduction of purchase barriers (easiest levels of grasping, lifting, and carrying).
- To improve **Communication** of the brand, product and sales promotion: more space, more packaging visibility and no need to change the original packaging.
- To make **Logistics and In-store operations** easier and faster, saving money and reducing labour.



► *The self-adhesive carry handle on the packaging offers many advantages to Retailers, Brand Manufacturers and Consumers.*

PACKAGING TRENDS

Packaging with self-adhesive carry handle is right on trends.

IT IS MORE ACCESSIBLE

Minimizing the force.

Maximizing the comfort.



IT IS MORE CONVENIENT

Ready to use with no further processing.

Easy to use.

Single hand use.

Come with functionality.



IT IS ENVIRONMENT FRIENDLY

No plastic bags needed.

Light and thin: no layers, no additional boxes, few components.

Recyclable.



IT IS SMART PACKAGING

Giving more information.

Use of technology (QR code, Bar code).





Handle Applicator, model M5 ELECTRO.





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