

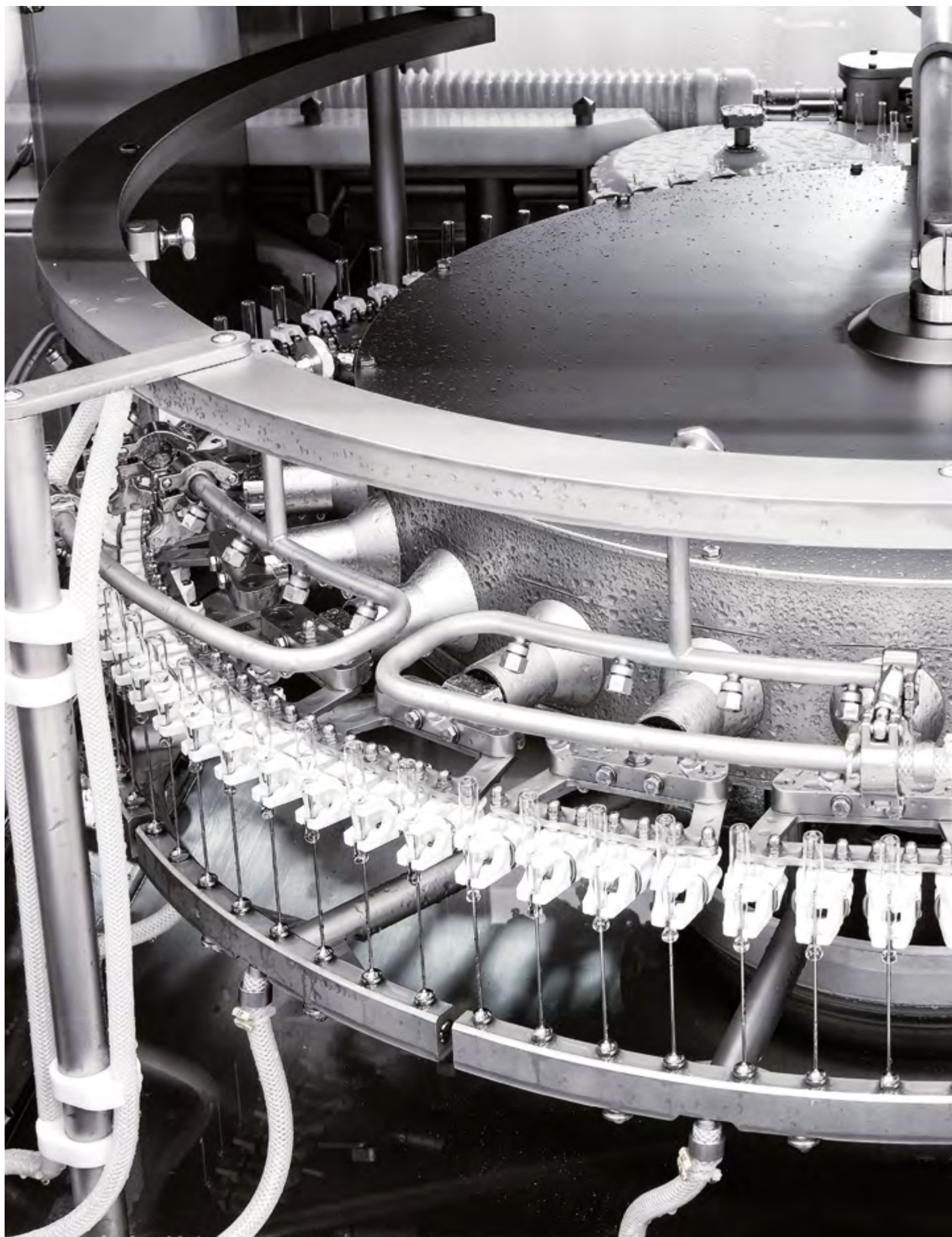


PACKAGING MACHINERY SOLUTIONS
FOR VACCINES IN BOTTLES



MARCHESINI
— GROUP —

marchesini.com





01 | ASEPTIC PROCESSING SOLUTIONS

- 10 INTERNAL WASHING | **WR16 - WR24**
- 11 DEPYROGENATION | **DEPYR**
- 12 FILLING & STOPPERING | **STERY-LA - STERY-LC**
- 13 ALU CAPPING | **CAPSY-LC - ML670/12**
- 14 EXTERNAL DECONTAMINATION | **WRE**
- 15 CODING | **CODY**

02 | INSPECTION SOLUTIONS

- 17 AUTOMATIC INSPECTION AND LEAKTEST MACHINE | **RS1 - RS2**
- 18 AUTOMATIC INSPECTION AND LEAK TEST MACHINE | **N450-LT**
- 19 AUTOMATIC INSPECTION, LEAK TEST AND LABELLING MACHINE
RS1-LAB - RS2-LAB

03 | LABELLING SOLUTIONS

- 21 ROTARY LABELLER SERIES DOUBLE TRAY FEEDER TM3 | **RL-F300 - 500 - 800**
- 22 LINEAR LABELLERS | **SL-F425 - BL-F425**

04 | SECONDARY PACKAGING SOLUTIONS

- 25 DEEP-DRAW THERMOFORMING MACHINES | **FB220**
- 26 INTERMITTENT MOTION CARTONER SERIES | **MA80-N**
- 27 CONTINUOUS MOTION CARTONER SERIES | **MA155 - MA255**
- 28 CONTINUOUS MOTION CARTONER SERIES | **MA400**
- 29 CASEPACKER WITH AGGREGATION UNIT | **BESTPOCKET**
- 30 CASEPACKER - PALLETIZER | **MCP840**

THIS IS A UNIQUE CONCENTRATION
OF RESEARCH, HOPE IN
THE FUTURE, HUMANITY
AND SENSE OF COMMUNITY.
IT IS MARCHESINI GROUP'S
COMMITMENT TO BEING A PART
OF THE HUGE CHALLENGE WE
MUST OVERCOME TOGETHER.
TODAY MORE THAN EVER BEFORE.

THIS IS OUR CONTRIBUTION TO
A BETTER FUTURE.



OUR BATTLE IN A BOTTLE

DISCOVER
MARCHESINI GROUP'S
PACKAGING LINES FOR
VACCINES.

marchesini.com



Do you wish
to know more?
Scan QR code.



MARCHESINI
— GROUP —

INSPIRED BY THE EXTRAORDINARY

THE MARCHESINI GROUP DESIGNS AND BUILDS STAND-ALONE MACHINES AND CUSTOMIZED LINES FOR PACKAGING OF PHARMACEUTICALS AND COSMETICS.

SINCE MASSIMO MARCHESINI ASSEMBLED HIS FIRST CARTONING MACHINE IN A GARAGE BACK IN 1974, THE GROUP HAS BEEN TRANSFORMED FROM A LOCAL BUSINESS INTO A "COMPACT" MULTINATIONAL ENTERPRISE, THANKS TO MERGERS AND ACQUISITIONS OF COMPLEMENTARY COMPANIES. TODAY, THE MARCHESINI GROUP CATERS FOR THE WHOLE PACKAGING PROCESS OF PHARMACEUTICALS AND COSMETICS, FROM START TO FINISH. THE FINISHED PRODUCT IS A COMBINATION OF CRAFTSMANSHIP INTEGRATED WITH ROBOTICS AND TECHNOLOGY.

THIS RESULT HAS BEEN ACHIEVED THANKS TO THE EXPERTISE OF THE GROUP'S BRANCHES IN ITALY, WHICH SPECIALIZE IN DESIGNING AND MANUFACTURING PACKAGING MACHINES WITH SPECIFIC PRODUCTION TECHNOLOGIES.

CORIMA DIVISION

CO.RI.M.A., founded in Siena in 1979, produces specific technologies for the aseptic filling and packaging of vials, bottles and syringes containing vaccines. Its solutions range from washing machines to guarantee perfect internal and external cleaning of containers, to the most advanced technologies for filling and capping of SPV vials containing liquid or freeze-dried products. Lastly, the company produces continuous motion machines designed for printing codes on vials or on cap/seals with camera verification.



CMP PHAR.MA

CMP Phar.ma, based in Vicenza, has been producing machines for the inspection of liquid, freeze-dried or powdered products in ampoules, vials and pre-filled syringes since 1969. These solutions can handle between 100 and 450 pieces per minute and they can be combined with a leak test unit.



BLISTER & FARCON DIVISION

The Farcon Division, established in 1968 and located in Carpi, is specialized in manufacturing machines and lines for packaging and forming deep-draw trays. The deep-draw tray forming is performed by lines designed to package ampoules, syringes and vials in pharmaceutical production environments with medium-high output.



NERI DIVISION

The Neri Division, located in Barberino di Mugello, is specialized in the production of sterilization tunnels and machines for applying self-adhesive labels to a wide range of products. These solutions include machines with one or two labelling heads for the application and verification of self-adhesive labels on glass bottles, vials and ampoules of different shapes and sizes.

In terms of secondary packaging, the Marchesini Group's cartoners offer the best solutions for handling, stacking and gently inserting the products into cartons with the utmost precision, thanks to quick-fit links to different types of automatic product feeding units.



KEY POINTS

Balcony-style

facilitates innovative line installation, containers can be transported without friction, and cleaning surfaces is simple and easy.

All machines comply with **GMP** and **FDA** guidelines.

Wall installation

enables maintenance to be carried out from the back-side of the machines in a non-classified technical environment.

New models

are constantly being developed in our **in-house R&D**

department.

High-speed machines

provide solutions aimed at **reducing total changeover time** and maximising the pharmaceutical process performance.

Fully automated In Process Controls

and containment cabinets in

Isolation Technology

have been implemented, to reduce the risk of microbial contamination and minimize operator interference during the **aseptic process**.

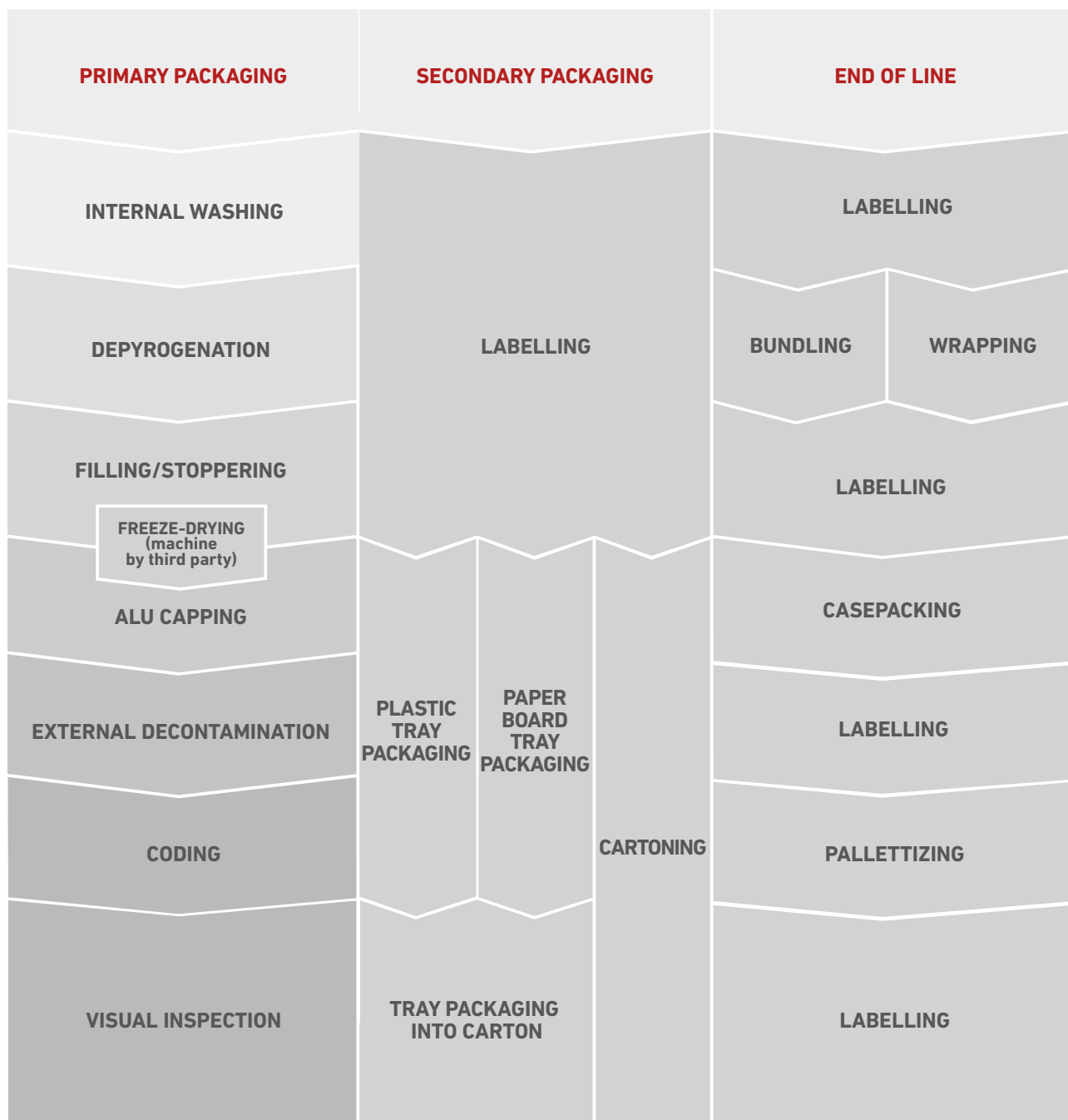


MARCHESINI
— GROUP —



01 | ASEPTIC PROCESSING SOLUTIONS
VIALS

PACKAGING PROCESS



INTERNAL WASHING

WR16 - WR24

Rotary continuous motion machines for internal washing and drying of ampoules and vials for Small Volume Parenteral (SVP).

- 8 internal and 3 external washing/blowing stations
- Pre-washing in Ultrasonic Bath
- Water Recycling

- Automatic drainage and drying
- Container siliconizing



OUTPUT

3.000 / 24.000 pcs / h

PRODUCT RANGE

Ampoules 1 ml / 25 ml

Vials 2R / 500 ml



MADE BY CORIMA

DEPYROGENATION

DEPYR

Depyrogenation Tunnels for ampoules and vials for Small Volume Parenteral (SVP).

- Hot chamber with dedicated make-up unit and air-flow control
- Automatic balancing and air flow adjustment
- Pressure cascade according to process requirements
- Outfeed chamber with dedicated cooling coil and 100% air recycling
- Dry-Heat sterilization of outfeed chamber



OUTPUT

3.000 / 24.000 pcs / h

PRODUCT RANGE

Ampoules 1 ml / 25 ml

Vials 2R / 500 ml



MADE BY NERI

FILLING & STOPPERING

STERY-LA - STERY-LC

Filling and stoppering machines for liquid or lyo products, suitable for filling vials for Small Volume Parenteral (SVP) in an aseptic process with complete or partial closure using rubber stoppers.

- Intermittent or continuous motion
- Balcony or traditional table-top arrangement
- Statistical or 100% weight check In Process Control (IPC)
- Dosing system: rotary piston and/or peristaltic pumps
- Inert gas flushing
- Easy integration with RABS or Isolator
- Cleaning and Sterilization in Place (CIP/SIP)



OUTPUT

3.000 / 24.000 pcs / h

PRODUCT RANGE

2R / 125 ml



MADE BY CORIMA

ALU CAPPING

CAPSY-LC - ML670/12

Alu Cap sealing machines for liquid or lyo products, suitable for closing vials for Small Volume Parenteral (SVP) in an aseptic process.

- Intermittent or continuous motion
- Balcony or traditional table-top arrangement
- Automatic Sealing Pressure Regulation
- Low particle generation
- Easy integration with RABS or Isolator

**OUTPUT**

3.000 / 24.000 pcs / h

PRODUCT RANGE

Vials 2R / 125 ml



MADE BY CORIMA

EXTERNAL DECONTAMINATION WRE

Rotary continuous motion machines for external washing and drying of ampoules and vials for Small Volume Parenteral (SVP).

- Cabinet and duct washing with spray-balls and manual spray-guns
- Automatic drainage and drying
- Dedicated detergent circuit
- Bag-In / Bag-Out filters



OUTPUT

up to 24.000 pcs / h

PRODUCT RANGE

Ampoules 1 ml / 25 ml

Vials 2R / 125 ml



MADE BY CORIMA

CODING CODY

Continuous motion machines for printing codes on vials or caps/seals with camera verification.

- Different code printing positions possible - shoulder, body or bottom of vials; lateral or top side of caps/seals
- Vials transferred by a screw to main starwheel for coding and checking operations
- Vials are held by vacuum systems in the main starwheel to ensure uniform printing and maximum control precision
- Printing head and camera height automatically adjusted from the HMI
- Vial collection in trays



OUTPUT

up to 24.000 pcs / hr

PRODUCT RANGE

Cartridges 1ml / 3 ml

Vials 2R / 125 ml



MADE BY NERI



02 | INSPECTION SOLUTIONS VIALS

AUTOMATIC INSPECTION AND LEAK TEST MACHINE

RS1 200 PCS/MIN – RS2 400 PCS/MIN

Automatic inspection machines based on intermittent motion technology performing tip/cap control, particles, fill level and leak test inspection of injectable products.

Main features:

- Product range:
Ampoules, vials, cartridges from 1 ml to 30 ml
- Production output: 200 pcs/min (RS1), 400 pcs/min (RS2)
- Easy mechanics

Standard inspection:

- Extraneous reflecting and no reflecting particles, fibres, glasses
- Correct filling level
- Leak Test

Optional Inspections:

- Tip/cap cosmetic control (shape, height, black spots, position of the cap)
- Ring/cap colour control
- Colour of the product
- Printing
- Sidewalls glass defects
- Plunger inspection (for cartridges)



Featured Model: RS1- RS2

MADE BY CMP

Indicative inspection speed for different products range RS1:

AMPOULES	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors.
DIN 1ml – 2ml	12.000 pcs/h	
DIN 3ml	11.000 pcs/h	
DIN 5ml	10.000 pcs/h	
DIN 10ml	8.000 pcs/h	
DIN 20ml – 25ml	6.000 pcs/h	
VIALS	PRODUCTION SPEED	Inspection speed can be confirmed only after testing the samples filled with the real product
DIN 2R – 4R	12.000 pcs/h	
DIN 6R – 8R	10.000 pcs/h	
DIN 10R-15R	8.000 pcs/h	
DIN20R – DIN 25R – DIN30R	6.000 pcs/h	

Indicative inspection speed for different products range RS2:

AMPOULES	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors
DIN 1ml – 2ml	24.000 pcs/h	
DIN 3ml	22.000 pcs/h	
DIN 5ml	20.000 pcs/h	
DIN 10ml	16.000 pcs/h	
DIN 20ml – 25ml	12.000 pcs/h	
VIALS	PRODUCTION SPEED	
DIN 2R – 4R	24.000 pcs/h	
DIN 6R – 8R	20.000 pcs/h	
DIN 10R-15R	16.000 pcs/h	
DIN20R – DIN 25R – DIN30R	12.000 pcs/h	

AUTOMATIC INSPECTION AND LEAK TEST MACHINE

N450-LT 450 PCS/MIN

Automatic inspection machine based on continuous motion technology performing tip/cap cosmetic, particles, fill level and leak test inspection of injectable product.

Main features:

- Product range: ampoules, vials, cartridges from 1 to 30 ml
- Production output: 450 pcs/min
- Single turret in continuous motion
- Independent rotations (24 brushless motors) up to 5.000 rpm
- Recirculation function

Standard inspection:

- Extraneous reflecting and no reflecting particles, fibres, glasses
- Correct filling level
- Leak Test

Optional Inspections:

- Tip/cap cosmetic control (shape, height, black spots, position of the cap)
- Ring/cap colour control
- Colour of the product
- Printing
- Sidewalls glass defects
- Plunger inspection (for cartridges)



Featured Model: N400

Indicative inspection speed for different products range:

AMPOULES	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors. Inspection speed can be confirmed only after testing the samples filled with the real product
DIN 1ml – 2ml	27.000 pcs/h	
DIN 3ml	27.000 pcs/h	
DIN 5ml	22.000 pcs/h	
DIN 10ml	20.000 pcs/h	
DIN 20ml – 25ml	16.000 pcs/h.	
VIALS	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors. Inspection speed can be confirmed only after testing the samples filled with the real product
DIN 2R – 4R	27.000 pcs/h	
DIN 6R – 8R	20.000 pcs/h	
DIN 10R-15R	16.000 pcs/h	
DIN20R – DIN 25R – DIN30R	12.000 pcs/h	

MADE BY CMP

AUTOMATIC INSPECTION, LEAK TEST AND LABELLING MACHINE

RS1-LAB 200 PCS/MIN – RS2-LAB 400 PCS/MIN

Automatic inspection machines performing tip/cap control, particles, fill level and leak test inspection and labelling of injectable products.

Main features:

- Product range: ampoules, vials, cartridges from 1 to 30 ml
- Production output: 200 pcs/min (RS1-LAB); 400 pcs/min (RS2-LAB)

Standard inspection:

- Extraneous reflecting and no reflecting particles, fibres, glasses
- Correct filling level
- Leak Test
- Label Inspection

Optional Inspections:

- Tip/cap cosmetic control (shape, height, black spots, position of the cap)
- Ring/cap colour control
- Colour of the product
- Printing
- Sidewalls glass defects
- Plunger inspection (for cartridges)



Featured Model: RS LAB

MADE BY CMP

Indicative inspection speed for different products range RS1-LAB:

AMPOULES	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors.
DIN 1ml – 2ml	12.000 pcs/h	
DIN 3ml	11.000 pcs/h	
DIN 5ml	10.000 pcs/h	
DIN 10ml	8.000 pcs/h	
DIN 20ml – 25ml	6.000 pcs/h	
VIALS	PRODUCTION SPEED	Inspection speed can be confirmed only after testing the samples filled with the real product
DIN 2R – 4R	12.000 pcs/h	
DIN 6R – 8R	10.000 pcs/h	
DIN 10R-15R	8.000 pcs/h	
DIN20R – DIN 25R – DIN30R	6.000 pcs/h	

Indicative inspection speed for different products range RS2-LAB:

AMPOULES	PRODUCTION SPEED	Indicative data. Inspection speed can diverge from the indicated ones depending by several factors.
DIN 1ml – 2ml	24.000 pcs/h	
DIN 3ml	22.000 pcs/h	
DIN 5ml	20.000 pcs/h	
DIN 10ml	16.000 pcs/h	
DIN 20ml – 25ml	12.000 pcs/h	
VIALS	PRODUCTION SPEED	Inspection speed can be confirmed only after testing the samples filled with the real product
DIN 2R – 4R	24.000 pcs/h	
DIN 6R – 8R	20.000 pcs/h	
DIN 10R-15R	16.000 pcs/h	
DIN20R – DIN 25R – DIN30R	12.000 pcs/h	



03

LABELLING SOLUTIONS
LABELLERS

ROTARY LABELLER SERIES

DOUBLE TRAY FEEDER TM3

RL-F300 - RL-F500 - RL-F800

High-speed labelling machines with a rotary star wheel transport system equipped with a rolls adjusting structure to handle a wide range of products.

TM3 Feeder: Automatic no stop double tray loading machine system for vials or similar stable containers.

RL-F SERIES

- In-line belt feeding system
- Self-learning system of label parameters
- Synchronized servo motors

TM3

- Fail-safe logic reject
- Automatic counting function (pieces/tray)
- Possibility of raw by raw or honeycomb arrangement of the products inside trays
- Automatic exchange between full and empty tray, without machine stop



Featured Model: RL-F500

Featured Model: TM3

MADE BY NERI

TECHNICAL DATA	RL-F300	RL-F500	RL-F800
Mechanical speed (pcs/min)	300	500	800
Labelling heads (Nr.)	1	1	1
CONTAINER SIZE			
Product diameter Ø	10 - 32 mm	8 - 32 mm	8 - 54 mm
Product height	40 - 130 mm	40 - 130 mm	35 - 100 mm
LABEL SIZE			
Label height	10 - 60 mm	10 - 60 mm	10 - 75 mm
Label length	13 - 100 mm	13 - 100 mm	25 - 170 mm

MODEL TM3
OUTPUT
up to 30 strokes per minute
BOTTLES SIZE
min. Ø 16 mm
max Ø 50 mm
H 120 mm
TRAYS SIZE
W min. 200 mm, max 400 mm
L min. 350 mm, max 550 mm
H max 120 mm

LINEAR LABELLERS

SL-F425 - BL-F425

Labelling machines with stainless steel frame designed to grant easy access for set-up, inspection and maintenance.

An advanced control system synchronizes the independent servo driven motors and supervises the process for the best, performing and reliable labelling operations.

- Self-learning system of label length, bar code and overprint position
- Motorized unwinder with adjustable loop
- Micrometric adjustment of the label and overprint position
- Self-diagnosis on touch-screen display
- Automatic reject for: missing label, printing and code errors

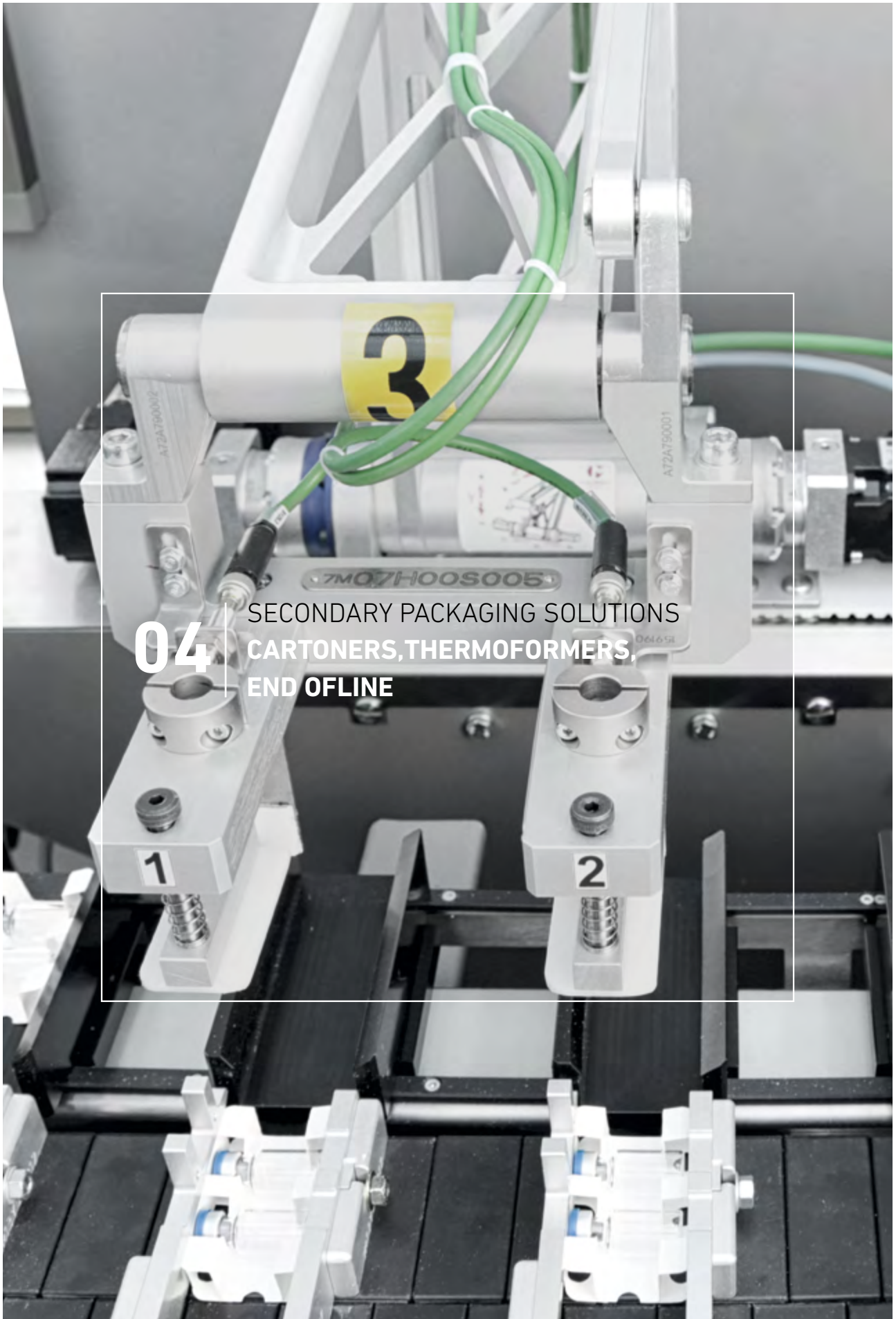


Featured Model: SL-F245

TECHNICAL DATA	SL-F425	BL-F425
Mechanical speed (pcs/min)	400	400
Labelling heads (Nr.)	1	1
CONTAINER SIZE		
Product diameter Ø	15 - 90 mm	15 - 90 mm
Product height	30 - 250 mm	30 - 250 mm
LABEL SIZE		
Label height	10 - 120 mm	10 - 120 mm
Label length	13 - 190 mm	13 - 190 mm

MADE BY NERI





04

SECONDARY PACKAGING SOLUTIONS
CARTONERS, THERMOFORMERS,
END OFLINE

THERMOFORMING MACHINES

FB220

Mechanical intermittent motion fully automatic packaging machine, designed to fit pharmaceutical-production environments, it thermoforms trays for Vials, Ampoules, Syringes and similar products out of thermoformable films.

- Machine speed adjustable from the main HMI, within dedicated recipes
- Easy, tool-less changeover: index change and size related parameters selected from main HMI
- Can be supplied with or without heat-sealing station
- High-speed fully automatic positive product feeding systems are available
- High draw depth (up to 28 mm)



Featured Model: FB220

SIZE RANGE

Film index max./Film width max.

A = film index max 160 mm

B = film width max 184 mm



Max. die-cutting area

A = film index max 154 mm

B = film width max 170 mm



MADE BY FARCON

INTERMITTENT MOTION CARTONER SERIES MA80-N

Intermittent-motion automatic machines with horizontal carton transport, particularly suitable for packaging vials, bottles, deep-draw thermoformed trays or paper trays.

- Versatility and efficiency in a small footprint
- Balcony design
- Synchronized servo motors
- User-friendly format changeover
- Cross control product-carton-leaflet



Featured Model: MA80-N

TECHNICAL DATA	MA80-N
Pitch	160 mm
Output (cartons/minute)*	120
CARTON SIZE	
Width (a)	30 - 130 mm
Height (b)	20 - 100 mm
Length (h)	75 - 200 mm
OPTIONS	
"G" Long Base	✓
"L" large conveyor	-
"L+G" Large conveyor and Long base	✓

(*) The output depends on product characteristics, feeding groups and installed accessories.

"G": Longer conveyor to perform extra steps.

"L": Larger conveyor to machine products with wider "h" length.

CONTINUOUS MOTION CARTONER SERIES

MA155 - MA255

Continuous motion medium-speed horizontal cartoning machines, particularly suitable for packing vials, blister, and bottles.

- Versatility and efficiency in a small footprint
- Balcony design for easy access
- Oil-bath main drive units
- Synchronized servo motors
- Motorized adjustment of carton length quota
- User-friendly size changeover
- Cross control product-carton-leaflet



Featured Model: MA255 fully configured

TECHNICAL DATA	MA155	MA255
Pitch	127 mm	127 mm
Output (cartons/minute)*	140	180
CARTON SIZE		
Width (a)	25 - 100 mm	25 - 100 mm
Height (b)	15 - 85 mm	15 - 85 mm
Length (h)	65 - 150 mm	65 - 150 mm
OPTIONS		
"G" Long Base	✓	✓
"L" large conveyor	✓	✓

(*) The output depends on product characteristics, feeding groups and installed accessories.

"G": Longer conveyor to perform extra steps.

"L": Larger conveyor to machine products with wider "h" length.

CONTINUOUS MOTION CARTONER SERIES

MA400

Continuous motion high-speed horizontal cartoners, particularly suitable for packing vials and bottles, blister and syringes.

- Versatility and efficiency in a small footprint
- Balcony design
- Oil-bath main drive units
- Synchronized servo motors
- Motorized adjustment of carton length quota
- Carton opening by rotating drum
- User-friendly format changeover
- Cross control product-carton-leaflet



Featured Model: MA400

TECHNICAL DATA	MA400
Pitch	95,25 mm
Output (cartons/minute)*	400
CARTON SIZE	
Width (a)	25 - 70 mm
Height (b)	15 - 85 mm
Length (h)	65 - 150 mm
OPTIONS	
"G" Long Base	✓
"L" large conveyor	✓

(*) The output depends on product characteristics, feeding groups and installed accessories.

"G": Longer conveyor to perform extra steps.

"L": Larger conveyor to machine products with wider "h" length.

CASEPACKER WITH AGGREGATION UNIT BESTPOCKET

Automatic casepacker with horizontal infeed and an extremely compact layout.

The Bestpocket combines innovation and consolidated packing solutions. The fast format changeover plus customizable outfeeds enable a wide range of products to be processed.

This machine can be easily equipped with DATAMATRIX verification camera and multilevel parent-child aggregation system to aggregate cartons in a box with a serialized



TECHNICAL DATA	BESTPOCKET
Output (Case/Min)	7
Product Width "A"	20 - 250 mm
Product Height "B"	16 - 150 mm
Product Length "H"	55 - 250 mm

MADE BY PACKSERVICE

CASEPACKER - PALLETIZER

MCP840

Automatic horizontal Casepacker-Palletizer combining in a single, compact monobloc the operations of packing products in cases then palletizing them.

- Compact, ergonomic, reliable and sturdy, and versatile thanks to the use of robotised SOLUTIONS
- All operations are fully automated, performed by brushless motors and controlled by a PC



PRODUCT	CASE	PALLET
a = 20 >150 mm b = 15 >120 mm h = 60 >250 mm	a = 160 >500 mm b = 120 >350 mm h = 120 >350 mm	y = 1.200 mm x = 800 >1.000 mm (standard configuration*) z + w = 1.550 mm (standard configuration*)

(*) Out-of-standard dimensions can be handled upon request



The technical specifications given in this catalogue are subject to change without prior notice or liability.

Size range may vary in accordance with the different applications.

The Marchesini Group constantly updates its products to meet market needs.



MARCHESINI
— **GROUP** —



MARCHESINI
GROUP



NERI
MARCHESINI
GROUP



CMP
MARCHESINI
GROUP



BLISTER &
farcon
MARCHESINI
GROUP



PACK
SERVICE
MARCHESINI
GROUP

Marchesini Group S.p.A.

Via Nazionale, 100 - 40065 Pianoro - BO - Italy
T. +39 051 047 9111 - F. +39 051 651 6457
sales@marchesini.com - marchesini.com