



DISPOSABLE PRE-FILLED SYRINGES FEEDING, HANDLING & ASSEMBLING





WE AT MARCHESINI ARE PROUD LEADERS IN MANUFACTURING AND INTEGRATING COMPLETE LINES SINCE 1974. WE PRODUCE STAND-ALONE MACHINES AND COMPLETE LINES TO HANDLE THE ENTIRE PACKAGING PROCESS FOR THE PHARMACEUTICAL AND COSMETIC INDUSTRIES.

Following the acquisition of CO.RI.MA. in 2003, we became a leading company offering complete lines for injectable products in pre-filled syringes, vials and ampoules, from the washing process of the primary container to resting the final packed product on the pallet.



The Marchesini Group combines CO.RI.MA's proven experience in disposable Pre-Filled Syringe (PFS) handling and assembling with the Group's advanced technological robotic solutions, already firmly established in our packaging machines. This winning combination results in the development of new solutions aimed at maximising machinery performance, ease of cleaning and flexibility.

KEY POINTS

Long-standing experience in syringe **handling** machinery both with **Tub-Nest** and with **Tray**.

The Marchesini Group was the **first on the market** to develop the **NO-Contact** arrangement.

The wide range of **Feeding, Handling and Assembling machines** and advanced flexibility of **Robots** which have been developed in-house, means that Marchesini can propose **tailor-made solutions** to meet even the most **complex** customer requests.

Innovative solutions enable **multiple component** assembling in **One** machine.

New models are constantly developed in our in-house **R&D department**. **High-speed machines** provide solutions aimed at reducing **total changeover time and maximizing** the pharmaceutical process performance.

Handling and Assembling machines can be integrated with **Robotized Stations** which have been developed internally, enabling **No Glass-to-Glass Contact** syringe handling between flanges and **improving** line efficiency.

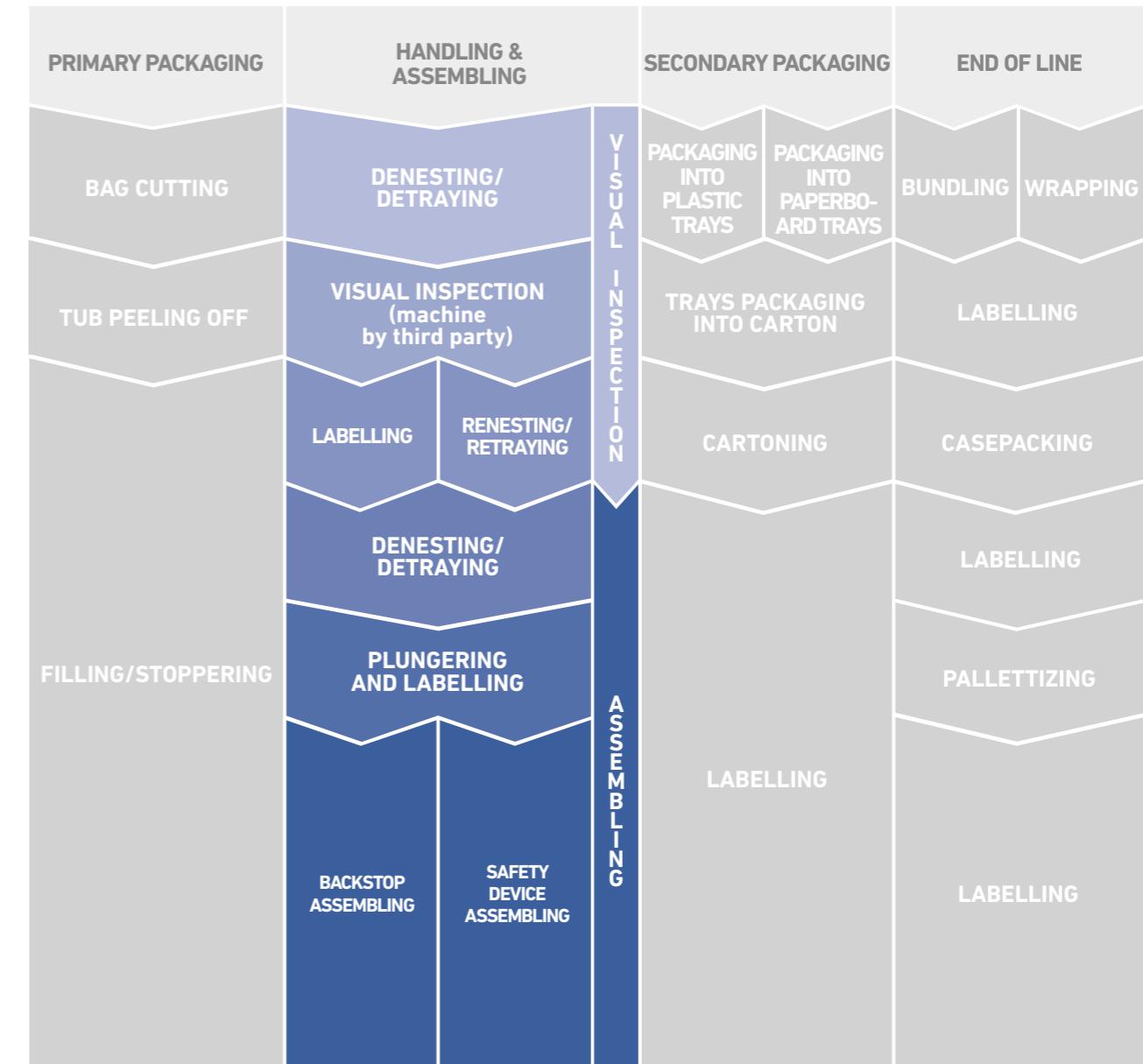
All machines comply with **GMP and FDA guidelines**.



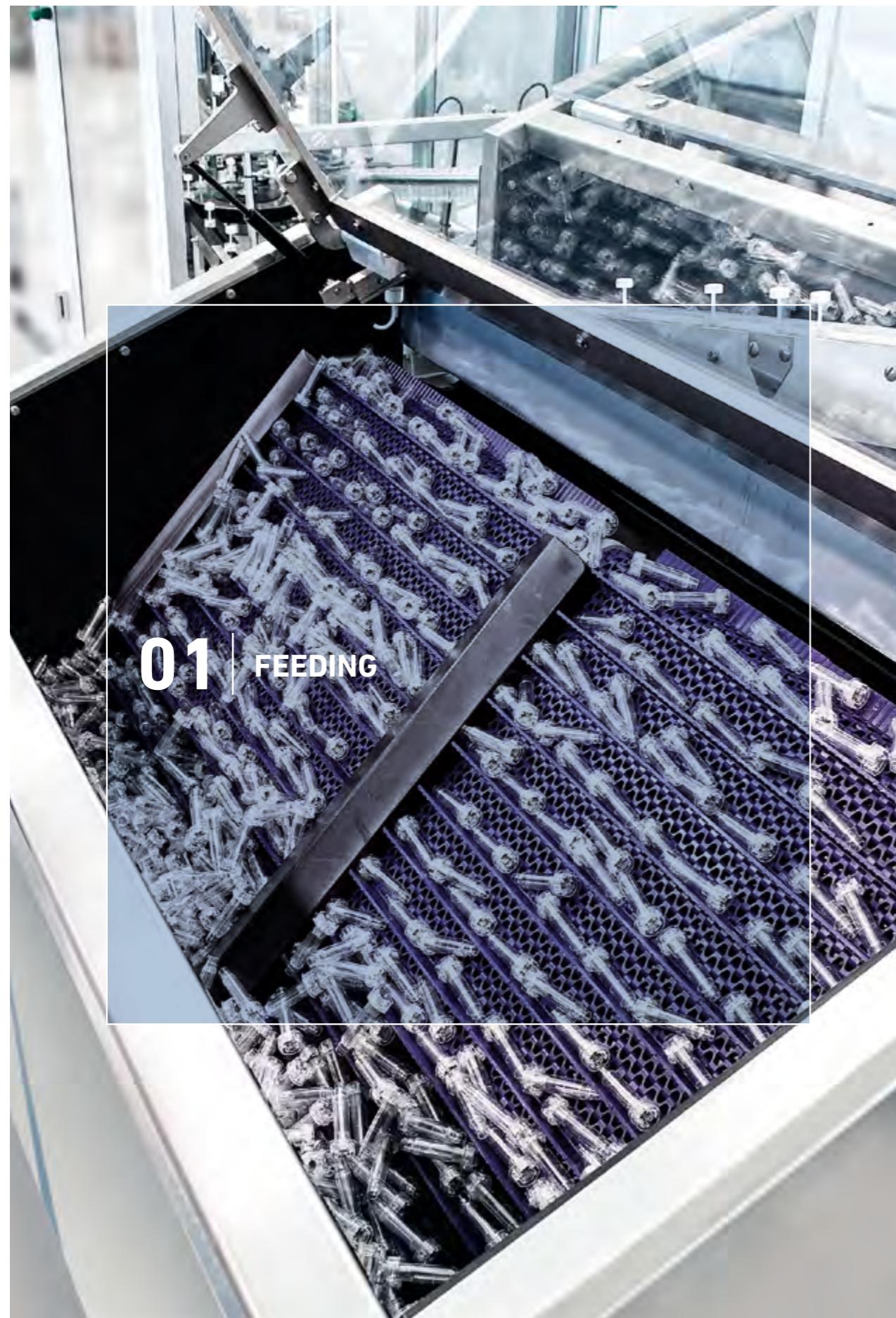
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PACKAGING PROCESS



The above chart illustrates the complete Marchesini line, whereas the contents of this catalogue detail the handling and assembling machines. For information on secondary packaging and end of line machines, visit our website www.marchesini.com



BULK FEEDING AVS SERIES

Elevator with Plates for automatic feeding of syringes or similar objects.

- 12 mobile plates driven by an independent motor
- Unload conveyor driven by an independent motor with step-less speed adjustment
- Integrated high-capacity pre-feeding hopper, driven by an independent motor
- Complete, easy and quick emptying and cleaning of the elevating plates area and pre-feeding hopper
- Possibility to integrate the AVS on the downstream machine or make it an independent unit equipped by its own control system and HMI display



OUTPUT
Up to 36.000 pcs /h
PRODUCT RANGE
Syringes, Safety Devices
and other hangable objects

Made by Corima



DE-NESTING NEXTRAN10

Automatic machine for syringe extraction from Nest and transferring to downstream process.

- Infeed Tub buffering with FIFO policy
- Decoding of Pre-printed data on the Tub by a vision system
- Automated Nest Removal from Tub
- Empty Tub and Nest stacking units
- Gentle transfer of syringes onto the unload guide

- Also available in No Glass-To-Glass Contact version
- For automated Inspection Lines: Empty Nest re-positioning on Tub with empty Nest automatically transferred to down-stream Re-Nesting machine (e.g. bridged conveyor)



OUTPUT

Up to 36.000 syringes / h

PRODUCT RANGE

Syringes 0,5 ml / 20 ml

Made by Corima

RE-NESTING NEXTRAN15

Automatic machine for re-arranging inspected syringes into the Nest.

- Robotized re-nesting is carried out with the Nest already placed in the Tub, making the machine very compact
- Possibility of automatic Tub/Nest loading from the de-nester with a "bridge conveyor"



OUTPUT
Up to 36.000 syringes / h
RANGE
Syringes 0,5 / 20 ml

Made by Corima

DE-TRAYING NEXTRAT20

Automatic machine for syringes or safety devices feeding from Rondo-Tray.

- High capacity loading system for stacked trays, designed to guarantee the stability of narrow Tray stacks
- Vision system control for load orientation and Tray rotation
- Gentle removal of Syringe or Safety Device by star-wheel or robot (for No-Contact version)
- Empty Tray stacking unit



OUTPUT
Up to 24.000 syringes / h
RANGE
Syringes, Safety Devices and other hangable objects supplied in trays

Made by Corima

RE-TRAYING NEXTRAT25

Automatic machine for re-arranging inspected syringes into Rondo-Trays.

- Automatic Loading of stacked empty Trays (all arranged with the same orientation)
- Walking-beam continuous re-traying by robot, with rondo-tray running in horizontal position
- Vision check for Tray completeness
- Automatic rejection of incomplete Trays
- Full Tray stacking
- Also available in No Glass-To-Glass Contact version



OUTPUT
Up to 24.000 syringes / h
PRODUCT RANGE
Syringes 0,5 / 20 ml

Made by Corima





LABELLING COMBI-1LAB

Automatic, continuous motion machine for syringes or Safety Device labelling.

- Objects are processed to avoid contact with machine's metal components
- Highly flexible feeding & unloading sections
- Customizable Label Feeding, Printing and Dispensing system
- In Process Controls (IPC) performed by sensors and vision systems
- Individual counting for each reject type
- Also available in No Glass-To-Glass Contact version



OUTPUT

Up to 36.000 syringes / h

PRODUCT RANGE

Syringes 0,5 ml / 20 ml

Round-shaped Safety Devices

Made by Corima

PLUNGERING & LABELLING COMBI-2PL

Automatic, continuous motion machine for syringe plungering and labelling.

As well as the COMBI-1LAB features:

- Syringe loading by adjustable motorized rollers without format-change
- Universal Plunger rod sorting unit (format-change free), with integrated high capacity pre-feeder
- Single adjustment (manual or motorized) of the plunger-rod feeding and assembling system according to rubber stopper position

- Plunger rod release & re-grabbing system to compensate stopper position variability
- Dynamic centering during Plunger Rod insertion
- Also available in No Glass-To-Glass Contact version



OUTPUT

Up to 24.000 syringes / h

PRODUCT RANGE

Syringes 0,5 / 20 ml

Made by Corima

PLUNGERING, LABELLING & BACKSTOP ASSEMBLING COMBI-3BS

Automatic, continuous motion machine for syringe plungering, labelling and Backstop assembling.

As well as COMBI-2PL main features:

- High capacity Backstop pre-feeder
- Rotary or linear vibrating Backstop feeder with reduced format parts changeover
- Backstop assembling control
- With Closed-type Backstop, the assembling station is positioned before the Plunger Rod assembling turret (COMBI-3BSR version)



OUTPUT

Up to 18.000 syringes / h

(24.000 syringes / h for the COMBI - 1BS model)

PRODUCT RANGE

Syringes 0,5 ml / 20 ml

Made by Corima

SAFETY DEVICE ASSEMBLING COMBI-2SD

Automatic, continuous motion machine for Safety Device assembling on syringe.

- External labelling of round-shaped devices
- Objects are processed to avoid contact with machine's metal components
- Highly flexible feeding & unloading sections
- Suitable for any type of Safety Device supplied in bulk or tray
- Dynamic centering during Syringe insertion into Safety Device



OUTPUT

Up to 24.000 syringes / h

PRODUCT RANGE

Syringes, 0,5 ml / 2,25 ml

Safety Devices: round and square-shaped

Made by Corima

PLUNGERING, LABELLING & SAFETY DEVICE ASSEMBLING COMBI-3SD/4SD

Automatic, continuous motion machine for syringe plungering, labelling and insertion into a Safety Device (COMBI-3SD).

As well as COMBI-2PL and COMBI-1SD/2SD main features:

- Available with an additional station for external labelling of round-shaped devices (COMBI-4SD)
- N.2 intermediate syringe rejecting stations between the plungering/labelling turret and the assembling turret

- Easy bypassing of device application to produce standard naked syringes with plunger and label
- Also available in No Glass-To-Glass Contact version



OUTPUT

Up to 24.000 syringes / h

PRODUCT RANGE

Syringes, 0,5 ml / 2,25 ml

Safety Devices: round and square-shaped

Made by Corima

NO GLASS-TO-GLASS CONTACT

Handling and Assembling machines in No-Contact version integrated with internally developed robotized stations.

No-Contact main advantages:

- Syringes are processed with No Glass-To-Glass contact between flanges

- A No-Contact buffer can be easily obtained between the COMBI machine and the downstream blister thermoforming machine allowing to improve the total line efficiency



The No-Contact technology has been successfully applied to fully automated Visual Inspection lines for Syringes, where our NEXTRA and COMBI models have been connected to third party visual inspection machines.

Moreover, allowing easy and efficient objects handling in a really compact space, the Marchesini No-Contact solutions are frequently used within customized projects that require Syringe transfer to third party machine transportation systems.



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.



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