

Case history: Adapta 100/200

April 2017

IMA: a synthesis of industrial experiences from all over the world



5109 EMPLOYEES



40 MANUFACTURING SITES



90% EXPORT



80 COUNTRIES NETWORK



IMA Non-Pharma sector includes divisions and companies that are recognized as leaders within their individual markets:

- ✓ **Tea & Herbs Division** for packaging tea, herbs and coffee in filter bags and pods;
- ✓ **Gima SpA** for packaging tea and coffee in capsules, chewing gum and sweets in innovative packs, and for the high level of assembly technology;
- ✓ **FillShape Srl** for filling in stand-up pouches;
- ✓ **Gima TT Srl** for smart and flexible packaging technologies;
- ✓ **Corazza SpA** specialized in lines for soup cubes, butter and processed cheese in various formats;
- ✓ **BFB Division** with its wide range of end of line machines;
- ✓ **Revisioni Industriali Srl** for perfectly overhauled second-hand machines.

IMA PHARMA is divided in 3 brands

IMA ACTIVE Solid Dose Solutions

- Handling
- Granulation
- Tableting
- Capsule filling
- Etc....

IMA LIFE Aseptic Processing & Freeze Drying Solutions

- Washing/Blowing
- Sterilizing
- Aseptic processing
- Freeze Dryng
Equipment
- Lyophilization Process
- Etc.

IMA SAFE Packaging Solutions

- Blister & Tray
Packaging
- Tablet & Capsule
counting
- Tube filling
- Jar filling
- Etc.

Before Adapta



TECHNICAL DATA ZANASI PLUS

	ZANASI PLUS 16	ZANASI PLUS 48	ZANASI PLUS 70
Maximum output (capsules/hour)	16,000	48,000	70,000
Number of capsules per cycle	2	6	9
Capsule size	000-5, supro A-E, DB, DBAA		00-5, supro A-E, DB, DBAA
Maximum installed power (kW)	8	14	
Aspiration	3,200 litres/minute 2,400 mm H ₂ O		4,600 litres/minute 3,100 mm H ₂ O
Compressed air	100 dm ³ /min - 6 bar		
Vacuum	100 m ³ /h - 3 mbar		
Standard voltage	230/400 V (±10%) - 50/60 Hz		
Weight (kg)	1,000	1,100	1,200

A new concept: Adapta



TECHNICAL DATA ADAPTA

MODEL	ADAPTA 100	ADAPTA 200
Maximum output (capsules/hour)	100,000	200,000
Number of capsules per cycle	12	24
Capsule size	5-00, DB, DB.A	5-00, DB, DB.A
Maximum installed power (kW)	17	18
Aspiration	9,500 litres/minute - 3,200 mm H ₂ O	9,500 litres/minute - 3,200 mm H ₂ O
Compressed air	115 litres/minute - 6 bar	115 litres/minute - 6 bar
Vacuum	100m ³ /h - 3 mbar (abs.)	165 m ³ /h - 3 mbar (abs.)
Standard voltage	400 V - 50 Hz	400 V - 50 Hz
Weight (kg)	1,800	2,000

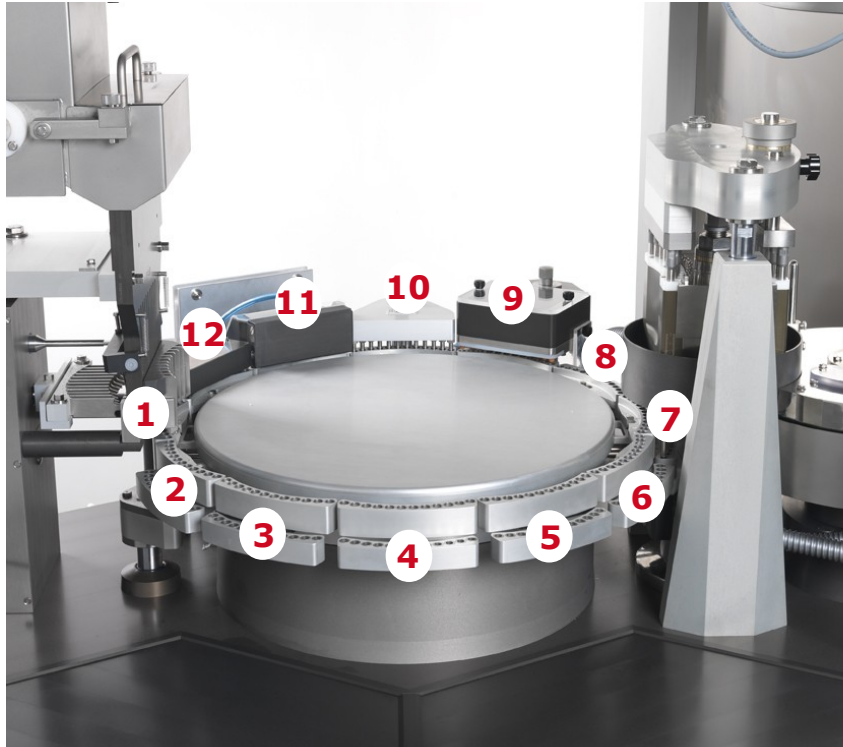
Comparison



Key features

- ✓ Adapta's DNA has its roots in IMA's 50 years of experience and more than 5,000 capsule filling installations worldwide.
- ✓ This knowledge and experience have allowed the IMA capsule fillers to evolve and **adapt** to the ever changing requirements of the market.
- ✓ **Flexible Configuration:** Station can be removed or added upon customer needs.

Work Flow



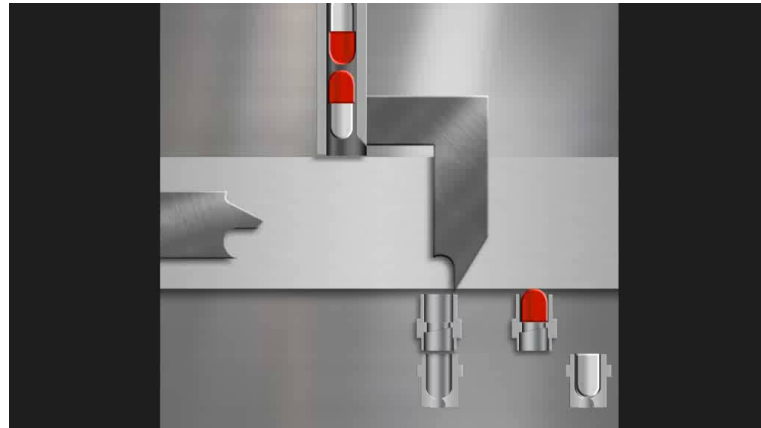
1. Empty capsule feeding
2. Capsule presence control (**optional**)
3. Dosing station (**removable**)
4. 100% in-line dosage control or dosing station (**optional**)
5. Dosing station (**removable**)
6. 100% in-line dosage control or dosing station (**optional**)
7. Dosing station (**fix** or **removable**)
8. 100% in-line dosage control (**optional**)
9. Rejection of unopened capsules
10. Capsule closing
11. Ejection of filled capsules
12. Cleaning of transport bushes

Station 1: Capsule infeed and opening

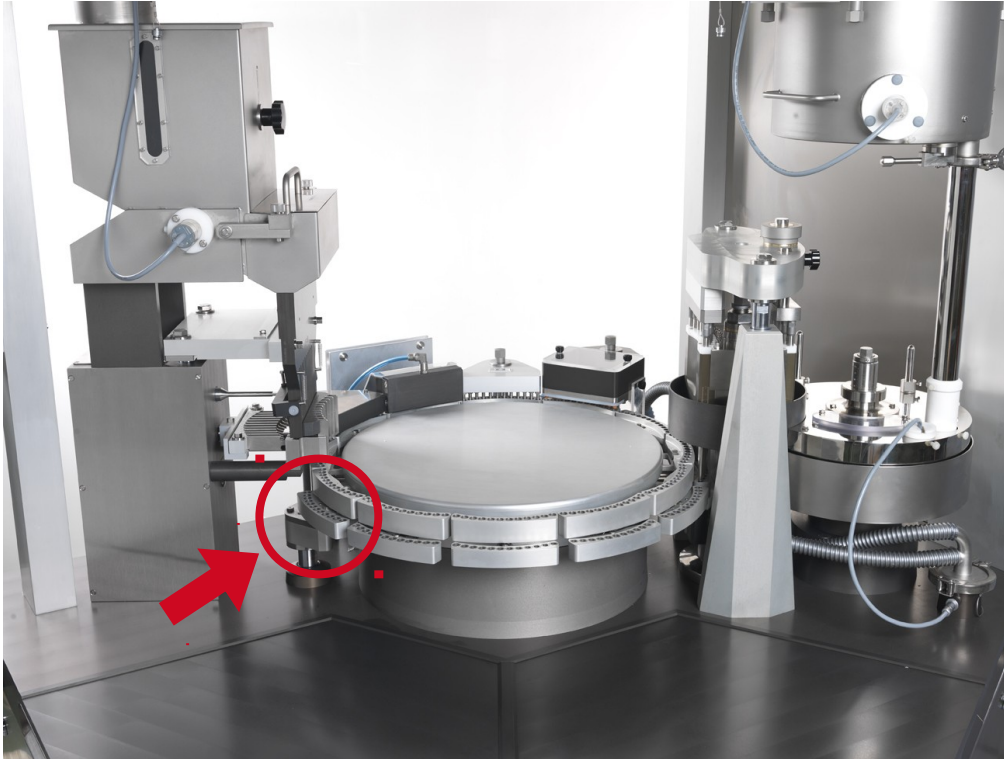


The capsule arriving from the infeed hopper is accurately positioned and inserted into the bushings, where the cap is removed from the body by means of vacuum.

An empty capsule weighing system can be fitted, in case the machine is fitted with 100% net weight check by scale.



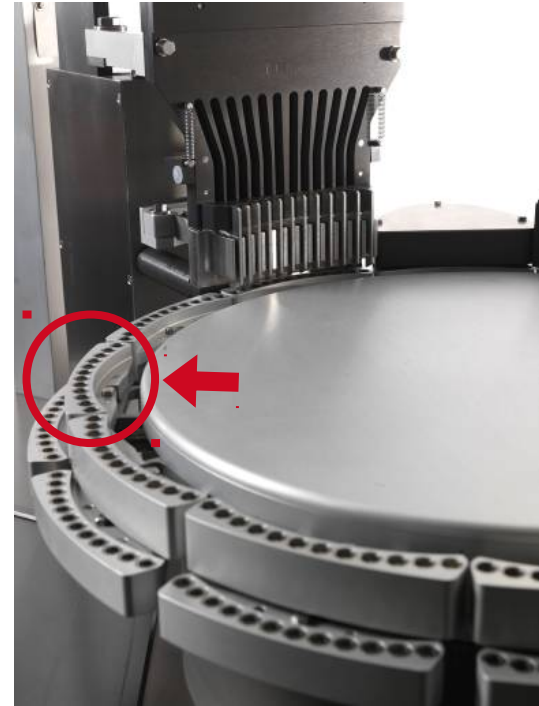
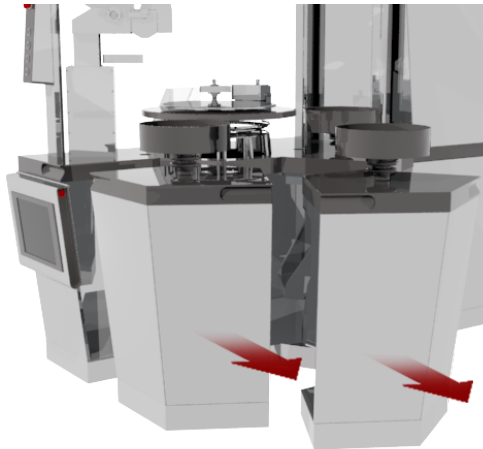
Station 2: Capsule presence control



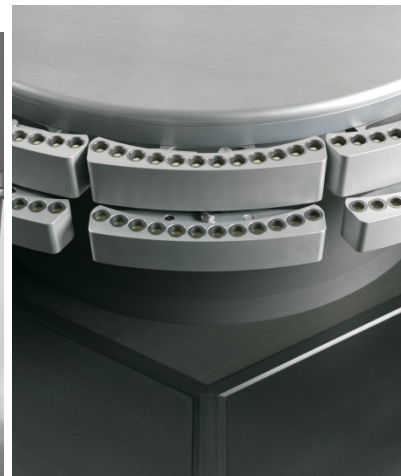
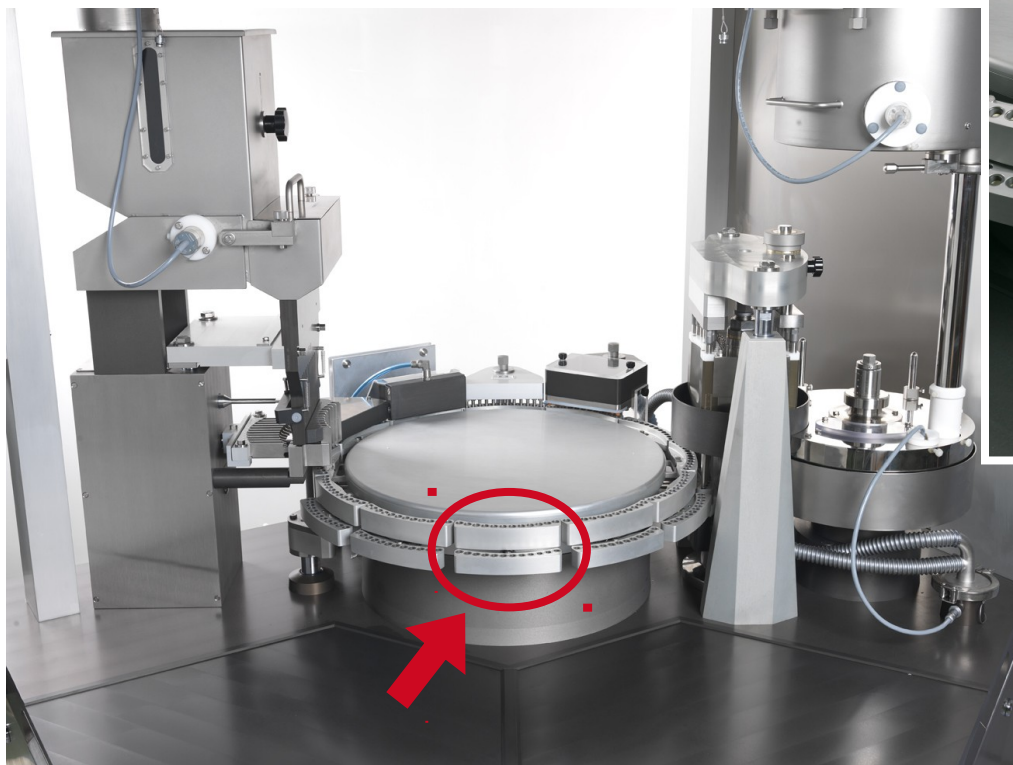
This station is available for capsule presence control (optional).

Station 3: Dosing Station

This station is available to fit a removable dosing unit (powder, pellets, tablets, microtablets, liquids).



Station 4: Dosage control system or dosing station

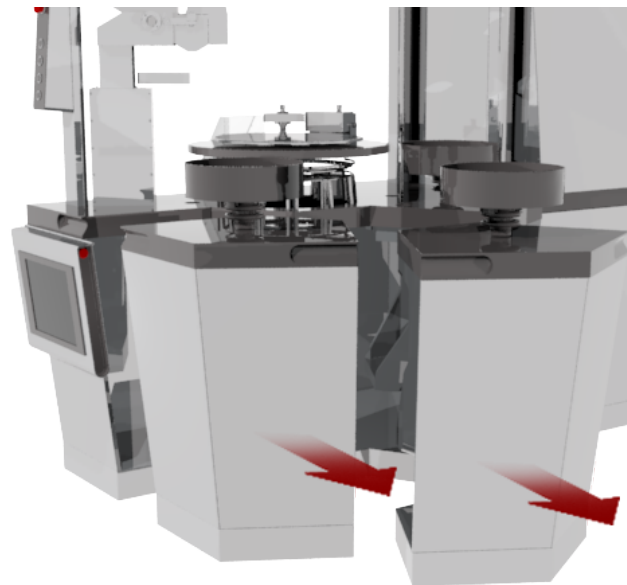


As an option, this station can be fitted with a 100% in line control of product dosage. Upon request, a product dosing unit can be installed as an alternative.

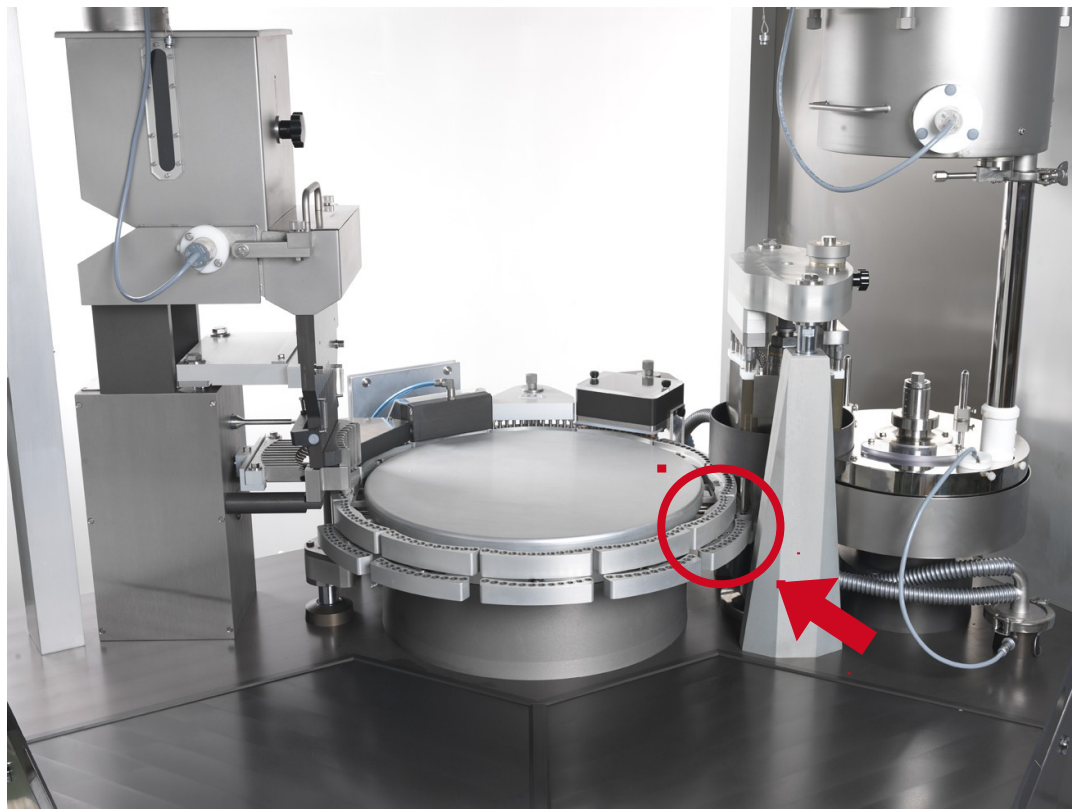
Station 5: Dosing station



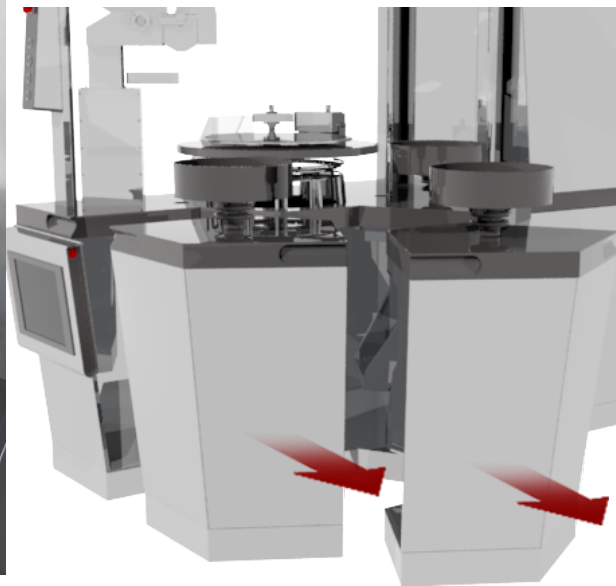
This station is available to fit a removable dosing unit (powder, pellets, tablets, microtablets, liquids).



Station 6: Dosage control system or dosing station



This station is available to fit a removable dosing unit (powder, pellets, tablets, microtablets, liquids).

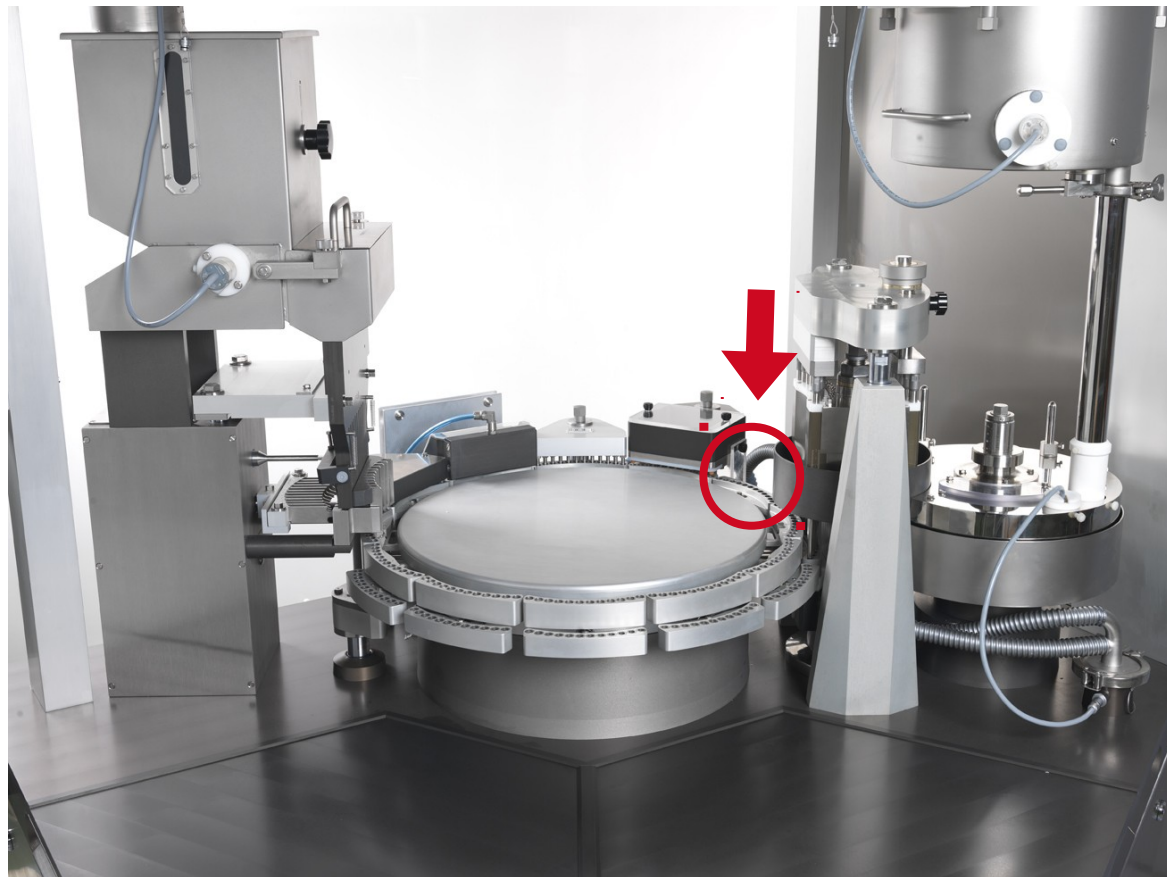


Station 7: Standar dosing unit

This station is available to fit either a fix or a removable dosing unit (powder, pellets, tablets, microtablets, liquids).



Station 8: Dosage control system



As an option, this station can be fitted with a 100% in line control of product dosage.

Station 9: Unopened capsule selection and removal

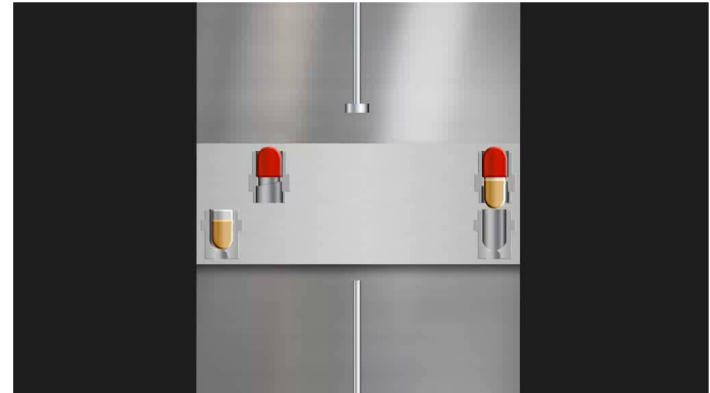
Any unopened capsule is rejected by means of appropriate pushers.



Station 10: Capsule closing



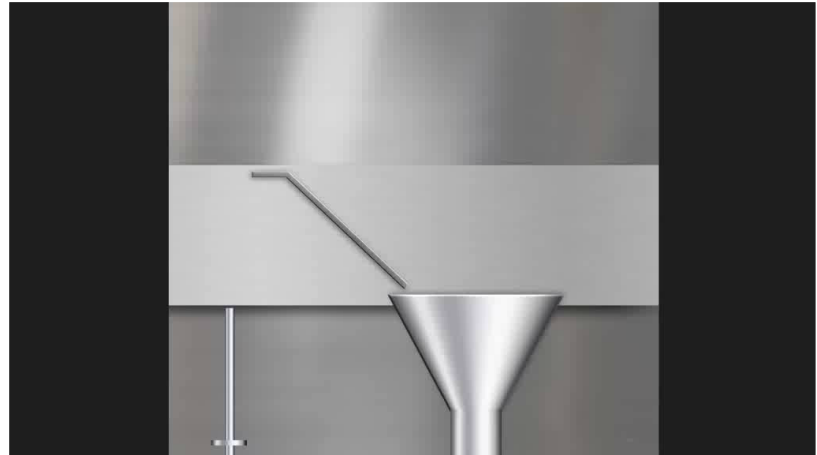
The bushings containing the capsule bodies realign themselves with the corresponding caps, the capsule is then closed by appropriate pushers.



Station 11: Capsule discharge



Closed capsules are discharged by the combined action of pushers and compressed air. A conveyor chute transports the capsules towards the finished product container.



Station 11: Capsule discharge



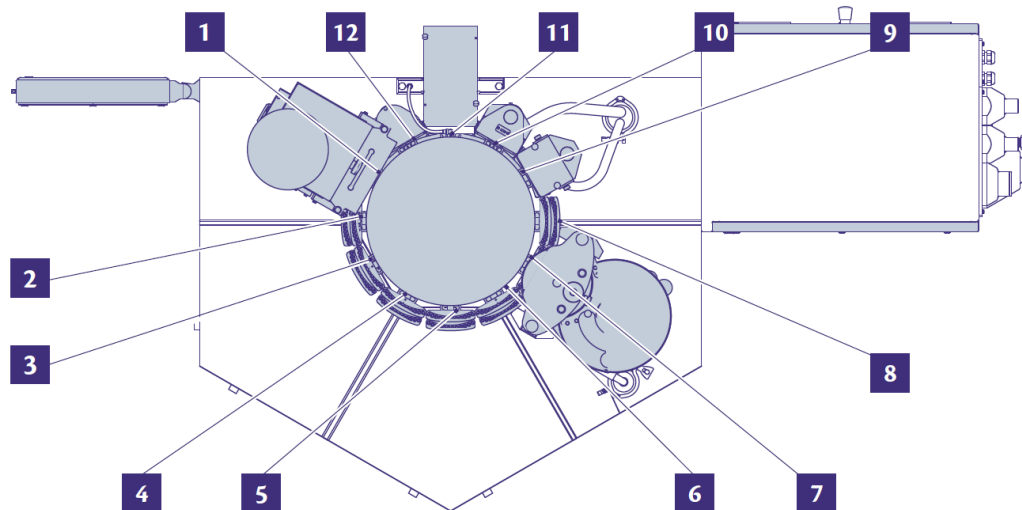
A statistical or 100% weighing unit can be installed at capsule exit for gross weight control, or for total net weight control, in combination with the empty capsule weighing system placed in station 1.

Station 12: Bushing cleaning



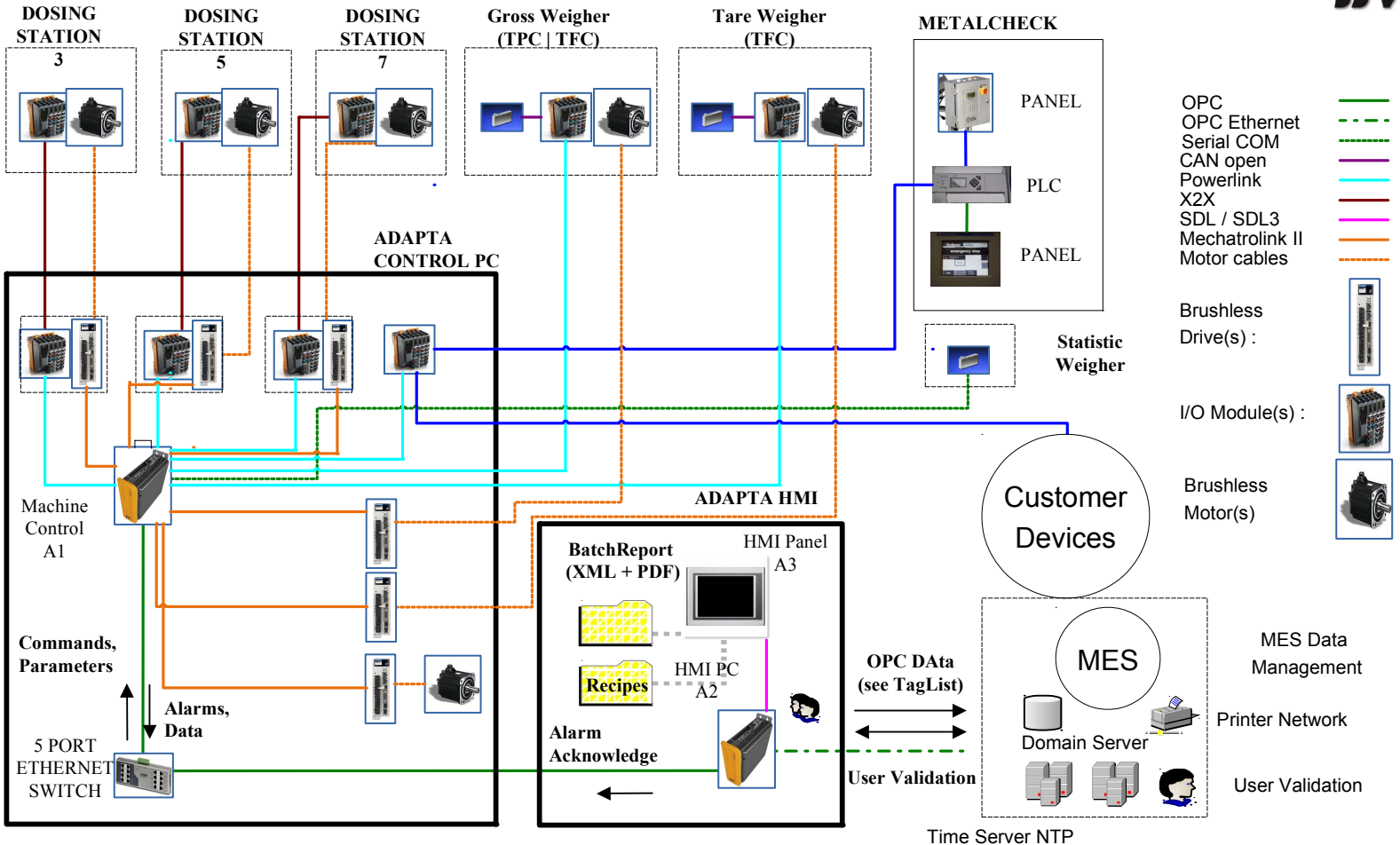
Upper and lower bushings are cleaned of any residual dust by means of compressed air and suction nozzles.

Exceptional design flexibility



- Three removable, reversible/interchangeable dosing units.
- Stations 4 and 6 can be used for additional dosing units instead of controls, making the machine suitable for the combination of up to 5 different products in the same capsule.

THE IMA GROUP



Thank you for your attention

