

PRACTICA

MID TO HIGH-SPEED CAPSULE FILLING MACHINE

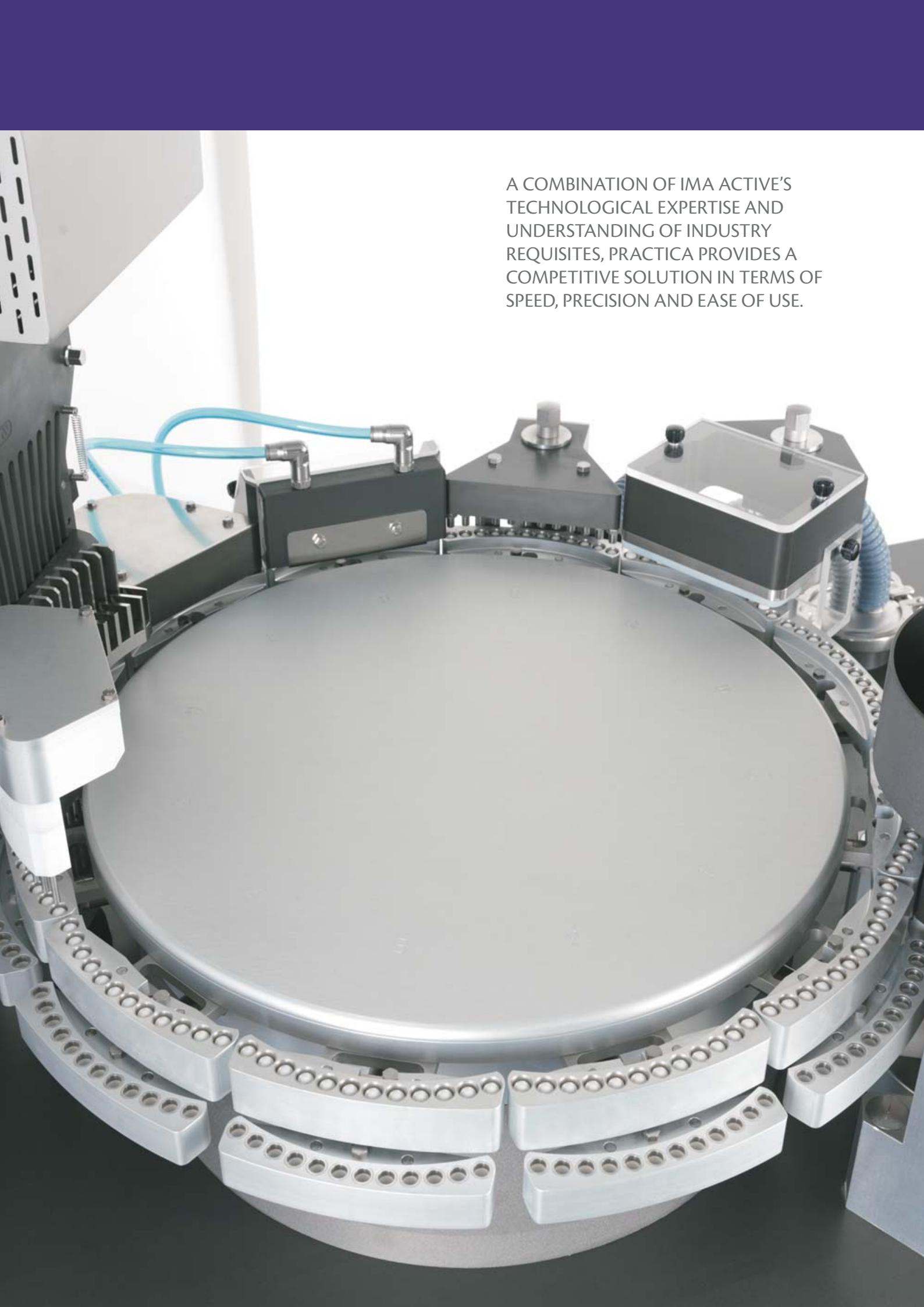


IMA ACTIVE
Solid Dose Solutions

PRACTICA

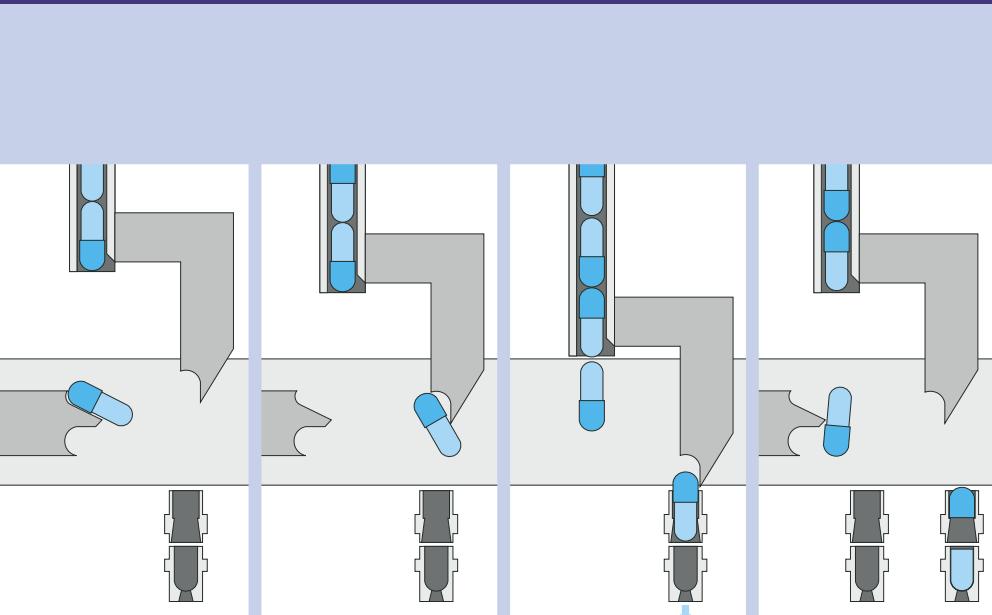
The Practica capsule filling machine covers low, medium and high-speed production requirements and performs single product dosing (powder/granulate or pellets) with very high accuracy. The machine is highly reliable thanks to its engineered simplicity and ensures extremely easy operation and low maintenance. User friendliness is a hallmark of this machine.





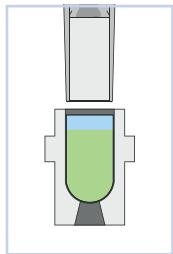
A COMBINATION OF IMA ACTIVE'S
TECHNOLOGICAL EXPERTISE AND
UNDERSTANDING OF INDUSTRY
REQUISITES, PRACTICA PROVIDES A
COMPETITIVE SOLUTION IN TERMS OF
SPEED, PRECISION AND EASE OF USE.

PRACTICA WORKFLOW



1 CAPSULE INFEED AND OPENING

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



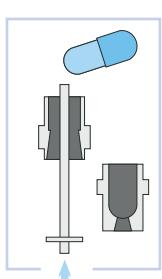
3 PRODUCT DOSING

This station is fitted with a product dosing unit (powder/granulate or alternatively pellets).



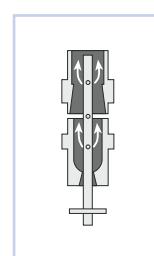
4 UNOPENED CAPSULE SELECTION AND REMOVAL

Any unopened capsules are rejected by means of appropriate pushers.



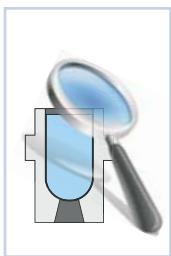
6 CAPSULE DISCHARGE

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



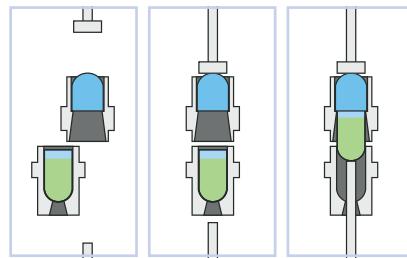
7 BUSHINGS CLEANING

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



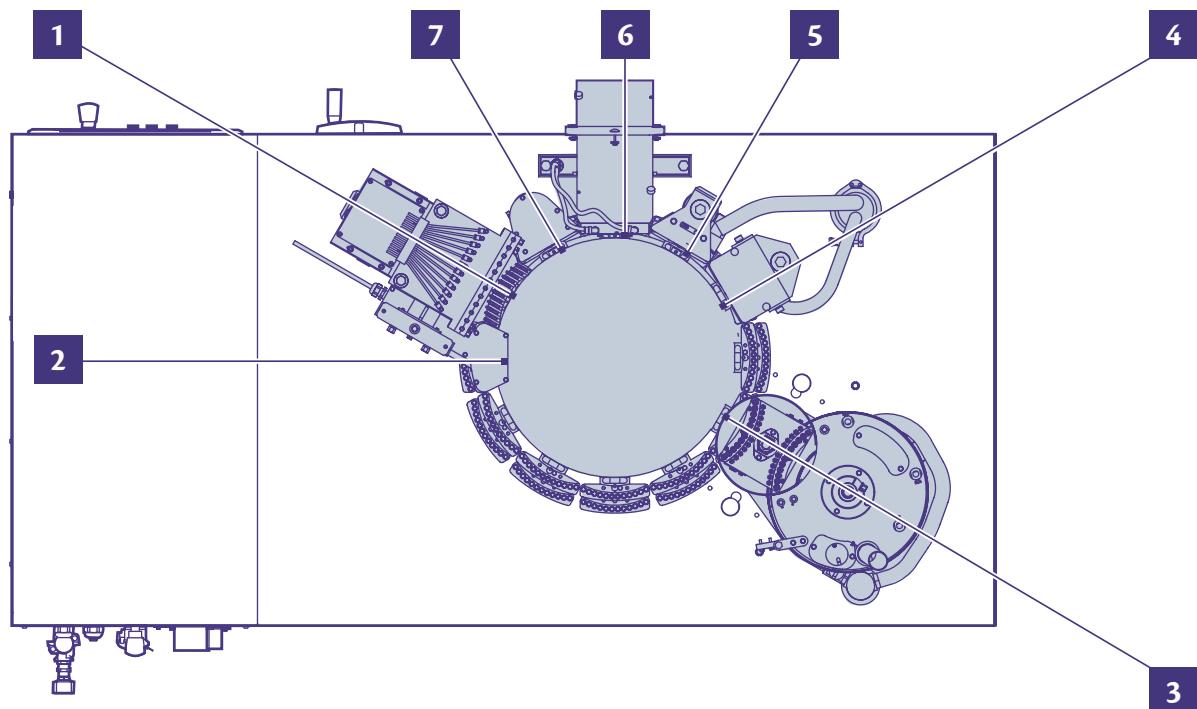
2 CAPSULE PRESENCE CHECKING

This station is available to fit an optional capsule presence checking group.

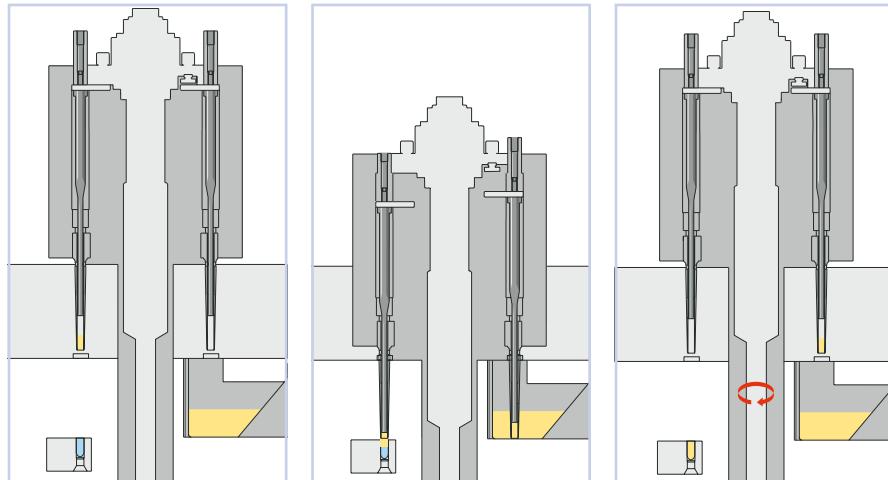


5 CAPSULE CLOSING

The bushings containing the capsule bodies re-align themselves with the corresponding capsule caps. The capsules are then closed by appropriate pushers.



PRACTICA DOSING UNITS



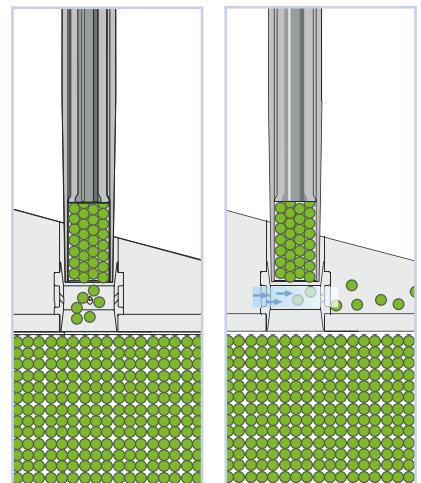
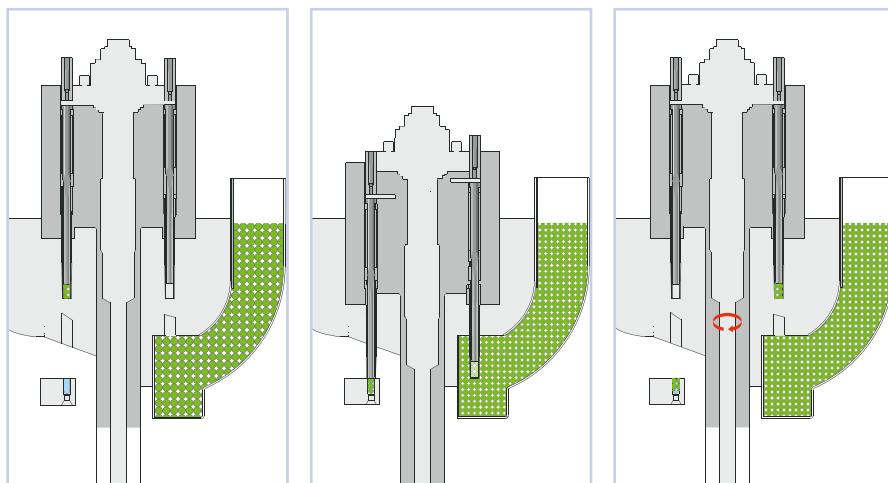
POWDER DOSING UNIT

Dosators are mounted on one block and are sited in two opposite segments.

1. The block moves down and the dosators on the first segment penetrate the powder bed inside the product bowl, whilst the opposite ones are positioned above the capsule bodies.
2. The pistons of the first segment compress the powder forming slugs; the opposite ones eject the powder slugs into the capsule bodies.
3. The block moves up and turns; dosators with slugs are positioned over the next capsule bodies, whilst the empty ones are positioned over the product bowl and the cycle begins once more.



In addition to the rotary bowl fitted on standard machines, the IMA patented vacuum bowl can be supplied for powder pre-compacting in case very fine powders have to be dosed.



PELLET DOSING UNIT

Dosators are mounted on one block and are sited in two opposite segments.

1. The block moves down and the dosators on the first segment penetrate the pellet bed inside the product bowl, whilst the opposite ones are positioned above the capsule bodies.
2. The pistons of the first segment create the dosing volume and vacuum force pellets to fill it; the opposite ones eject the pellets into the capsule bodies, the vacuum is released.
3. The block moves up and turns; the dosators filled with pellets are positioned over the next capsule bodies, whilst the empty dosators are positioned over the product bowl and the cycle begins once more.

Excess pellets are removed by a jet of air. This system is particularly suitable for microtablets and pellets with a delicate coating.

PRACTICA



CONTROL SYSTEM

Practica is equipped with a PC based control system which can be configured according to machine characteristics. The HMI is interactive and very simple to use, displaying data and machine operating parameters while offering the proper tools for compliance with 21 CFR part 11 rules and GAMP 5 guidelines.

ACCESSIBILITY AND CLEANABILITY

Once the machine windows are opened the working area is completely accessible making cleaning operations very easy.

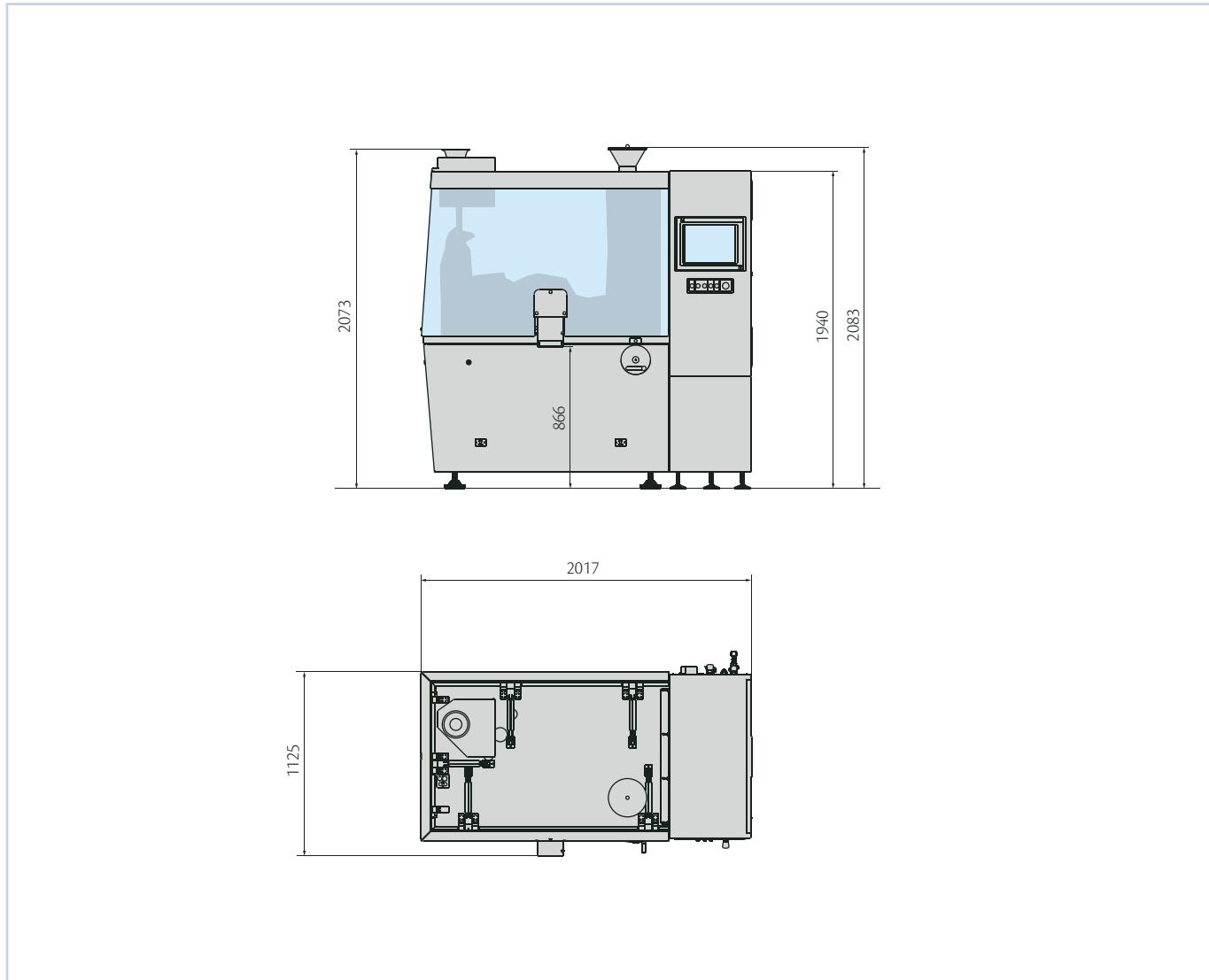
STATIC WEIGHT CHECK AND SELF-ADJUSTMENT

PRACTICA IS PREARRANGED TO BE EQUIPPED WITH A STATIC WEIGHT CHECKING UNIT FOR PRODUCTION MONITORING. THE GROUP IS PREPARED FOR 21 CFR PART 11 COMPLIANCE.

IF THE MACHINE IS ALSO EQUIPPED WITH SELF-ADJUSTMENT, THE WEIGHT OF THE SAMPLED CAPSULES CAN BE FED BACK TO THE CONTROL SYSTEM WHICH AUTOMATICALLY ADJUSTS THE POSITION OF THE DOSING HEAD TO KEEP THE SET TARGET WEIGHT. IN THIS WAY PRODUCTION IS AUTOMATICALLY KEPT WITHIN THE PARAMETERS SET BY THE OPERATOR.



PRACTICA TECHNICAL DATA



Maximum output (capsules/hour)	100,000
Number of capsules per cycle	12
Capsule size	5-00, DB, DB.A
Maximum installed power (kW)	15
Aspiration	5,100 litres/minute - 3,200 mm H ₂ O
Compressed air	115 litres/minute - 6 bar
Vacuum	100 m ³ /h - 3 mbar (abs.)
Standard voltage	400 V - 50 Hz
Weight (kg)	1,630



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Certificate
N. IT00/0415