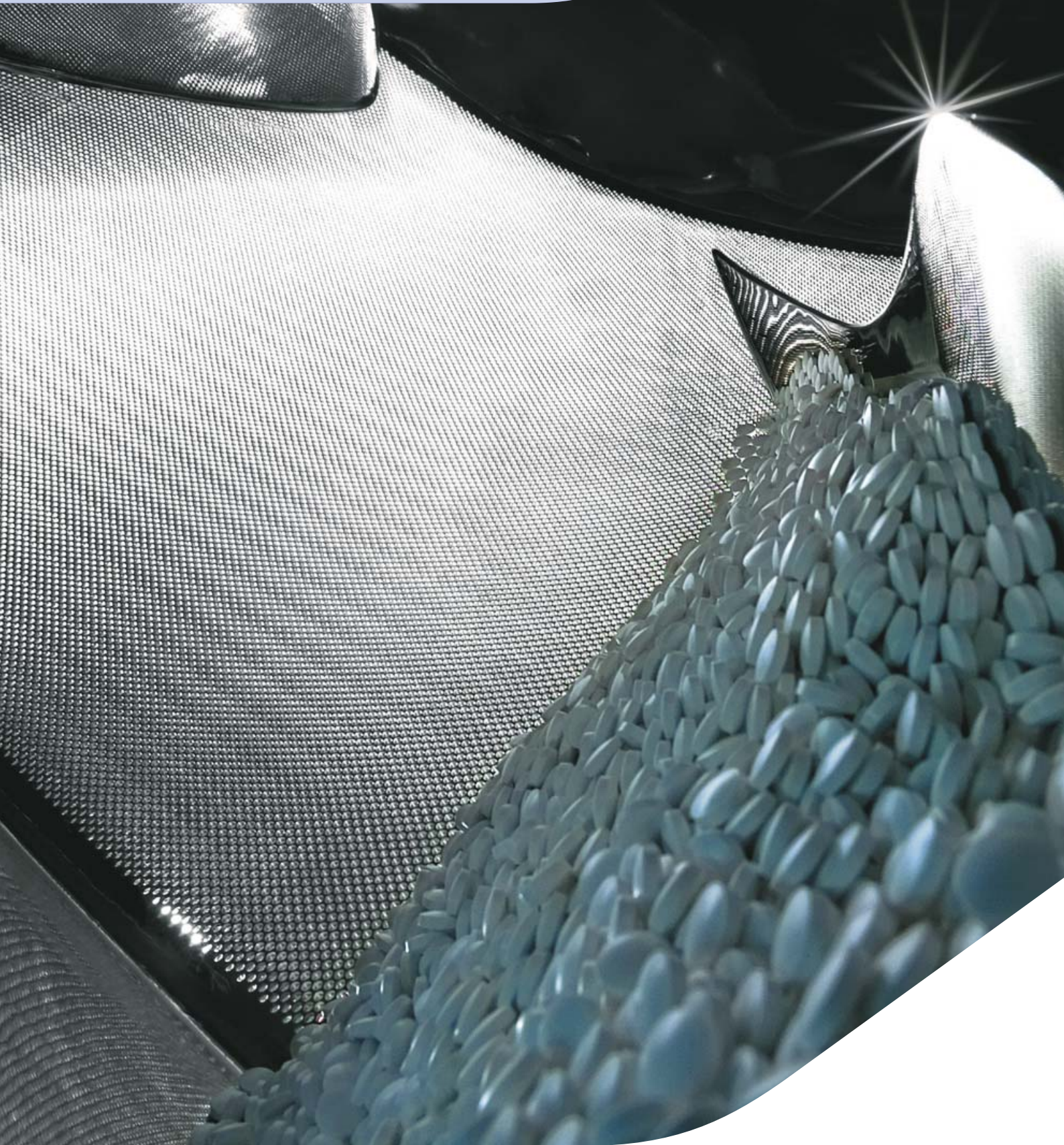


PERFIMA

PERFORATED PAN FOR TABLET COATING



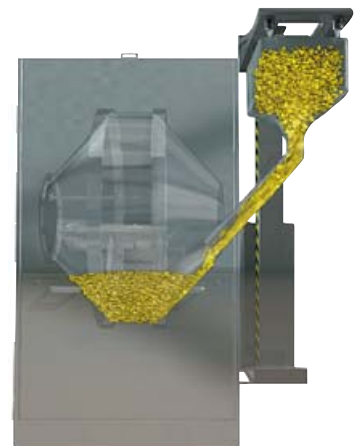
PERFIMA



PERFIMA IS A FLEXIBLE AND RELIABLE MACHINE PROVIDING HIGH EFFICIENCY IN THE FIELD OF AUTOMATIC COATING EQUIPMENT. THE MACHINE IS ALSO SUITABLE FOR CONTAINMENT INSTALLATIONS, REDUCING OPERATOR EXPOSURE IN CASE OF HIGHLY ACTIVE POTENT INGREDIENTS (HAPI) PROCESSING.

MIXING CAPABILITY AND FLEXIBILITY

The shape of the pan combined with the mixing baffles positioning on the central sector of the drum ensure a perfect and uniform mixing of the cores. The mixing capability is maintained in case of minimum or maximum quantity of product, allowing a wide range of batches to be processed in the same machine (from 25% to 100% of the pan capacity). Position and dimensions of the outlet air duct are designed so that to guarantee a good and uniform drying of the product, thus saving energy.



AUTOMATIC PRODUCT LOAD AND DISCHARGE

The machine can be fitted with automatic product loading and discharge. On a standard Perfima pan, product discharge is achieved through a discharge tube connected to the pan by a fast fixing system. On the spiralled pan a triple spiral present in the front surface of the pan allow product unloading by simply reversing the rotation of the pan: coated tablets are discharged through the unloading port in the front door without need to open the front door and to fit any additional device. Both systems have no dead zone and guarantee 100% product discharge to the bin.

SPRAY GUNS

Perfima spray guns feature an Anti-Bearding-Cap (ABC) system avoiding guns clogging while the machine is working. Both sugar and film spray guns can be easily fitted on the sliding support arm and are positioned and adjusted during the process from the outside by using the relevant device. The sliding arm can be removed from the front door of the pan allowing guns changing, calibration/adjustment and fast and safe cleaning.



Sugar spray gun



Film spray guns



SUGAR

The sugar system (airless) features a pneumatic high pressure piston type pump with spray gun and recirculation system.

FILM

The film system (air) is fitted with either peristaltic or volumetric piston, low pressure type pump (depending on the viscosity of the product to be handled) and is complete with in-line product pressure control and air spray guns.

DOSING UNIT

The spray system is the result of blending some highly advanced technologies and has been designed to ensure easy maintenance, simple inspection operations and quick changeover from one product to another. It includes two spray units (air and airless) complete with the relevant surge chambers to guarantee constant flow rate, and is housed in a soundproof stainless steel cabinet, which can be opened from four sides to fully comply the GMP requirements.

PERFIMA



INSPECTION

The doors placed on the front and side of the pan allow the machine to be fully accessible for inspection.



ISOLATION

All parts of the machine in contact with the product are completely isolated. All openings are fitted with inflatable seals and the entire coating process can be achieved without contamination of the external environment.

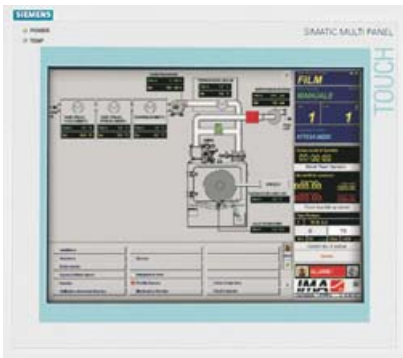


CLEANING

The machine is equipped with a completely automatic Clean In Place system validated in collaboration with the University of Parma (Italy). Cleaning nozzles and spray balls covers all machine areas to be cleaned and are always in position so that a cleaning cycle can start immediately after the process without any need to install additional devices. Water discharge is carried out by means of a valve placed on the bottom part of the pan.



PATENT PENDING



OPERATOR INTERFACE AND EQUIPMENT MANAGEMENT

According to customers requirements, three different systems can be fitted: BT, TO and COMAUT. All of them feature the use of a PLC connected to an operator terminal board (BT basic or TO advanced version), up to the most sophisticated PC based computerized system (COMAUT), which gives a constant operator guide and keeps continuous control over every significant process parameter in both numerical and graphic formats.

PERFIMA LAB

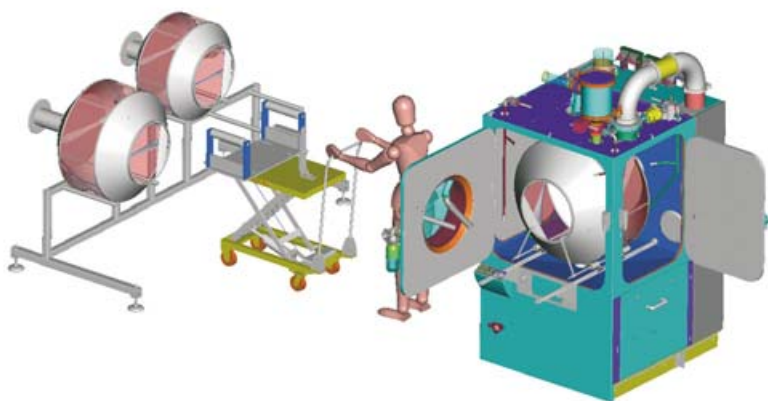


PERFIMA LAB

The laboratory systems make use of the same highly advanced technology as those developed for the production range and this enable the processing of all kinds of products, giving maximum flexibility and easy scale-up.

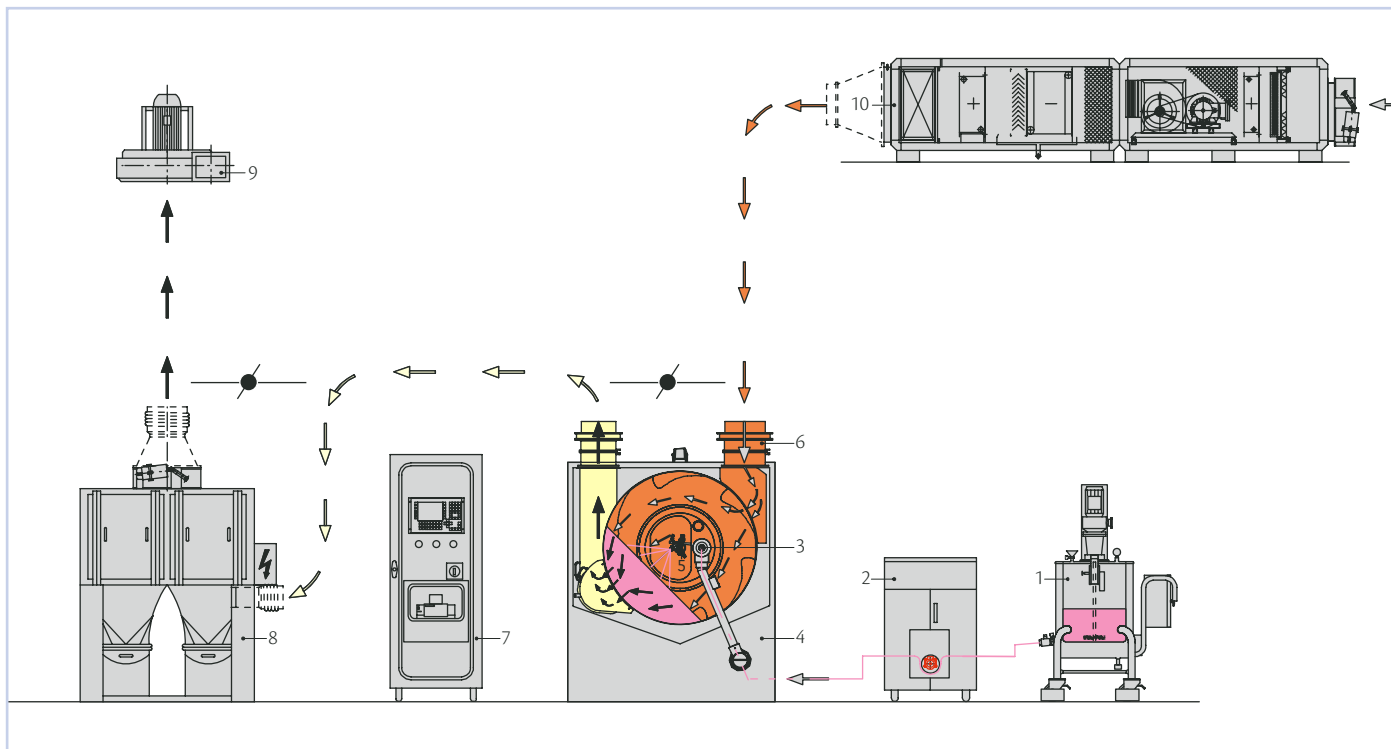
The high degree of automation allows easy operation and maintenance procedures to be applied. Characterised by small overall dimensions, laboratory systems can be easily and quickly connected to the utilities.

Perfima Lab can be considered not only as a laboratory coater but also as a machine for small production batches. Thanks to its interchangeable drum (three drums available) it is possible to work a wide range of capacities: from 3 to 60 litres.



PERFIMA TECHNICAL DATA

PERFIMA



- | | | | |
|---------------------------------------|----------------------------------|----------------------------|------------------------|
| 1) Product storage tank with agitator | 3) Spray gun support sliding arm | 5) Spray guns | 8) Dust collector |
| 2) Dosing pumps | 4) Perforated pan | 6) Inlet air handling unit | 9) Aspirating fan |
| | | 7) Control system | 10) Air treatment unit |

MODEL	PERFIMA LAB*	PERFIMA 200	PERFIMA 500	PERFIMA 800
Minimum/maximum capacity (litres)	10 (3-10) 30 (8-30) 70 (18-70)	60-250	140-550	225-900
Pan diameter (mm)	765 (for 10 L drum) 865 (for 30 L drum) 985 (for 70 L drum)	1,360	1,716	1,985
Pan mouth diameter (mm)	474	540	580	732
Pan motor power (kW)	1.5	4	5.5	7.5
Process air delivery (m ³ /h)	1,100	4,000	6,000	8,000

* Interchangeable drum

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