



## Process laboratory equipment



The process laboratory equipment is a set of autonomous subsystems for managing more complex technological processes.

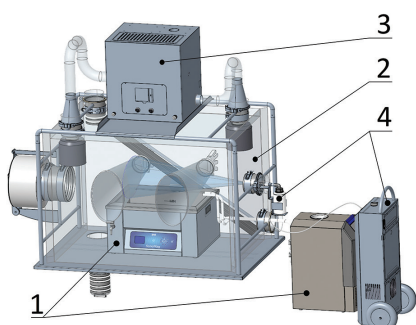
- Innovativeness of the process and used technologies
- Significantly increased dissolution rate
- Easy to implement
- Easy installation
- Mobile implementation

### General

The process laboratory equipment is an innovative set of autonomous subsystems. As a connected system, they ensure the management of dissolution processes in appropriate protective conditions for the product, the environment and the operator, while at the same time being microbiologically appropriate.

#### The system consists of:

1. SonoMag dissolution device with cooling system
2. Protective environment - flexible isolator
3. AH module – to keep protective environment conditions
4. Decontamination system



### Operating principle

The process laboratory equipment is an innovative set that can work as a complete system. At the same time, its individual subsystems can also act as independent devices, which with their innovative elements and solutions are created for the implementation of special technological procedures.

The independent principles of operation are as follows:

- Ultrasonic dissolution
- Protection of the product, the environment and the operator
- Keeping appropriate conditions within the protective environment
- Decontamination of the working environment by using a disinfectant

Additional excellence gives the system the possibility of designing completely new sets with a combination of independent devices, whereby one of the devices can also be eliminated. This gives a completely new and additional useful value to the resulting system.

## Use

The process laboratory equipment is primarily intended for the innovative dissolution of solid pharmaceutical forms in combination with the protective environment of a flexible isolator. This protective environment can operate independently, but it can also be used in combination with the AH module, which provides appropriate conditions within the working space (filtration, air exchange, appropriate pressure conditions). The protective environment in combination with the decontamination system ensures appropriate microbiological conditions in

the workplace depending on the needs and according to the technological process that takes place in it.

This flexibility gives the whole system a great useful value, which is seen in the possibility of carrying out a wide range of procedures. The following are just a few:

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- Independent dissolution of solid pharmaceutical forms or other more difficult to dissolve products with or without keeping the temperature conditions in the bath
- Dissolution of solid pharmaceutical forms within a protective environment
- Implementation of safe dosing

and weighing procedures of active raw materials with protection of the operator, environment and product by using vacuum operating mode

- Implementation of simpler sterile procedures with microbiological suitability and protective environment for the product in overpressure mode
- Integration of the protective environment into other systems and ensuring safe and sterile working conditions
- Successful microbiological decontamination of rooms of various shapes and sizes.

	SonoMag	Flexible isolator	AH unit	DECON Classic
Outside dimensions (L×W×H) [mm]	570 × 515 × 320	Custom defined	410 × 470 × 503	300 × 460 × 870
Power supply [V/Hz/kW]	230 / 50 / 0,7	/	230 / 50 / 0,8	230 / 50 / 0,8
Noise level [dB]	72	/	30 - 65	75
Weight [kg]	37	Conditioned by design	25	26
Purpose	Dissolve, homogenize and mix active ingredients	Operator, product and environmental protection	Keeping appropriate conditions in a protective environment	Microbiological decontamination of closed area
Special features	Ultrasonic waves and electromagnetic stirring mixer rods	Material TPU 250 µm, ATEX, FDA compliance	Airflow 0 - 60 m <sup>3</sup> /h External pressure 0 - 600 Pa	PIO Flash® system, H2O2 disinfectant, up to Log 6 reduction
Additional equipment	Cooling system, flasks, anti-noise chamber	Filters, endless bag system, dosing system, waste bag, reactor connection, airtight inserts for cables and pipe connections	Connecting pipes and clamps, additional filters	External nozzle with bottle

