

► Tradition | Experience | Innovation | Worldwide

In the DIOSNA laboratory we have created a facility for customers and academic institutions. This we believe is the essence of a developing partnership.

New techniques from DIOSNA can be tested for incorporation into production processes.

The DIOSNA laboratory is designed to meet the high requirements of research and development in the pharmaceutical industry and provides a valuable pilot scale for process developments. From granulating to tablet coating all of the DIOSNA range of equipment are available.

Product evaluation can also take place on site, the trial results can be extrapolated to production scale processing. tion scale processing.









We position ourselves consistently and innovative on the high requirements of our customers.

Since 1885. All over the world.



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► VERSATILITY FOR THE PHARMACEUTICAL LABORATORY

► Modular laboratory equipment MINILAB RC

The MINILAB RC is a laboratory system specially designed for research and development. Whether drying, spray granulation, powder coating, pellet coating or tablet coating, a wide range of applications can be realized on a laboratory scale. The two modules, the drum-coater and the fluidized-bed module, make the MINILAB RC the ideal way to cover a wide range of tablet production with just one machine.

The simple change from the fluidized bed module to the drum coater module by means of a mobile mounting and storage rack included in the scope of delivery enables flexible use of both modules. Air, measuring and control technology are integrated into the housing of the MINILAB RC and are used by both modules.

► Drum coater module MINILAB RC

The drum coater module belongs to the family of horizontal drum coaters and has a sight glass in the front door for optimal process monitoring. Due to the design with two sizes of drums, a batch size range of 0.5 - 2.7 kg can be achieved.

► Fluidized bed module MINILAB RC

Thanks to top, tangential and bottom spray, the fluidized bed module offers a variety of granulation and coating processes. The three different sizes of product containers allow a wide batch size range of 0.2 - 3.2 kg.

Advantages

- Fluidized bed and film coating processes with one machine.
- High flexibility due to wide batch range.
- Desktop device for fast product and process development (MINILAB).
- Flexible installation: In line, at the corner, through the wall (MIDILAB).
- Good process observation through glass components.
- Convenient operation via swivelling and tilting full graphic display.
- Easy exchange of the modules. Easy cleaning due to tool-free dis-







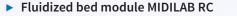
► Modular laboratory equipment MIDILAB RC

The MIDILAB RC is a mobile, highly flexible laboratory system with a very wide range of applications to perform a large number of processes quickly, comfortably and professionally. In addition to a fluidized bed module that allows drying, granulation and coating processes, a drum coater module can also be used for film and sugar coating processes.

With the MIDILAB RC, all units such as inlet air treatment unit, inlet air heater and fan are integrated into the housing. The MIDILAB RC is designed for plug & play operation, so that the system is ready for operation after the compressed air and electrical supply have been applied. Exchanging the modules is done without tools and can be carried out quickly and easily thanks to the mobile design of all units.

For both modules, the MIDILAB RC is operated via a swivelling and tilting touchscreen, which is embedded in a stainless steel housing and allows flexible adaptation. The MIDILAB RC has a generous work surface on which peripheral equipment such as scales or spraying liquid containers can be placed.

Numerous options for solvent operation, automatic loading and unloading or air conditioning allow the system to be configured to suit the functionality and design of production facilities. This can create the conditions for a quick transfer of the laboratory results to the pilot or pro-



For the fluidized bed module, four product containers of 7l, 12l, 16l and 20l are available, which allow for the production of sample batches on a scale of has a large sight glass for optimal process observation. In order to achieve 1kg to 10kg. The product container is pivoted into an optimal coating result, the spray arm can be individually adapted to the the tower and locked via inflatable seals. For empdrum size. tying, the container can be rotated by 180° while it is at the swung-open position.





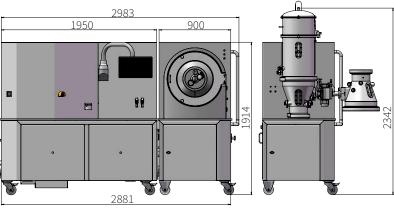
▶ Drum coater module MIDILAB RC



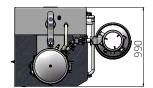
For the drum coater module, three drum sizes of 7l, 12l and 20l are available,

covering a batch size range from 2kg to 16kg. The front door is swiveling and



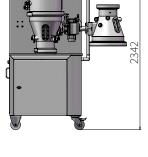


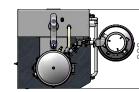














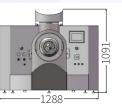


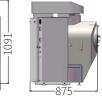




Technical specifications	Fluidized bed module	Drum coater module
volume of material container / drum (l) batch size¹ (kg) max. supply air temperature² (°C) air volume flow (m³/h) electric connection power (kW)	3/5/7 0,2-3,2 100 150 7,5	2/3 0,5-2,7 100 150 7,5









► MIDILAB

Technical specifications	Fluidized bed module	Drum coater module
volume of material container / drum (l)	7/12/16/20	7/12/20
batch size¹ (kg)	0,6 - 9	2 - 16
max. supply air temperature ² (°C)	100	100
air volume flow (m³/h)	250	250
electric connection power (kW)	22	24