

JUCHHEIM
Laborgeräte GmbH

Chemically inert glass reactor

Pressure operation up to 10 bar

Ready-to-use system



convenient • secure • innovative

Eng

micro shieldRack

The micro shieldRack is a fully enclosed benchtop reactor system for maximum safety and convenience during operation. It is ideal for research and development, and impresses not only with its compact design and robust construction but also with its practical features.

The large polycarbonate windows provide a clear and safe observation of the ongoing process at all times without compromising the closed protective environment. The system is particularly well-suited for sensitive applications where process control, protection from external influences, and user safety are of utmost importance.

The micro shieldRack includes an overhead stirrer for efficient mixing, a magnetically coupled stirring feedthrough that is completely hermetically sealed. Depending on requirements, the stirring feedthrough can be configured for a torque of either 50 Ncm or 90 Ncm.

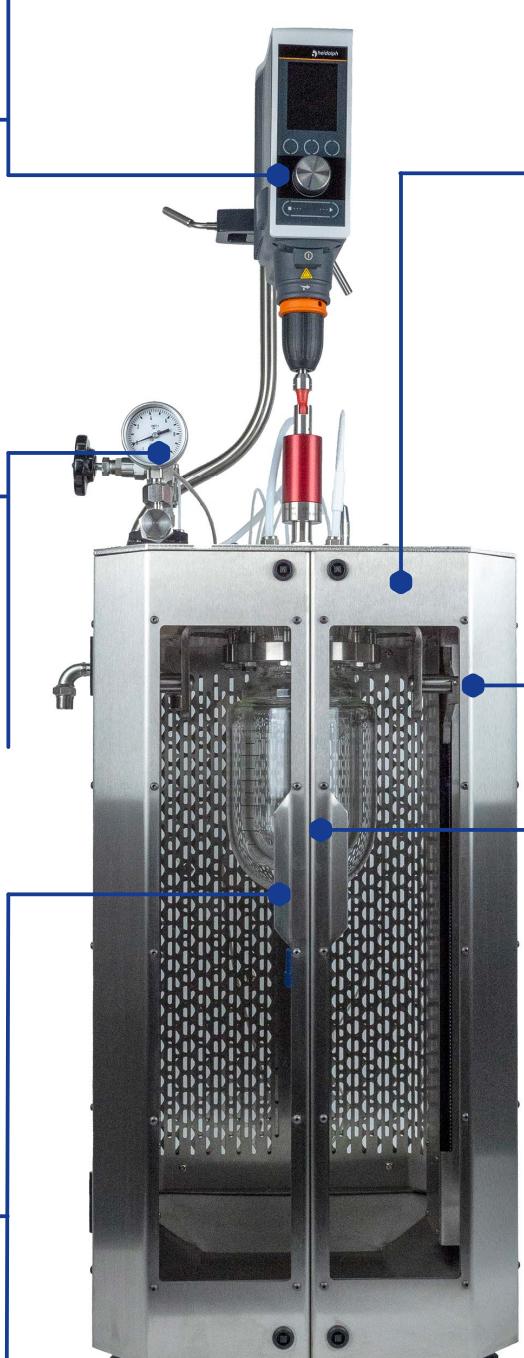


A manometer, overpressure protection and pressure relief valve are standard equipment.

For precise process temperature measurement, either a PT100-temperature sensor or a thermocouple can be equipped. Various lid connections are available to enable flexible use and can be customized as required.



Lockable doors with polycarbonate panels provide maximum safety. Depending on requirements, the system can be equipped either with a safety valve or a bursting disc.



This compact system is designed for space-saving and robust performance, featuring a stainless steel housing with access ports for heat transfer hoses or signal cables. Various material options are available for the flange and cover: stainless steel, Hastelloy®, or PTFE, allowing for a completely metal-free configuration.

The design includes a convenient lifting device for the pressure reactor. This device allows easy tilting and removal of the reactor. A quick release mechanism ensures simple handling. The stainless steel lining and a removable drip tray allow easy cleaning.



A wide range of stirrers can be selected: propeller stirrer, anchor stirrer, twisted anchor stirrer, impeller stirrer, or blade stirrer, optionally made of PTFE, stainless steel, or Hastelloy®. Alternative stirrer geometries are available on request.



integration & expandability



The system is expandable and can be integrated into your existing laboratory environment. For instance an automated liquid dosing using an intermediate container with electronic control is available, particularly for adaptability to different laboratory setups.

Technical data

Reactor Material	borosilicate glass
Overall capacity	1,7 ltr.
effective capacity	1,0 ltr.
Max. permissible temperature	220 °C
Max. permissible pressure ¹	10 bar
Max. permissible pressure ²	6 bar
Dimensions (D x W x H)	520 x 460 x 1400 mm
Net height w/o overhead stirrer	780 mm
Weight	80 kg

1) Stainless steel and Hastelloy®

2) PTFE - ensures non-metallic surface

convenient • secure • innovative

