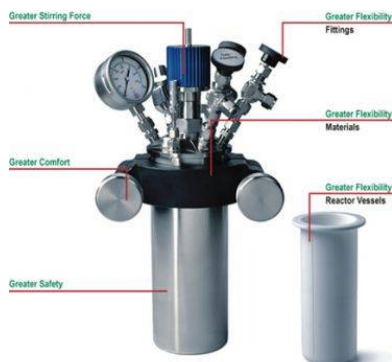




## HIGH PRESSURE REACTION VESSELS



- The Berghof High Pressure Reactor is available in Stainless Steel SS 316TI, Hastelloy, or Stainless Steel SS 316TI with a PTFE lining closed on all sides.
- Manually locked with a quick-lock chain, without the need for tools\*.
- Sealed by a conical flange lock and an O-ring made of PTFE, Viton, or Kalrez.
- Matching fittings sets are available in Stainless Steel SS 316TI or in Hastelloy.
- The lid offers a total of six\*\* connections which can be employed as follows:
  - ❖ 1 x temperature probe submersion tube;
  - ❖ 1 x metal rupture disc to safely limit the maximum pressure;
  - ❖ 1 x pressure indicator;
  - ❖ 1 x pressure relief valve;
  - ❖ 2 x for any other purpose, e.g., a gas sampling valve or liquid sampling.

\*BR-25 – Hand Tighten only \*\*BR-4000 – Eight connections

All Berghof High Pressure Reaction Vessels are available in either Stainless Steel or Hastelloy. Stainless Steel Reactors are ideally suited for applications involving organic solvents and most organic acids. These reactors can be fully lined with PTFE, consisting of a removable thick wall PTFE insert and PTFE liner in the reactor lid. Together, these provide effective corrosion protection for all reactor components which come into contact with the medium. Hastelloy reactors are recommended to provide corrosion protection for applications involving strong mineral acids or aggressive gasses.

The modular design allows any reactor head to be combined with a variety of vessels and inserts. The reactor volume can be adapted to specific needs with the inserts.

The BR series pressure reactors are equipped with clamping rings or chains for quick and easy opening without the need for tools. All fittings can be easily removed and reinstalled for cleaning and service by the user.

Each reactor vessels is individually tested and certified for optimal safety. A manometer or an electric pressure sensor can be factory installed for pressure management. A pressure transducer made of SS or Hastelloy, to transfer reactor pressure to the sensor or manometer, without coming into direct contact with aggressive media, is available.

The internal reactor temperature is continuously measured with a temperature probe encapsulated with SS, SS with a PFA jacket or Hastelloy. A second temperature probe can be installed to protect against overheating. A programmable PID temperature controller for heater control is also available.

The stirring force selection ranges from economical bar stirrers for low-volume High Pressure Reactors to magnetic couplings with a variety of drives and torque levels.

Product No.	Available Capacity (ml)	Max Operating Pressure	Maximum Temperature	Stirring	Heating
BR-25	25 or 40 SS 316TI	200 bar / 2900 psi	230C PTFE & Viton 300C FFPM	Magnetic Stirrer	Hot plate BLH-800 + Heater block
	25 or 40 Hastelloy				
	25 or 40 SS w/PTFE insert				
BR-100	150 or 200 SS 316TI	200 bar / 2900 psi	230C PTFE & Viton 300C FFPM	Magnetic Stirrer	Hot plate BLH-800 + Heater block
	150 or 200 Hastelloy				
	75, 100, 150 or 240 SS w/PTFE insert				
BR-300	350, 600 or 900 SS 316TI	200 bar / 2900 psi	230C PTFE & Viton 300C FFPM	Magnetic Stirrer or Coupling	Hot plate + block; Heating Jacket Thermostatic Jacket
	350, 600 or 900 Hastelloy				
	300, 500 or 700 SS w/PTFE insert				
BR-1000	1100, 1700 or 2300 SS 316TI	200 bar / 2900 psi	230C PTFE & Viton 300C FFPM	Magnetic Coupling	Heating Jacket Thermostatic Jacket
	1100, 1700 or 2300 Hastelloy				
	1000, 1500 or 2000 SS w/PTFE insert				
BR-4000	5500 SS 316TI	150 bar / 2175 psi	230C PTFE & Viton 300C FFPM	Magnetic Coupling	Heating Jacket Thermostatic Jacket Internal coil
	On Request Hastelloy				
	4700 SS w/PTFE insert				