

Custom/Bespoke Reaction Systems - 100 ml to 30 litres

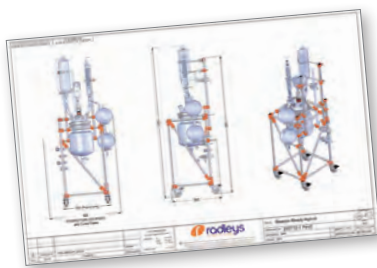
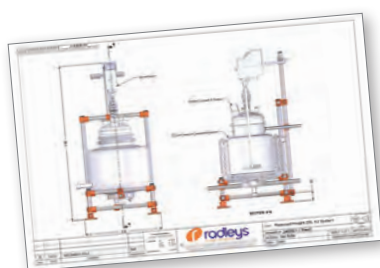
Jacketed reaction systems designed to meet your specifications

Radleys are experts in the design and manufacture of exceptional quality scientific glassware. We have a long history (over 50 years) of working with chemists and chemical engineers in the leading industrial and academic research facilities around the world. Whether you require a multi-vessel process rig, a small benchtop reactor or a complex parallel set-up, our team of design engineers and scientific glassblowers will be pleased to help with your project.

Simply tell us what you need

The combination of features and design variations is almost limitless. Please contact our technical specialists or your local Radleys distributor to discuss your requirements.

In-house
design and
manufacture of
vessels



Scope of our services

- In-house design and manufacture
- Frameworks and supports
- Thermoregulators, chillers and circulators
- Overhead stirrers, sensors and probes
- Datalogging and software control
- Installation and training

Vessels

- Single or vacuum jacketed
- Jacketed vessels to 30 litres
- Vacuum jacketed vessels to 10 litres
- Tall, squat or process vessel geometries
- Cylindrical or spherical vessels
- Split jackets and optical windows
- Conical, dish or hemispherical vessel bottoms
- Stainless steel, hastelloy or PTFE vessels
- Vessels with optical windows or split jackets
- Vessels with fixed or removable filters or sinters
- Glass or PTFE lids

Systems

- Multi-reactor systems for parallel synthesis
- Fermenters, bioreactors and photoreactors
- Condensers, distillation assemblies, scrubbers

Accessories

- Thermoregulators with supply and servicing
- Thermofluids, hoses and adapters
- Overhead stirrers: electric or air-powered



In-house design and manufacture of custom glass reaction vessels and frameworks



An installation of six 30 litre jacketed reaction systems in Shanghai, China



A custom parallel system and framework, with control software installed in Germany



Control and log your reaction system with AVA Laboratory Control Software



Reactor-Ready™ Lab Reactor - 100 ml to 5 litres

Swap reaction vessels in minutes, not hours



Reactor-Ready is designed as a universal reactor work station, with a range of easily interchangeable vessels from 100 ml to 5 litres, which can be configured to suit the chemistry and scale needed for each project. Easy to use, this one unique framework can replace many, saving money and fume hood space.

Features

- Rapid, tool-free vessel exchange with quick-release vessel clamp and hose couplings.
- Range of single and vacuum jacketed vessels from 100 ml to 5 litres.
- Process vessels to mimic larger scale plant or manufacturing reactors, with 1:1.25 ratio and dish-shaped bottom.
- Accepts all leading brands of overhead stirrer and allows easy, tool-free adjustment.
- Triple support stand features heavy-duty stainless steel support rods for stability.
- Self aligning stirrer coupling engages without the need for tools.
- Innovative hose manifolds allow easy thermofluid drain down.
- Jacket temperature range: -70 °C to +230 °C.
- Wide range of accessory glassware including condensers and dropping funnels etc.
- Optional software allows you to log and control stirrers, circulators, balances, pumps, temperature sensors and other devices.

Control and log your chemistry



Swap vessels in minutes, not hours



Unique vessel clamp

- Self-centering
- Quick-release
- Change vessels in minutes

Simple stirrer alignment

- Slide and glide
- Set and lock

Hose couplings

- Quick-release
- Connect in seconds
- Chemical-resistant PEEK

Patented stirrer coupling

- Drop in
- No tools
- No fuss

Convenient vessel kits make buying vessels and accessories easy and cost effective



Standard vessels

- 250 ml to 5 litres
- Vacuum jacketed option
- Glass accessories to match

Process vessels

- Mimic plant scale geometry
- 100 ml to 5 litres
- Vacuum jacketed option
- Glass accessories to match

A choice of popular stirrer paddles



Individual manifolds

- Easy connection
- Easy drain-down
- Reduces stress on vessel sidearms

