



Process

CHEMISTRY REACTORS

and Accessories

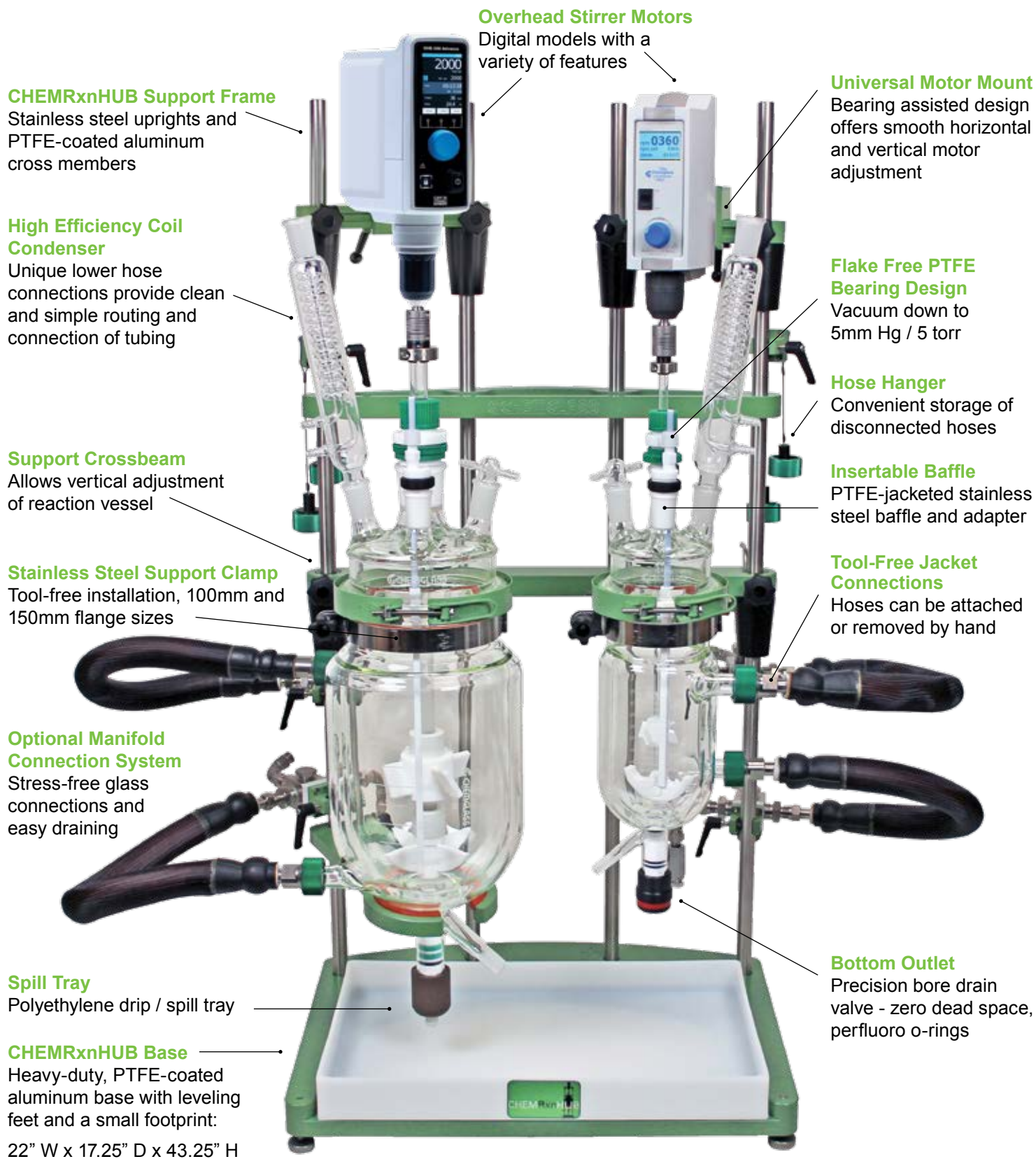
- benchtop
- pilot scale
- kilo-lab
- commercial scale
- Huber circulator sales and service



100mL through 150 liters

Benchtop Reactor Systems

- Jacketed borosilicate glass vessels from 300mL to 5 liters
- Your choice of overhead stirrer motors
- Tool-free jacket connections
- Optional manifold connections for easy draining



Single, Dual and Triple Vessel, Benchtop Process Reactor Systems

Single



Dual



Triple



Complete ChemRxnHub™ Systems with Tool-Free Jacket Connections

ChemRxnHub single, dual and triple reactor system workstations in **300mL to 5 liter configurations**. Great for those who need complete, off-the-shelf systems that are quick to assemble, easy to operate and low on maintenance.

The unique design of the ChemRxnHub support stand and clamping system allows for **easy installation and removal of glassware**. These workstations also fit into most benchtop hoods.

The ChemRxnHub series of benchtop reactors is comprehensive, making it easy for you to get the vessel size and accessories you need.

Each system includes benchtop stand, overhead stirrer and glassware. Optional manifold connection and heat transfer fluid draining systems are available.

Contact us for a FREE quote

T 1.800.843.1794 F 1.800.922.4361

tech@cglifesciences.com

www.cglifesciences.com

CHEMRxnHUB
YOUR **R_x** FOR PROCESS CHEMISTRY



Unique clamp and support system provides simple installation and quick change-out.



Tool-free jacket fittings with hose hanger. Optional manifold system shown.



Borosilicate Glass Process Reactor Vessels from 10 to 100 liters

Questions?
Get in touch.

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- Your choice of overhead stirrer motors - electric or air
- Optional components and custom systems
- Complete reactor and circulator packages

Our Glass Vessels

Unless otherwise noted, glass components are manufactured exclusively from Type I, Class A borosilicate glass meeting ASTM Specification E438. This glass type is used because of its **exceptional chemical and heat resistance**.

Open Frame Design

User-friendly support frames are designed with our “**open frame**” approach to **maximize user accessibility**. Frame components include PTFE-coated aluminum bases, cross supports and fittings combined with stainless steel uprights for the optimal level of strength and durability.

Common Usage

Chemglass process reactors are commonly used for chemical synthesis, process development, workup, filtration, purification, evaporation, stirring, dissolving, mixing, and extracting operations across a host of scientific disciplines. Our glass process reactor vessels range in size from **10 through 100 liters**; everything from pilot scale and kilo-lab to commercial scale production.

Affordable Custom Glass Reactor Systems

Designs, using a combination of custom and standard components, are **routinely designed in collaboration with our customers**. Whether you need a pre-configured benchtop workstation or a one-of-a-kind, custom chemical process reactor, specify Chemglass to be the catalyst for your next reactor.



huber AUTHORIZED



Unistat, Ministat, Minichiller and Unichiller

Innovative Frame Design Provides Excellent Flexibility

10L and 20L Systems

Open Air, Auto-Center Stands for Ease and Accessibility

Auto-centering motor mount (brushless DC electric, air and explosion-proof motors available)

5-neck lid with large powder addition port

Optional Manifold



SS inlet / outlet adapters, available in M16 x 1 and M30 x 1.5, allow connection to cooling / heating circulator



Zero dead space, detachable drain valve with laser-etched directional arrows for open and close



Support frame with oversized, rugged SS uprights and heavy-duty, PTFE-coated aluminum fittings

Brushless Motor Controller

- RPM torque, PT100 temperature and timer
- Wifi and USB connection
- 3.5" TFT display
- Quick lockout function
- Easy direction changes

Improved support clamp auto-centers reactor and lid allowing quick installation and removal of reactor

Perfluoro o-rings on 60mm and 200mm flanges

Reactor jacket graduation scale on both sides

Removable support used for side shelf and manifold

Lower support plate and PTFE ring have a v-shaped opening allowing an unobstructed view of bottom valve

Support bushings for optional safety shield

Heavy-duty, lockable casters

30L and 50L Systems

300mm Flange

Smaller Footprint Saves Floor Space

Motor mount arm can unlock and swing out giving greater access to the reactor

Brushless Motor Controller

- RPM torque, PT100 temperature and timer
- Wifi and USB connection
- 3.5" TFT display
- Quick lockout function
- Easy direction changes

Smaller footprint support frame with oversized, rugged, SS uprights and heavy-duty, PTFE-coated aluminum fittings

SS inlet / outlet adapters, available in M16 X 1 and M30 X 1.5, allow connection to cooling / heating circulator

Optional Manifold



Auto-centering motor mount (brushless DC electric, air and explosion-proof motors available)

Open frame design provides excellent accessibility

7-neck lid with large powder addition port

Removable plug allows motor mount arm to be installed on the right or the left

Reactor support plate holds reactor securely and allows easy installation / removal of reactor by one person

Reactor jacket graduation scale on both sides

Lower safety ring

2" beaded pipe drain



Zero dead space, detachable drain valve with laser-etched directional arrows for open and close

Heavy-duty, lockable casters

50 and 100 Liter "Squatty" Systems with 400mm Flanges

50L and 100L "Squatty" Systems

400mm for Better Interior Access

Auto-centering motor mount arm can unlock and swing out giving greater access to reactor

Brushless DC electric, air and explosion-proof motors available

Brushless Motor Controller

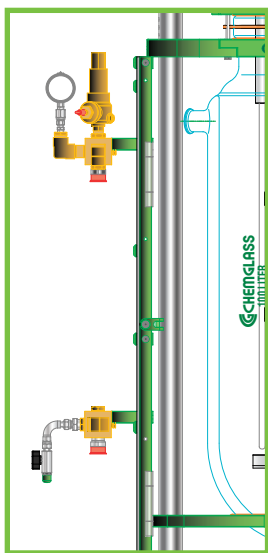
- RPM torque, PT100 temperature and timer
- Wifi and USB connection
- 3.5" TFT display
- Quick lockout function
- Easy direction changes

Open frame design provides excellent accessibility

400mm
Better Access!



50L Squatty System



High Flow Manifold Included with 100L System

(Optional on 50L Squatty Systems)

M30 x 1.5 circulator fittings and insulated hoses, -60 to +200°C

Smaller footprint support frame with oversized, rugged, SS uprights and heavy-duty, PTFE-coated aluminum fittings

Heavy-duty, lockable casters

Reactor jacket graduation scale on both sides

Safety shield on all four sides

Lower safety ring

3-inch
Pipe Drain

Larger 3" beaded pipe drain with larger radial clearance



Zero dead space, detachable drain valve with laser-etched directional arrows for open and close

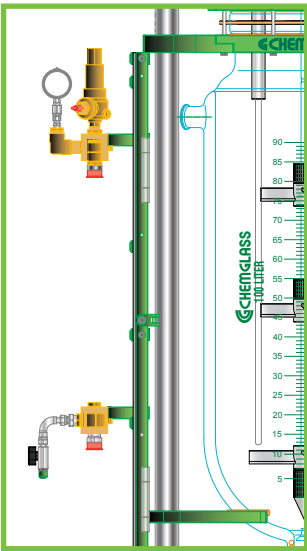
150L Systems

400mm Flange

Mechanical Seal Stirrer Bearing

Brushless Motor Controller

- RPM torque, PT100 temperature and timer
- Wifi and USB connection
- 3.5" TFT display
- Quick lockout function
- Easy direction changes



High Flow Manifold Included

M30 x 1.5 circulator fittings and insulated hoses, -60 to +200°C

Smaller footprint support frame with oversized, rugged, SS uprights and heavy-duty, PTFE-coated aluminum fittings

3/8 HP Brushless DC electric, air and explosion-proof motors available

Auto-centering motor mount arm can unlock and swing out giving greater access to reactor

Open frame design provides excellent accessibility

400mm
Better Access!

Mechanical Seal Bearing

Reactor jacket graduation scale on both sides

Safety shield on all four sides

Lower safety ring

3-inch
Pipe Drain

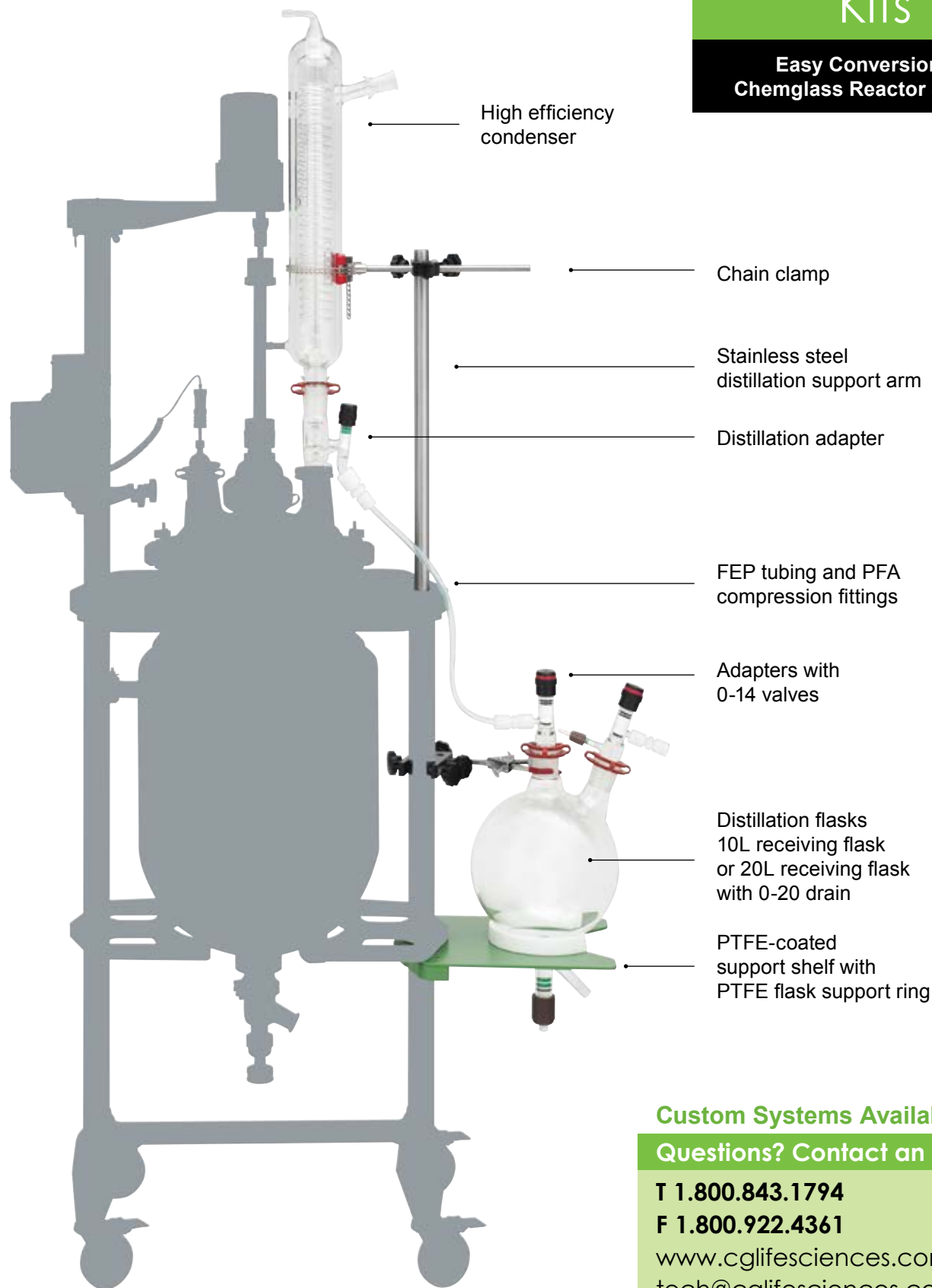
Larger 3" beaded pipe drain with larger radial clearance

Available for 10, 20, 30 and 50L Reactor Systems

Custom Systems Available

Side Shelf Distillation Kits

Easy Conversion for
Chemglass Reactor Systems



Custom Systems Available

Questions? Contact an expert.

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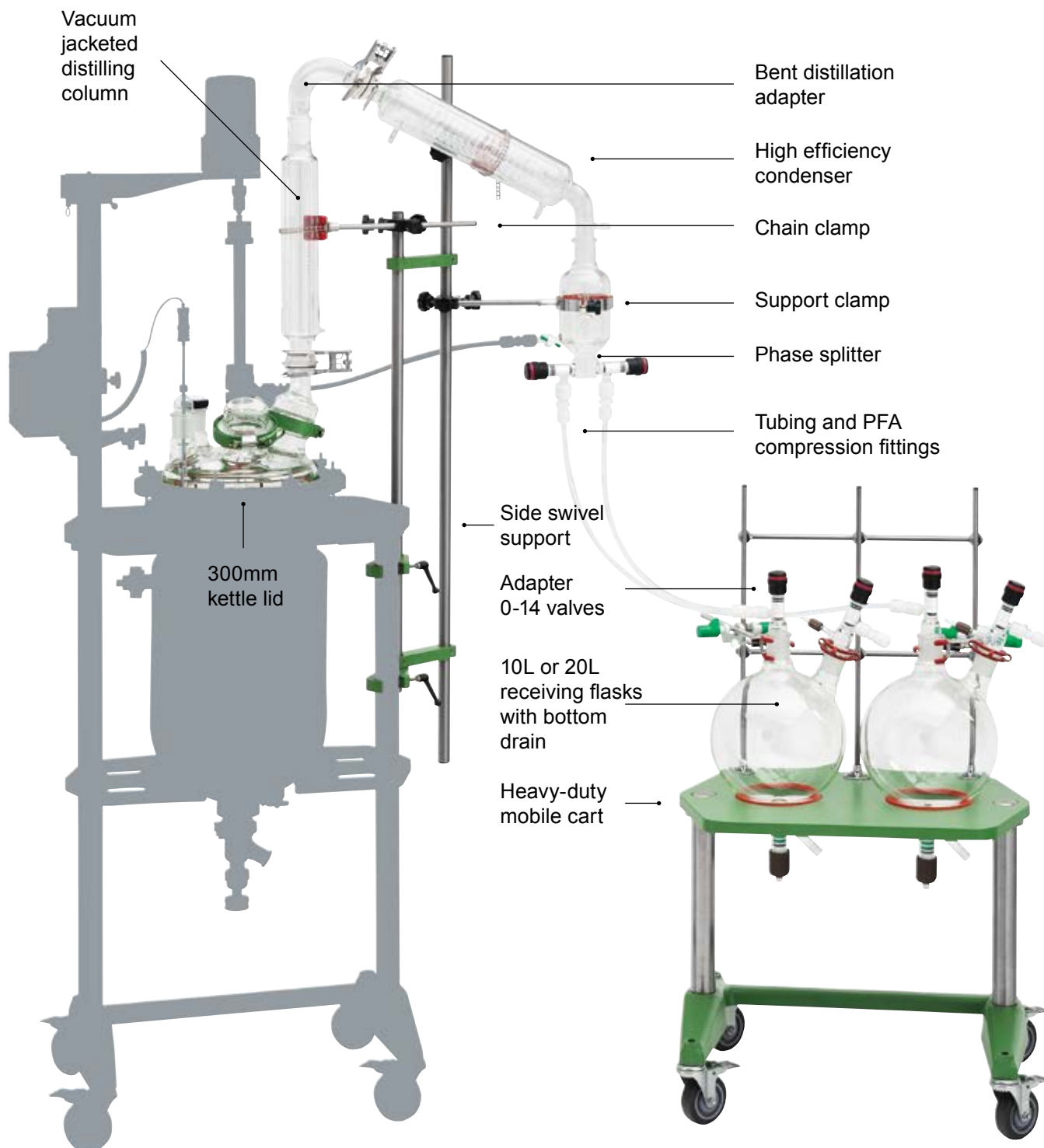
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Cart Distillation Kits

Available for 30 to 150L Reactor Systems

Custom Systems Available

Separate, Heavy-Duty Cart with
Two Receiving Flasks



For Single and Multi-Step Reactions in One Vessel

Filter Reactors

1, 5, 10, 20 and 65L Jacketed and Unjacketed Filter Reactors

Jacketed and Unjacketed Systems

Open frame design for excellent accessibility

Support frame with oversized, rugged, SS uprights and heavy-duty PTFE-coated aluminum fittings

Mechanical seal stirrer bearing

SS inlet / outlet adapters available in M16 x 1 and M30

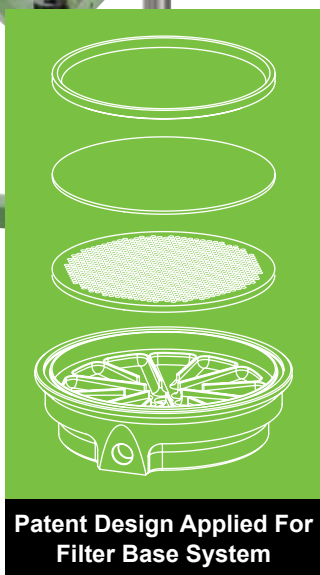
PTFE filter base

Detachable drain valve

Heavy-duty lockable casters



1 & 5 Liter Unjacketed Benchtop Systems



Patent Design Applied For Filter Base System

Our unjacketed filter reactors can be used for single or multi-step reactions and filtrations in the same vessel, and large scale peptide synthesis. Filter base eliminates material transfers and significantly reduces losses. Complete 1L and 5L reactor systems include our ChemRxnHub stands.

Filter Reactors

Larger Scale Custom Filter Reactors Up to 65L

Custom Filter Reactors and Accessories

Manufacturing Expertise Makes All the Difference

- Extensive filter reactor design experience
- Open frame designs
- Jacketed and unjacketed
- Unique filter base design (Patent Applied For)

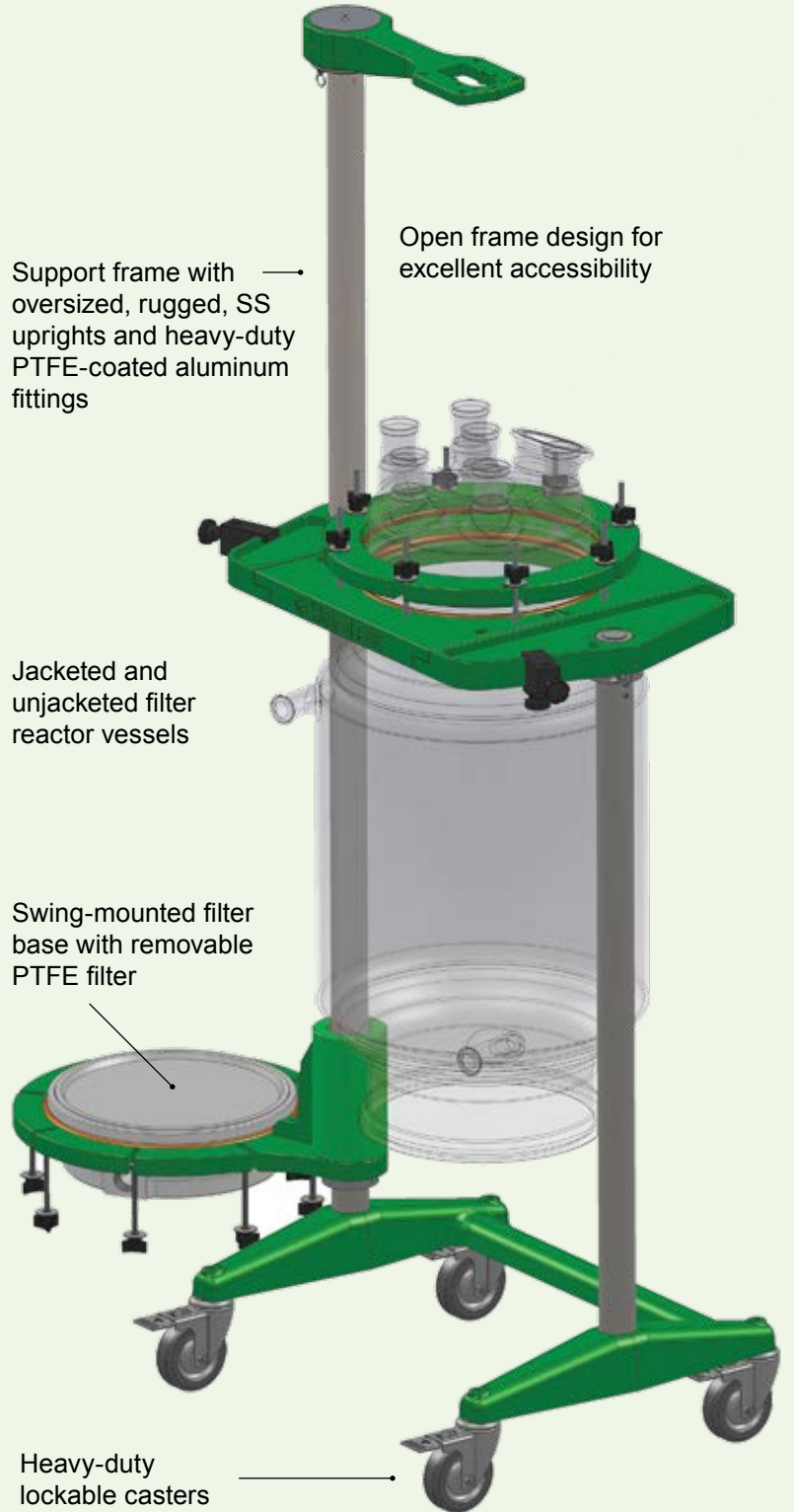


Support frame with oversized, rugged, SS uprights and heavy-duty PTFE-coated aluminum fittings

Open frame design for excellent accessibility

Jacketed and unjacketed filter reactor vessels

Swing-mounted filter base with removable PTFE filter



Heavy-duty lockable casters

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For Air and Exhaust Scrubbing

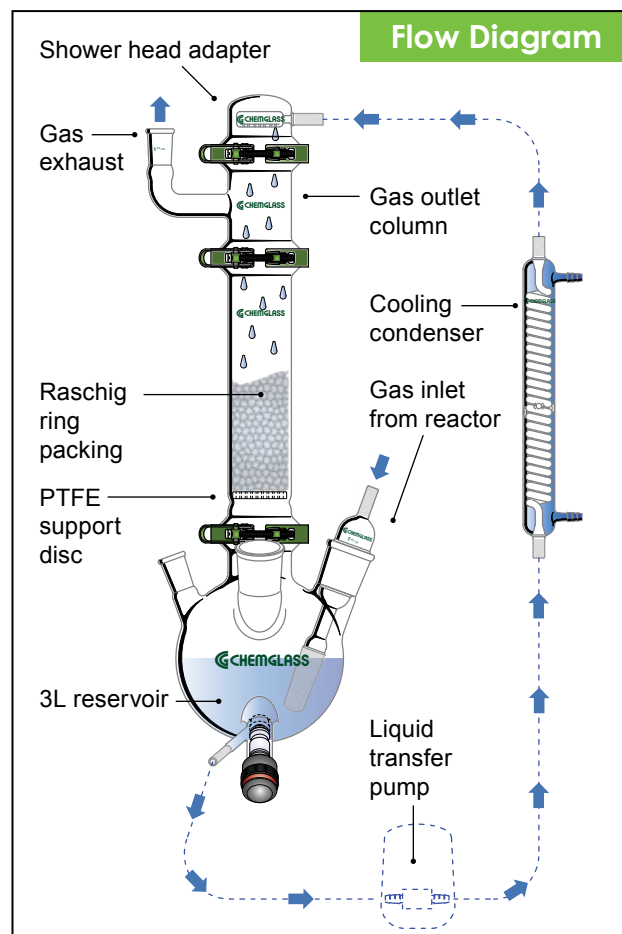
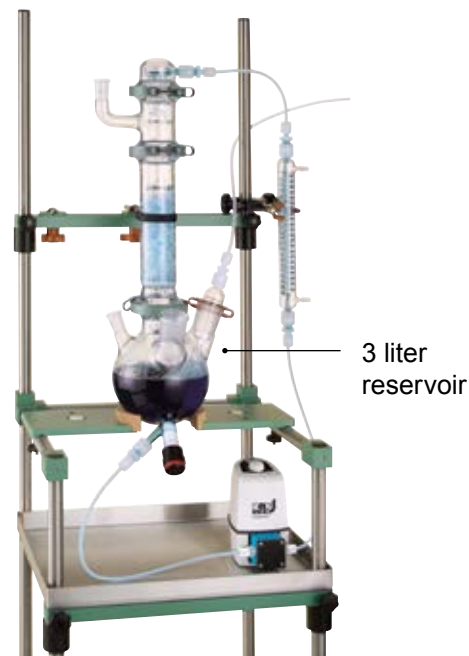
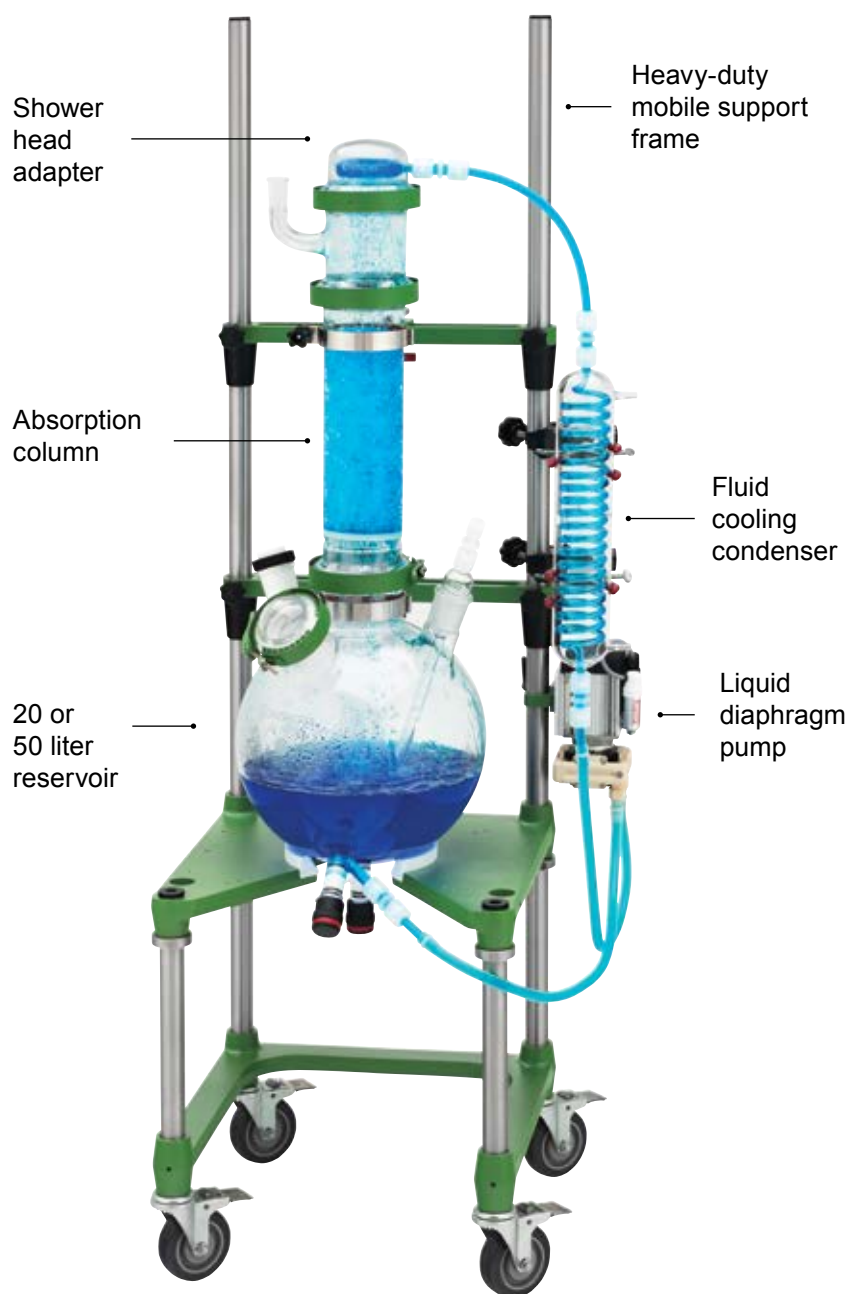
Laboratory scale gas scrubbers for use in many air and exhaust cleanup tasks.

Scrubbers are currently available in 3, 20 and 50 liter fluid reservoir sizes. The 3 liter is a compact design and will fit into any laboratory hood. It can also be used in walk-in hoods when assembled on our mobile or benchtop reactor stands.

Gas scrubbing takes place when the exhaust enters the inlet in the round bottom flask and travels upward through the absorption column. The scrubbing fluid is pumped from the round bottom flask upwards into the shower head adapter. It then flows counter-current to the exhaust gas, through the packed column, causing intensive contact between the two. Scrubbing can be accomplished by creating either a positive flow through the reaction vessel using a carrier such as nitrogen, or by connection of a vacuum source to the column adapter.

Gas Scrubbers

Complete Gas Scrubbers in Three Convenient Sizes



Your Custom Resource

Reactors and Accessories

Custom Reactors and Accessories

Chemglass Life Sciences has the experience and expertise to design and fabricate custom engineered solutions for any application.

- Custom reactor systems
- Large scale round bottom flask systems
- Stationary and tilting stands and supports
- Custom carts and frames for columns, flasks, feed vessels and receiver vessels
- Custom filter or mixing systems
- Accessories that interface with our reactor systems including bulk powder addition bags

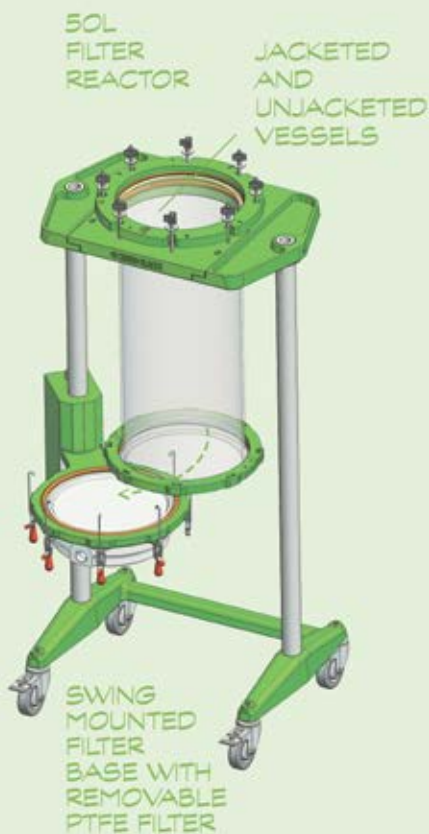
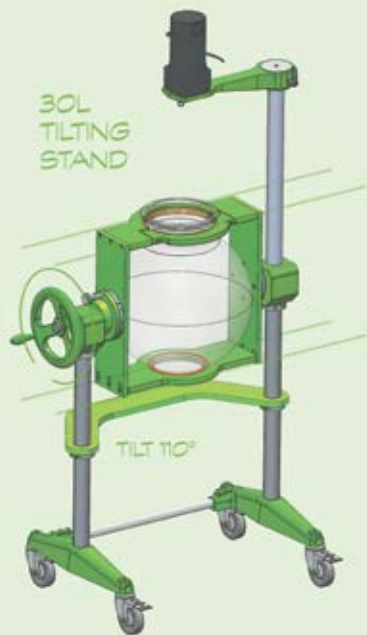
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The Leader in High Precision Thermoregulation



Huber® Unistat, Ministat, Minichiller and
Unichiller Authorized

For more than 10 years, Chemglass has distributed Huber brand products because they are the recognized **technology leader in high precision thermoregulation** for research and industry. Their products ensure precise temperature control in laboratories, pilot plants and production processes and are the perfect complement to our line of jacketed process chemical reactors.

In addition to their Unistat dynamic temperature control systems, we also offer Huber chillers and heating / cooling circulators. **Chemglass is an authorized Huber installation, training, maintenance and repair supplier** with distributor access to Huber's entire product line.

Complete reactor and circulator package deals are available! Show us your wish list and feel free to ask for a complimentary, no-obligation quote:

Contact us today!

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huber

Chillers and Circulators for
Research and Industry

- Sales
- Installation
- Training
- Preventive Maintenance
- Repair



Reactor Accessories

These are just a few . . .

See www.cglifesciences for all of our accessories.

A large selection of Huber circulator adapters and fittings for converting metric to NPT as well as hoses and valves



Polypropylene
reactor funnels in
a variety of sizes



Air-operated drain valve

- opens quickly and easily
- great for solvent extractions and partitioning after a reaction



We're your Reactor Resource!



Manufacturing Experience

- Leading scientific glassware manufacturer for more than 70 years
- 12,000+ standard chemistry and life sciences products

Quality Products in Stock

- The most glass process reactor expertise, bar none, in the industry
- Thousands of systems installed worldwide
- Sizes from 100mL to 100L
- Standard, modified and custom reactor systems

Superior Customer Care

- Prompt, courteous, efficient customer service
- Dedicated technical service experts
- Design assistance for custom and oem glass components



Get in touch.

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