

# Lab Glass Reactor



## Lab Glass Reactor

One of the prime endeavor and proud moment for “**GOEL Scientific Glass Ltd.**” to have designed lab glass reactor for the convenience of chemical scientists, R&D and Lab fraternity, who make wonderful use of standard glass equipment to accomplish desired results and innovations.

“**Lab Glass Reactor**” has become very convenient, essential, and integral part of chemical processing units to accomplish desired results which is a standard equipment **Make in India**.

Glass being an inert material is extremely useful for scientific fraternity with additional qualities of transparency, chemical resistance, and thermal stability.

### Significant Features

**Convenient Interchangeability** - The lab glass reactor has a tool-free exchange system with a hose coupling quick-release reactor clamp. It also has a self-aligning stirrer coupling that engages without any tools.

### Aesthetic Design

**Lab Glass Reactor** is most suitable for every chemical process unit. It is also ideal for all vacuum conditions due to its design and construction in **SCHOTT Duran, GmbH** glass with high quality material at a reasonable price.

The triple stand support with stainless steel rods enhances the stability of the lab glass reactor.

### Suitability

Lab glass reactor is most suitable requirement for every chemical process unit.

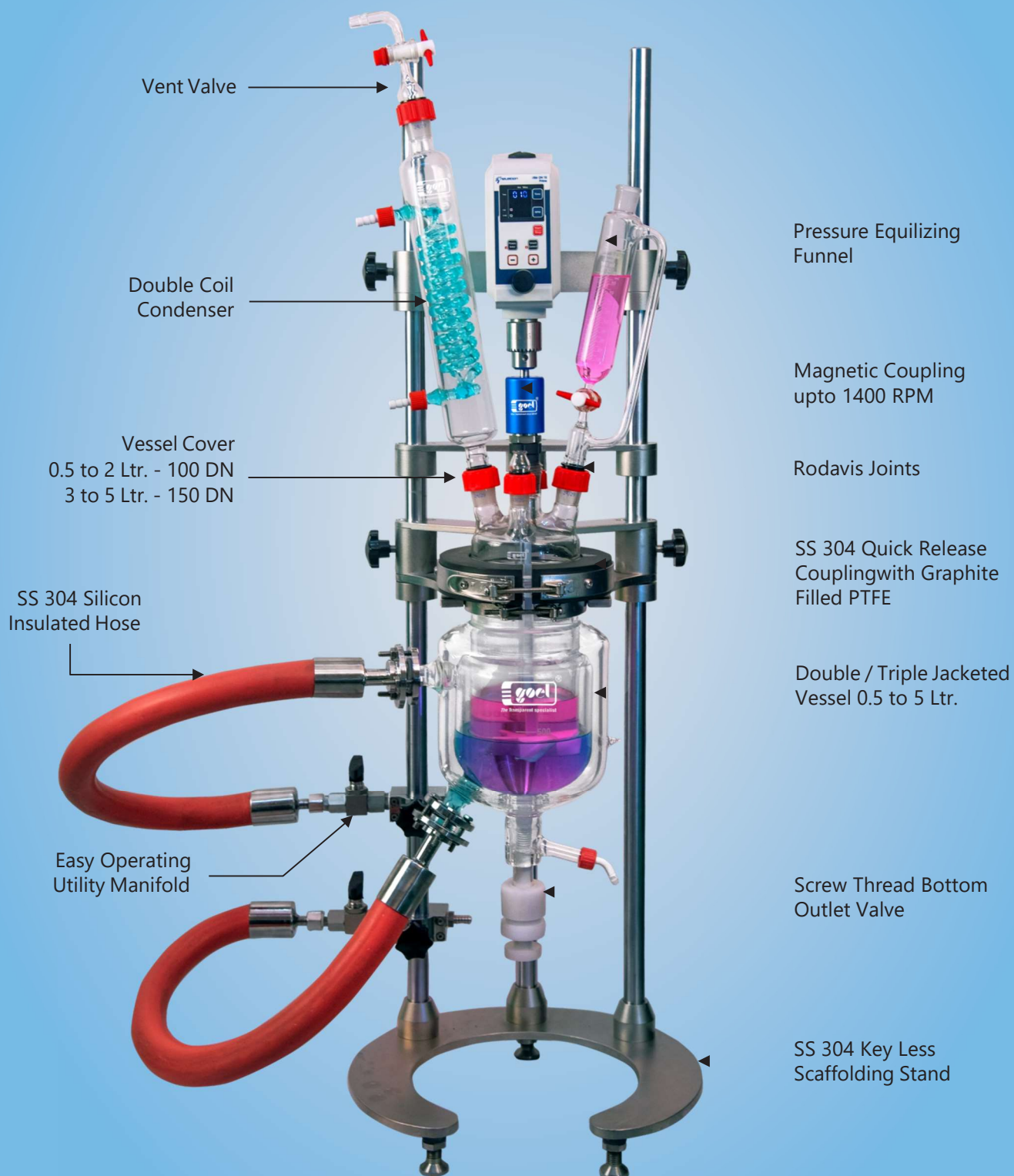
It is also ideal for all vacuum conditions due to its versatile design and quality material.

### Why do we use 'SCHOTT Duran Glass'?

SCHOTT Duran meets a significant standards for technical glass such as **ISO 3585:1998&ASTM E438** Type 1. It's a renowned glass for use especially in scientific laboratories, architecture, and R&D sector due to its versatility, resistance, strength, and availability in all dimensions for worldwide applications.



# Lab Glass Reactor



# Technical Specifications & Components of Lab Glass reactor

## 1. 0.5 Ltr to 5 Ltr Double / Triple Wall Jacketed reactor with 100 DN / 150 DN Duran glass flange with groove

- Made from Schott Duran Glass tubing

Primary Reactor - For Reaction

Double Wall Reactor - for Utility Circulation (-60 to 200°C)

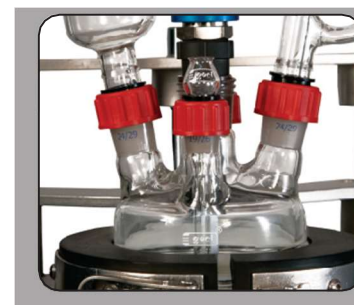
Triple Wall Reactor - for Full Vacuum sealed Jacket to prevent energy loss



## 2. Fused type bottom outlet valve with Screw thread operating

1. Easy to open to clean
2. Minimum dead Volume Valve
3. Contact parts PTFE

## 3. 100 DN/150 DN Duran Glass Flange cover with DURAN® RODAVISS® Joints - Made from Schott Duran Glass tubing



## 4. 100 DN/150 DN "O" Ring Viton / PTFE/FFKM (Perfluoro elastomer)



## 5. SS304 Quick release heavy duty coupling with Graphite Filled Teflon material

1. High compressive strength
2. Improved wear resistance under load & permanent deformation
3. Better thermal / electrical conductivity.
4. Good chemical resistance
5. Excellent frictional properties.

## 6. SS Magnetic Drive for Glass reactor

Max. Working Pressure-Full vacuum

Max. Working Temp. -200°C

"O" ring- Viton (Top) & Bottom Kalrez "O" ring

M.O.C- Carbon filled Teflon (CFT) & SS-316 with bottom Hast C adapter

Rotation - Clockwise direction

Max RPM-0-1450





**7. SS316 with PTFE Lined stirrer 10 mm Rod**



**8. Pressure Equalizing funnel with DURAN<sup>®</sup> RODAVISS<sup>®</sup> Joints**

**9. High Efficiency 250 mm Long Double coil Condenser with DURAN<sup>®</sup> RODAVISS<sup>®</sup> Joints**

**10. Unique Support system SS304 Scaffolding stand with Bakelite Knob with SS304 screw**

1. Medical Grade Bakelite
2. Smooth & Glossy Finish
3. Quick opening & easy lifting
4. Universal motor Mount
5. Heavy duty SS304 Base



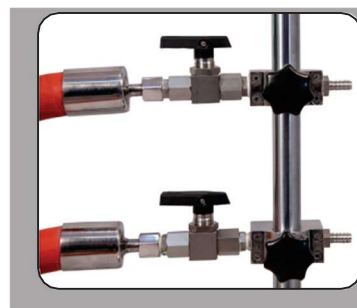
**11. Over Head Stirrer Drive**

1. RPM 50 to 1000
2. Motor Type - Brushless Dc
3. Torque-15 Ncm
4. Viscosity - 8000mPas
5. timer -1 min to 99 Hr 59 min & infinity
6. Direction of rotation : Reversible CW/CCW

**12. Digital Temperature Indicator PT100 PTFE Coated sensor (-40 to 300°C)**

**13. SS304 Insulated hose with Manifold Connection System with flexible movement**

3/8" X 750mm with Flange Connection with Silicon Insultation / Nitrile Insulation





## GOEL SCIENTIFIC GLASS WORKS LTD.

#69, Yardley Crescent, Brampton, ON, L6X5L7, Canada

Tel : +1-416-912-1530

Email : [canada@goelscientific.com](mailto:canada@goelscientific.com)

Web.: [www.goelscientific.ca](http://www.goelscientific.ca)

