

## SS Vacuum Chamber for drying

Vacuum drying is the mass transfer operation in which the moisture present in a substance, usually a wet solid, is removed by means of creating a vacuum. In chemical processing industries like food processing, pharmacology, agriculture, and textiles, drying is an essential unit operation to remove moisture. Vacuum drying is generally used for the drying of substances which are hygroscopic and heat sensitive, and is based on the principle of creating a vacuum to decrease the chamber pressure below the vapor pressure of the water, causing it to boil. With the help of vacuum pumps, the pressure is reduced around the substance to be dried. This decreases the boiling point of water inside that product and thereby increases the rate of evaporation significantly. The result is a significantly increased drying rate of the product. The vacuum drying process is a batch operation performed at reduced pressures and lower relative humidity compared to ambient pressure, enabling faster drying.



### • Product Features of the Chamber

- **Stainless steel chamber for long-term air-tightness performance.**
- **Burhani Vacuum chamber has a rounded edge at the top, for the protection of silicone gasket.**
- Vacuum gauge is assembled on a separate port, so that the reading remains accurate even while pumping/venting the chamber.
- Gauge reading in both in Hg and Mpa.
- All kits are vacuum tested for 24 hours before packaging. (leakage less than 2.0 inHg at 24 hours)
- Two-sided flippable vacuum gasket for better durability and reliability.
- The gasket is chemically resistant to butane and other solvents.
- 25 mm thickness Acrylic lid for long life and clear visibility.
- Strong elastic food grade silicone vacuum hose can connect/disconnect easily with the pump/chamber.
- 50um air filter on the vent valve to reduce air flow and prevent any dust/powder flowing into the chamber.
- Easy to install and low-cost to maintain: the chamber can be assembled in 5 minutes.
- 45 day complimentary warranty and life-long parts support.

### • Product Specs & Part List of the Chamber

- **Vacuum Chamber:** stainless steel
- **Lid:** Acrylic / Stainless Steel
- **Vacuum Gasket:** silicone, resistant to Butane and other solvents.
- **Vacuum Gauge Assembly:** 0.5 inHg accuracy.
- **Valve Assembly:** very high quality air-tight brass valves, with 50um filter on vent port
- **Vacuum Hose:** 3.3' / 1 meter food grade collapse-proof silicone hose, 3mm wall thickness (8mm I.D, 14mm O.D)
- **Vacuum Pump Adapter:** 3/8" hose barb to 1/4 SAE flare port. . .

Model No	Capacity Gallon	Capacity Litres	Size Dia x Height (cm)
BHF2020	1.7	6.3	20x20
BHF3030	5.6	21	30x30
BHF3045	8.5	32	30x45
BHF4040	13.5	50	40x40
BHF5050	27	100	50x50
Custom Sizes Manufactured on Demand			