

High pressure Reactor - Handling Precautions

Follow the following instructions carefully.

1. **Mounting**

Mount the Autoclave on levelled floor on 4 Castor wheels.

2. **Align the Motor Coupling**

Properly align the bush coupling between the Motor and Magnetic drive to avoid vibration in the running.

3. **Earthing**

Ensure proper earthing connection to trolley legs and ensure all OK signal is on the Control Panel.

4. **Provide Overpressure Protection**

To ensure safety, please adjust the device to a maximum of 85% of its design pressure.

5. **Inspect end closures and side ports regularly**

If any components are damaged or deteriorated, they will be replaced, and the cause of any deviation will be corrected.

6. **Relieve system pressure before working on the Reactor**

Working on Reactor that are under pressure may result in bodily harm or property damage.

7. **Never support other components with the vessel**

To avoid damaging the vessel, it is important not to hang piping manifolds or support other components with it. Never allow the weight of manifolds to be held by the Feed/Concentrate ports or the Permeate ports. Instead, use the frame to securely attach manifolds in a way that does not pull on these ports.

8. **Do not over-tightened the connection**

Tightening the connection more than required will damage the port or threads. Avoid movement on the permeate piping not to produce stress on the threaded port.

9. **Ensure that all vent ports are away from the operator**

Connect all vent ports like the Vent valve, Rupture disc, and Safety valve port with the hose pipe and direct them to a safe place away from the operator.

10. **Never operate the vessel above its ratings**

Engaging in this practice will nullify the warranty of the vessel, reduce its lifespan, and may result in physical harm or damage to property.

11. Do not operate the vessel over 85 % design pressure and temperature

For safety purposes, it is recommended to operate the reactor at or below 85% of its design pressure and temperature. Operating above this level may result in voiding the vessel warranty, shortening its lifespan, and causing bodily harm or property damage.

12. Operate the vessel in only positive pressure applications

This high pressure autoclave is not designed to work under vacuum conditions.

13. Flush the vessel before the system shuts down

It is advised to flush the Bottom Valve with regular water as some feed waters and chemicals can cause corrosion and jam the valve when left stagnant.

Note: Failure to take every precaution listed will void the vessel warranty and may result in vessel failure.