System Description

The system is made of 1-cubic-foot fiberglass enclosure for storage of sensitive materials in vacuum or dry nitrogen.

- Size: 12×12×12 inch
- Vacuum level down to ~27 inches of Hg
- Nitrogen vent/purge
- 3-way switch for changing between vacuum and nitrogen lines

Figure 1 shows different components of the instrument.

1. Fiberglass cabinet structure
2. Door frame assembly
3. Valve assembly
4. Support rack
5. Removable shelves
6. Desiccant pan
Operation

**Loading and Un-loading Samples**

1. Loosen the door lock (figure 2 and 3)
2. Turn the 3-way valve towards the nitrogen line (figure 2, 3, and 4)
3. Turn on the main nitrogen valve (figure 4)
4. Wait for a few minutes
5. Put your samples inside (or unload the samples) when the door pops open
6. Close the lock
7. Turn on the vacuum pump (figure 5)
8. Turn the 3-way valve towards the vacuum line
9. Wait until the pressure gauge of the vacuum pump shows 27 inches of Hg
10. Close the 3-way valve (middle position)
11. Turn the vacuum pump off

**Note**

Keep the cabinet always under vacuum or dry nitrogen when not used.

**Caution**

1. Do not force the door open by hand when cabinet is still under vacuum
2. Do not exceed 10 psi pressure for the nitrogen line
Figure 4: Close-up view of the 3-way valve and main nitrogen valve

Figure 5: Vacuum pump