

VACUUM SUITCASE

Objectives

Transport samples in vacuum conditions. With this vacuum suitcase it is possible to translate the sample without contamination between different experimental facilities, internal and external to the laboratory.

Environmental conditions

- Sample type «Omicron».
- Base pressure without bake-out: 10^{-8} mbar. With bake-out: 10^{-10} mbar. The vacuum suitcase need an external roughing pump and a turbo pump for starting the vacuum.
- Powered to room temperature. No heat production.
- The current of ion pump is proportionally to the pressure. Don't need pressure gauge.

Technical parameters

- Minimum weight for manual transport.
- Cold finger for liquid nitrogen for maximize the water absorption in the range of 10^{-6} mbar.
- Two pumps in the same flange. Combination of Ion pump and NEG pump. The activated NEG pump don't power correct for maintain the vacuum level.
- Auto voltage output for ion pump for minimum current value.
- Magnetically transfer rod.
- Little powered system make by a combination of small electronic for high voltage for the ion pump and ion-lithium battery for the normal operation in the transport.

