## Instructions for Replacing the Helium Compressor Adsorber/ Filter

## General Information...

An Adsorber acts as a filtration device in the closed helium cycle in cryopump and compressors, preventing the helium gas from oil vapor contamination, and providing clean and high purity helium to extend the lifetime of cryopumps.

Gross contamination in the closed helium cycle may require expensive cryopump overhauls and/or replacement of other key components. Therefore, routine replacement (every 1-2 year for most of the applications) of adsorber is essential to maintain optimal cryopump performance.

Trigger Technology only manufactures brand new adsorbers.

- The adsorbers are fabricated using dehydrated charcoal, glass wool and felt pads and Aeroquip couplings; varnished with non-stripping paint to assure the cleanliness of the installation site.
- Each adsorber is cleaned, helium leak-checked, purged and charged with 5N5 (99.9995%) UHP helium for immediate on-site service. And finally, packed with protection materials for safe transportation.
- All of our adsorbers are guaranteed to meet or exceed OEM specifications; we have excellent reputations in Asian market.

We provide various models compatible for CTI/ Brooks, Austin/ Trillium, Ulvac and Suzuki helium compressors. Please feel free to contact us for more information.

Model	AD-A	AD-B	AD-C	AD-UC15	AD-UC30	AD-J	AD-SC100	AD-SC303
Compatible OEM compressor models	CTI SC 8200 8500 8510 9600	<u>CTI</u> 8300 <u>Austin</u> 125W	<u>CTI</u> 1020 <u>Austin</u> 450	<u>Ulvac</u> C10 C15	<u>Ulvac</u> C30	<u>Suzuki</u> A200 C300 <u>Austin</u> 125A	<u>Suzuki</u> C100	<u>Suzuki</u> C303 C305

## Replacing An Adsorber...

- Shut down the compressor
- Disconnect the compressor power source (input power cable)
- Disable the cooling water supply
- Disconnect the helium lines from supply/ return connectors at the rear of the compressor
- Loosen the screws that hold the compressor rear panel, and remove rear panel
- Disconnect the adsorber with compressor internal piping and keep all bolts and washers for installing the replacement adsorber. Remove the adsorber from the compressor
- Install the replacement adsorber and connect it with compressor internal piping
- Make sure the internal piping connection and Aeroquip couplings are properly tightened
- Replace the rear panel and tighten the screws
- Reconnect the helium lines to the supply/ return connectors at the rear of the compressor
- Ensure the pressure gauge reading is correspondent to compressor models
- Enable the cooling water supply
- Reconnect the compressor power source
- Note the date that the adsorber was replaced on the operating log record
- Make sure the adsorber is replaced routinely
  - While disconnecting/ connecting the Aeroquip couplings, use two wrenches to avoid loosening the body of the coupling from its adaptor.
  - Unscrew/screw the two coupling as quickly as possible to minimize gas leakage