

S.I.S.™ Charcoal Trapping Exhaust Filter & Oil Mist Eliminator F45

Removes Contaminants From Vacuum Pump Exhausts

Features

- High Efficiency Filtration
- Low Operating Cost
- Inexpensive Replacement Element
- Pressure Safe
- Easily Installed and Replaced
- Equalizes Air Flow
- Helps Maintain Safe Working Environment
- Combined with SIS Oil Mist Eliminator Trap Particles Down to 0.3 Micron



AC-10S SIS Activated Carbon Replacement Element



CSS-RC10-050 SIS Air Purifier with 1/2" NPT

Function

SIS Air Purifiers are installed on exhaust ports of roughing pumps to adsorb remaining compressed air contaminants such as oil aerosols, oil vapors, certain other hydrocarbon vapors, and trace moisture. They also trap all foreign solid particles such as dirt, dust, rust, and pipe scale down to 10 microns in size. In addition, SIS Air Purifiers can be used for efficient adsorption and removal of organic vapors and aerosols, noxious odors, certain foreign gases and bacteria, and are effective in removing certain inorganic vapors and aerosols from compressed air and vacuum air.

Adsorption Capacity

The carbon used in the manufacture of SIS Air Purifiers has a huge internal and external surface area with an affinity for adsorbing organic contaminants. Each gram of carbon has a surface area of approximately 1500 sq. meters, making SIS Air Purifiers particularly efficient for most air purification and gas phase applications.

Actual adsorption capacity can be as high as 80% of carbon weight depending on the specific compound being removed. Generally (but not always), adsorption capacity of activated carbon increases with molecular weight, boiling point, and concentration of contaminants. Compounds with low molecular weights, and/or highly polar compounds will not be sufficiently adsorbed at low concentrations.

► Tech Tip

Standard Pump Filter Kits consisting of a SIS Charcoal filter in conjunction with an SIS Oil Mist Eliminator are available from SIS for most Vacuum Pumps. See pages F43

Part No.	Description
CSS-AC10-050	SIS Vacuum Exhaust Filter
AC-10S	Activated Carbon Replacement Element
QF25XSP50	1/2" NPT to NW25 Adapter

SIS Pump Oil Mist Eliminator

When vacuum pumps are first turned on they usually emit a considerable quantity of oil vapors into the air. This oil mist not only contains oil but it also contains any contaminant's that were in the oil within the pump. The oil mist eliminators trap this oil mist before it is expelled into the air, traps it within the filter and then returns the oil back to the pump. It traps particles down to 0.3 microns and is 99.97% efficient.

The oil mist eliminator also becomes very useful if the vacuum pump is out-gassed by means of the gas ballast valve. Again the oil mist will be trapped and the oil returned to the pump. By preventing the oil mist from contaminating the laboratory air, the risk of head crashes on computer disc systems can be reduced. In addition they provide a healthier environment within the laboratory.

The oil mist eliminator contains an easily replaceable paper filter which traps the oil mist allowing it to condense and return to the oil pump. It also incorporates a safety valve to prevent pressure buildup in the pump when pumping vapors capable of clogging the cartridge. In some cases of very heavy use, it may be desirable to exhaust the pumped gases to a fume duct or charcoal filter. For such applications, the oil mist eliminator can be fitted with a hose nipple to which an exhaust hose could be attached or our CSS-AC10-050 charcoal filter can be attached directly to the oil mist eliminator

Part no. EEG-GL915-NW25 incorporates a NW 25 flange (O.D. - 1.5") which enables this unit to be clamped onto the exhaust port on the newer model Alcatel Pump Models UM2005, UM2010, UM2015. This model also fits BOC Edwards E1M5/8/12, E2M3/5/8/12, RV3/5/8/12, E2M0.7, E2M1, E2M1.5, and any other pump up to 12 SCFM with a NW25 fitting. Adaptors are also available for pumps without this fitting.



GL915R SIS Coalescing Filter Replacement Element



EE-GL915-NW25 SIS Oil Mist Eliminator

Part No.	Description
EE-GL915-NW25	SIS Oil Mist Eliminator
GL-915R	Coalescing Filter Replacement Element