

Engineering • Design • Manufacturer

INSTALLATION INSTRUCTIONS FOR VORTOX AIR TECHNOLOGY, INC. OIL BATH AIR CLEANERS: S AND SA SERIES



INSTALLATION

The S and SA Series Oil Bath Air Cleaner must be installed in a vertical position. Sufficient space should be available immediately below the air cleaner to allow for the removal of the cup. All connections between the air cleaner and the unit to which it is connected must be airtight. Vortox Air Technology Inc. Air Cleaners will give you the maximum possible dust protection; do not allow dust to bypass it through leaky connections.

Note: Before operating the equipment, the Air Cleaner must be filled to the proper level with oil.



METHOD OF OPERATION



The air flowing through the Air Cleaner is first centrifugated to remove the heavier dust particles. The air then flows into the filter element, carrying with it oil from the oil reservoir. The dust remaining suspended in the air, with the oil picked up from the reservoir, impinges upon the filter surfaces. The cleaned air passes on through the filter, and the dust laden oil drains back to the reservoir. Clean oil is displaced from below the disc and the cycle is continued. The circulation of oil is both rapid and continuous.

RECOMMENDED OIL

Use inexpensive lubricating oil or one of the pale oils. The oil is used primarily to wash the dust extracted from the air stream into the reservoir; therefore, the oil should not be heavy. An SAE 20 oil is recommended for temperate conditions; SAE 10 is recommended for colder weather.

For more specific recommendations, refer to the following table:

Temperature of Air Entering Air Cleaner (°F)	Viscosity (SAE No.)
Above 100	30
50 to 100	20
25 to 100	10
0 to 25	3 parts 10 + 1 part Kerosene
-30 to 0	2 parts 10 + 1 part Kerosene



For temperatures below -30°, dilute oil further with Kerosene. A mixture having a viscosity, at the operating temperature, equivalent to and SAE 20 at 70° is required.

Note: Consult your petroleum distributor for oil that has this low temperature characteristic because adding Kerosene is only an emergency measure. If the operating temperature rises, the Kerosene may evaporate, leaving a low oil level.