

FC-4



Heat Treated Furnace

Carbon Stain on Part Surface



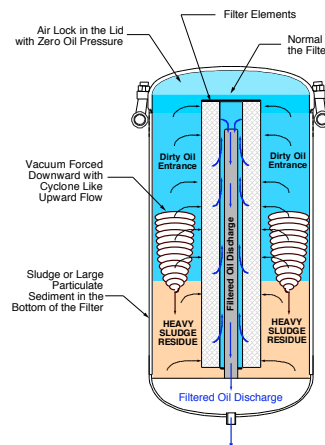
Quenching Oil Filtration to Remove Excessive Carbon Particulate.

Acme Screw Machines

Chip Spinner to Recover Cutting Oil



C- Series Filter Elements



Cutting Oil Filtration System for Screw Machine Operation.
Clean Cutting Oil Increases 15% to 30% of Tool Life.

Air Lock Special Design for High Dirt Holding

This filter element is a pleated paper filter specifically made to remove excessive carbon particle from dirty oil. This paper has a special chemical coating so the filter media will not easily collapse with high oil flow and will not easily swell when there is excessive water in the dirty oil. The filter element has a high dirt holding capacity.

As filter element is made of cellulose material, so there is no **ESD (Electrostatic Discharge)** that causes oil oxidation and corrosion from electrified oil from this filter element as compared to other type of synthetic fiber filter medium.

The **filter housing** is designed to create oil flow in a cyclone like upward motion. This cyclone like upward flow will create oil and sludge separation in the FC-4 housing. The heavy particles will drop to the bottom of the housing and start to clog filter element from the bottom up. The **air lock** in the housing allows oil pressure to force dirty oil to slowly penetrate through filter elements from the bottom up. In addition, these filter elements are rated at 40 GPM while we only use a 3 or 10 GPM pump. So when you open the lid, oil hardly reaches the O-ring and the lid because of this air lock design as shown in the illustration.

Therefore, this **air lock design forces the filter elements to clog from the bottom part of the filter elements**, rather than clogging throughout the element as in conventional filter. This design helps the filter elements to hold more dirt from the bottom up. A typical new filter element weights about 4 pounds. After this filter is clogged, the spent filter could weight approximately 5 to 10 times more than its original filter weight due to its high dirt holding capacity.

FC-4 Filter Cartridge Air Lock Designed Technology

- Remove excessive carbon from **quenching oil and cutting oil from ISO Code 22/18 to 18/14 cleanliness.**
- 3 Different filter elements:
 - C-5 for 5 micron filter
 - C-12 for 12 micron
 - C-24 for 24 micron
- Water resistance filter material.
- Capable of filtering oil having oil temperature up to 400 °F.
- 7 GPM filtration flow rate.
- Operation is controlled by Programmable Digital Controller with FLASH memory storage with built-in chip memory backup.
- Special air lock designed that allows dirt to capture based on oil flow, rather than pressure drop. This helps increase 3 to 5 times more dirt holding capacity.
- Automatic stop operation controlled by differential pressure switch and built-in timer switch.