

*Biodiesel & WVO Processing – Complete Pump Filtration System*

When using the complete pump/filter system, the cover assembly and filter bag basket is removed and the WVO as collected is poured through a nylon monofilament size #1 filter bag rated at 150 microns. This results in the following benefits.

- Large contaminant particles are removed which could damage the pump
- By first removing the large particles, the service life of the filter bag used for final filtration will be increased

After the required amount of WVO has been pre-filtered and is in the drum, the drum heater is turned on and the WVO heated to about 90°/100° F.

The filter bag basket is placed in the filter bag holder. A 1 micron nominally rated polyester felt filter bag is installed inside the filter bag basket and the cover assembly is securely in place. The transfer valve is in the closed position and the filter inlet valve at the top is in the open position.

The pump is turned on and the filtration process is started. The fluid should be turned over 5 to 6 times. Each time the WVO passes through the bag, it will get cleaner. 40 gallons of WVO turned over 5 to 6 times will take approximately 15 to 18 minutes.

After the required quality level is obtained, the pump is shut off and the heater turned on to heat the oil to 125°/140° F. to speed up water removal. After being at this temperature for a short period of time, the free water can be drained off.

In the last step, the filter inlet valve is turned off and the transfer valve opened. The pump is turned on and the WVO can be transferred to a storage tank.

Our complete pump/filter system is illustrated as follows:

