

OIL SEPARATOR

Models OSEP-5, OSEP-5S

OSEP-5 OIL SEPARATOR

Operating and Maintenance Instructions

DESCRIPTION

The Graymills Oil Separator is intended for use in conjunction with our Liftkleen agitated immersion parts cleaners for the separation and removal of emulsified oil from water-based detergent solutions.

NOTE: The Oil Separator is not intended for and will not function with solvent based cleaning fluids.

OPERATION

The Oil Separator tank is internally divided into two sections by an internal baffle. The larger chamber contains a basket which is filled with polypropylene tower packing balls.

During operation, a portion of the recirculated cleaning solution is fed into the separator tank through a throttling valve. The emulsified oil coalesces on the polypropylene packing forming droplets which eventually rise to the surface forming an oil layer. The oil-free detergent solution passes under the baffle into the smaller chamber which overflows by gravity back to the parts cleaner tank. When the oil layer increases in depth, it discharges through an overflow pipe into a pail or other receptacle provided by the customer.

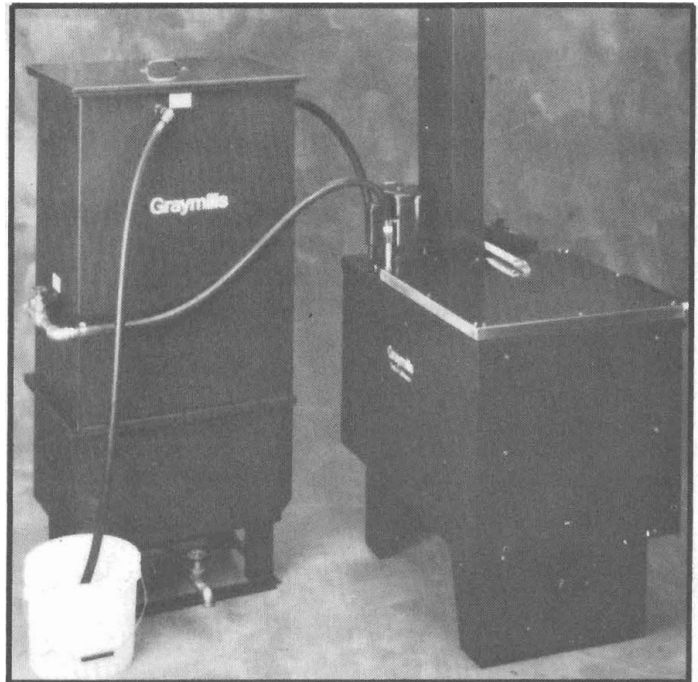
The input throttling valve is provided to reduce the inlet flow to the separator to no more than 5 gallons-per-minute. If the input flow exceeds this amount, insufficient separation will take place and oil will flow back to the parts cleaner tank.

A drain valve is provided to facilitate routine clean out of the separator tank.

INSTALLATION

The Oil Separator should be placed on a level area of the floor within 6 feet of the parts cleaner. Connection to the parts cleaner is made via 3/4" I.D. reinforced EPDM synthetic rubber hose.

Connect the port labelled "fluid-in" on the separator tank to the pump bypass discharge (or the recirculating filter discharge if one exists) on the parts cleaner. Connect the port labelled "fluid out" on the separator to the fluid return opening on the parts cleaner tank.



Connect a length of hose or tubing from the "oil out" port on the separator down to a pail or other receptacle on the floor.

The installation is now complete.

STARTUP

Be sure that the drain valve at the bottom of the separator tank is completely closed.

Precharge the separator tank with about 120 gallons of premixed detergent solution. This should be the same diluted solution as is used in the parts cleaner.

Start the pump on the parts cleaner and adjust the fluid inlet valve to limit the flow into the separator tank to no more than 5 gallons per minute.

CAUTION: Be sure that there are no bends or kinks in the fluid return hose back to the parts cleaner tank. A blockage in the fluid return line will cause the separator to overflow.

Ensure that the cover is placed on the separator tank at all times during operation.

MAINTENANCE

The OSEP-5 oil separator has no moving parts and requires only minimal routine maintenance.

Periodically empty the oil discharge pail. Dispose of the oil according to EPA and local regulations.

- If the cleaning operation is extremely dirty or if no filter is present on the parts cleaner, periodically remove sludge from the bottom of the separator tank by opening the drain valve for a few seconds.
- When required, the entire separator may be cleaned by completely draining the tank and removing the internal basket containing the polypropylene packing. The tank and packing can be cleaned with a hose and warm water.