Centrifugal-action filtration in a compact, convenient and carryable unit for on-site demonstration use.

The performance capability of a LAKOS separator is confirmed by this complete mini-system, featuring portability, versatility and convenience. Matched with a reliable pump and all necessary fittings, valves, gauges, hoses and hardware. The PTR quickly verifies the filtration capabilities of a LAKOS Separator for any system. Immediate on-site results increases user confidence and saves valuable time.

PORTABLE TEST RIG
Separators and Filtration Solutions

Operation — Maintenance — Specifications

For transport/storage: separate unit at “A” and insert “B” into “A”.

SPECIFICATIONS

Separator: LAKOS Model ILB-0037
Flow Rate: 5-6 U.S. gpm (1.4 m³/hr)
System Weight: 45 lbs (20.5 kg)
Pressure Output: 33 psi (2.3 bar)
Pump: Teel Water Systems, Model 2P110A Centrifugal, 1/2 H.P.
Pump Lift: 10 feet (3 meters)
Pump Housing: Cast Aluminum
Impeller: Valox 420

Shaft & Volute Seal: Buna N
Power Cord: 8 ft (2.4m), 18-3 SJTO
Motor: 1/2 H.P., Single Phase, 50-60 Hz, 115V 8,000 R.P.M. Series
Motor Shaft: Cold Rolled Steel
Motor Bearings: Permanently Lubricated
Maximum Amps: 8.0
Maximum Fluid Temperature: 100°F (38°C)
SET-UP

1) Remove the bolt from the separator support stand. Place separator support stand vertically so that the separator is in an upright position. Re-insert the bolt, fastening the separator support stand to the skid.

2) Connect the suction hose (one end is screened) to the inlet of the demo pump. Place suction hose into the solids-laden liquid to be tested. IMPORTANT: Make sure that the suction hose is elevated at least three inches (76 mm) above any settled solids to avoid an excessive intake concentration. (Note: By removing the suction screen, this hose may also provide a flexible connection to a 3/4 inch F.I.P.T. for side-stream testing.)

3) Connect the discharge hose to the outlet of the demo separator. Its other end is typically placed into the same source where the suction hose is currently placed. (Note: This hose may also be used as a flexible connection to a 3/4 inch F.I.P.T.)

4) Prime the pump by opening the priming valve and pouring approximately one quart (or liter) of water into the open valve. Close valve.

5) Close the purge and separator outlet valve completely.

OPERATION

1) Start the demo by connecting the electrical cord into a suitable 110v, 60Hz outlet. When the pressure gauges indicate a reading of 35 psi (2.4 bar), the pump is ready for operation.

2) Slowly open the valve at the separator outlet until the pressure differential between the inlet and outlet gauges reaches 12 psi (0.8 bar). (Note: The flow rate at this point should be 6 gpm (1.4 m$^3$/hr) and may be confirmed by using a measurable pail and the sweep-second hand of a watch or clock.)

3) Separated solids will collect in the separator’s lower chamber. A plastic freezer bag is recommended for capturing purged solids. Tilt the bag so that the solids will settle into a corner of the bag for maximum visibility and evaluation purposes.

RECOMMENDED MAINTENANCE

1) Clean suction screen on hose after each use.

2) Pump clean water (five gallons/liters or more) through the PTR to flush the separator and hoses.

3) Drain pump.

4) Drain separator by opening purge valve.

5) Clean purge collector bag, if used.