

Closed Recovery System

Capture Separated Solids with Zero Liquid Loss



Closed Recovery System (CRS) Package

Retention Vessel: Carbon steel¹. Internal epoxy coating.

Retention Vessel Lid: Carbon steel dome, with "T" Bolt Closure and a spring-assisted opening mechanism.

Internal Baskets: Three stainless steel.

Purge Collector Bags: Polyester-felt material, 50-micron rating. NOTE: an optional 25-micron bag may be specified. Six (6) bags provided.

Air Relief Valve: 1/4" Float vent valve.

¹Also available in stainless steel. Consult factory for any special application requirements.

NOTE: Manual valves are required, but not included in basic package.

CRS Features & Benefits:

- Capture separated solids easily and return clean liquid back to system; resulting in zero liquid loss
- Continuous operation, remove captured solids without interrupting system flow or filtration
- Lower waste water treatment costs, meet waste disposal requirements and greatly reduce chemical loss
- Filter bags available from 10 micron to 50 microns
- Optional indicator package provides convenient way to determine bag change-outs

Optional Indicator Package

To help determine when bag change-out is necessary, choose the Optional Indicator Package. Responsive to increased pressure differential as the vessel accumulates with purged solids, this assembly identifies when the solids collection bag is full, minimizing routine servicing.

❶ **Ball Valves:** Two per package; 1-1/2-inch (female, N.P.T.) manual; bronze body², stainless steel ball, teflon seat.

❷ **Pipe Fittings:** Three 1-1/2-inch pipe nipples (female, N.P.T.); bronze² and two 1-1/2-inch pipe tees with 1/4-inch reducer bushings.

❸ **Sightglasses:** Two per package; 1-1/2-inch (female, N.P.T.); bronze².

❹ **Annunciator:** One per package; 1/8-inch (female, N.P.T.) tubing connections; "pressure indicator" style³.

❺ **Flow Control Orifice:** One per package; 2-1/2-inch (female, N.P.T.); chrome-plated. Included also are two 2-1/2-inch x 1-1/2-inch bell reducers for proper installation. Maintains a constant flow of 50 U.S. gpm (11.5 m³/hr) through the CRS.

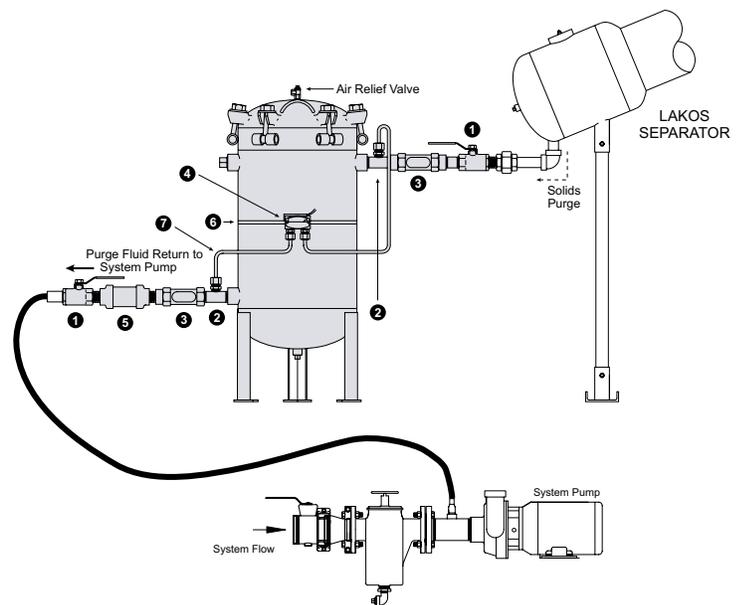
❻ **Clamp:** Stainless steel band with hardware to mount Annunciator to body of CRS vessel.

❼ **Tubing:** To hook up high/low pressure connections on Annunciator; 1/4-inch diameter poly tubing for 150 psi (10.3 bar) or less; water use only; 6 feet (1.8m). End connectors also provided.

²Also available in stainless steel. Consult factory for any special application requirements.

³Optional electronic contact switch is available to operate a 12W light; 125/250 VAC-28 VDC, 2 amp. (Voltage booster relay available to activate buzzer or other indicator device).

NOTE: Annunciator is pre-set by the factory at a prescribed pressure differential of 15 psi (1 bar).



Models & Dimensions

General Specifications

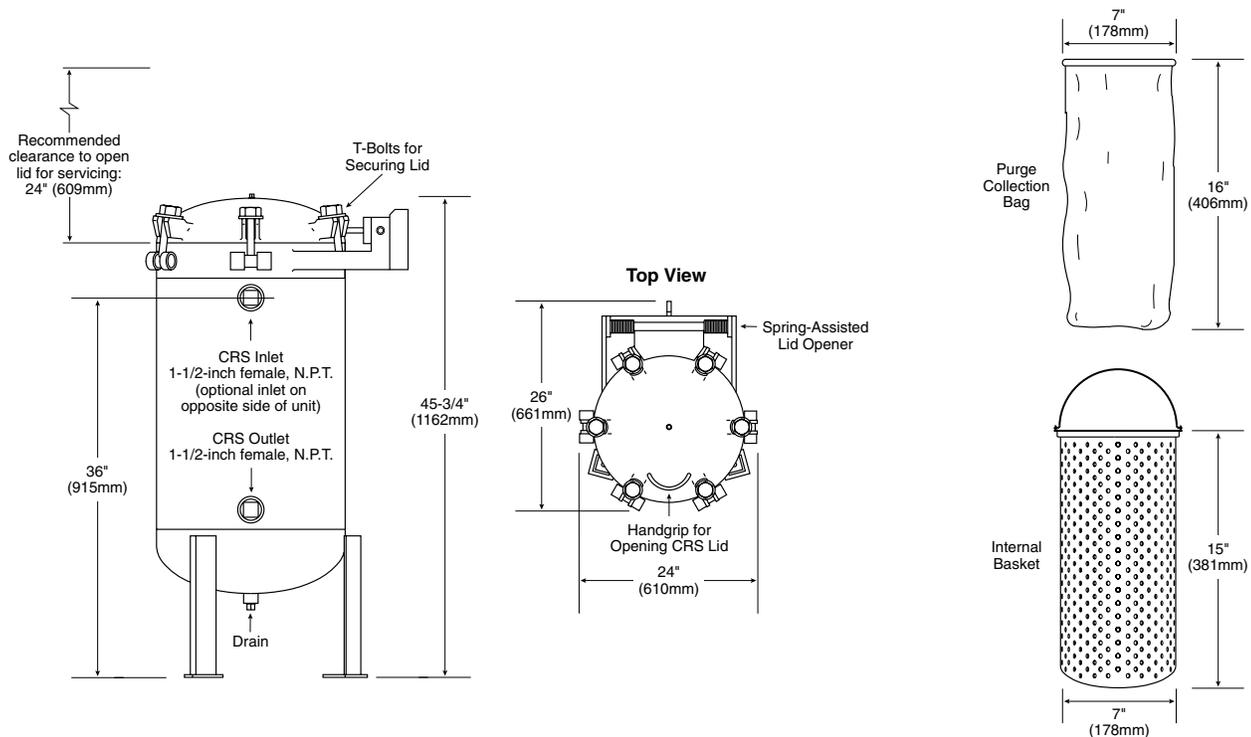
Solids Collection Capacity: 1080 cubic inches/18 liters

Liquid Retention Capacity: 30.5 gallons/115.4 liters

Total System Weight (without liquid): 285 pounds/129 kg

Maximum Pressure: 150 psi/10.3 bar

Maximum Operating Temperature: 200°F/93°C



Maintenance Procedures

Separated solids collected in the SRV vessel must be periodically removed. The collector bag may be cleaned and re-used or discarded and replaced. This operation can be performed without interrupting system flow or the LAKOS Separator's operation (see instructions below). Recommended maximum solids load per bag is 25 lbs. (11 kg).

The Indicator Package uses a pressure-differential sensor to identify when the bag should be serviced. The standard gauge will point to a red zone, indicating needed servicing. The optional dry electric contact will engage whatever indicator is connected (a light, buzzer, horn, etc.).

Follow these steps:

1. Close the manual valve on the purge line. Wait for 30-45 seconds.
2. Close the manual valve on the liquid recovery line.

3. Open the manual pressure relief valve to release trapped air. **IMPORTANT:** Wait until all pressure has been released before proceeding.
4. Open the lid to the SRV vessel. Remove the retainer. Grasp the stainless steel basket handle and remove the entire assembly from the SRV vessel. Remove the bag(s) and clean/replace in the basket.
5. Check o-rings on the basket lip and SRV vessel lid; replace if damaged. Replace the basket/bag assembly in the SRV vessel. Replace the retainer. Close lid and secure properly.
6. Fully open the manual valve on the purge line.
7. Use the manual pressure relief valve to vent all air from the SRV vessel. Close this valve when liquid begins to discharge (indicating that the SRV vessel is now full of liquid).
8. Fully open the liquid recovery line valve. If the Indicator Package is installed, check the sightglasses for proper flow to and from the SRV vessel. System is now back in operation.

Claude Laval Corporation, headquartered in Fresno California since 1972, is recognized worldwide for engineering, manufacturing and marketing the original centrifugal action solids from liquids separator and being the world-wide leader in cyclonic separation technology.

LAKOS Separators are manufactured in the USA. 

LAKOS is a proud and contributing member of ASHRAE for over 30 years

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1365 North Clovis Avenue
Fresno, CA 93727

www.lakos.com

Tel: (559) 255-1601
info@lakos.com