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CLEANING A LIQUID TRAP MAGNET

WHEN TO CLEAN THE LIQUID TRAP

Downtime can be minimized if cleaning occurs at planned shutdowns or at product/batch changeover times. Cleaning frequency will also depend upon the amount of trash in the line and the production schedule. Frequent cleaning provides quicker identification of contaminants and thus faster ability to prevent their entry into the system. Captured trash, if left too long between cleanings, can leave rust stains on the Liquid Trap's interior and on the magnetic element. The stains can be removed with scouring powder.

CLEANING THE LIQUID TRAP

- 1) Depressurize the line and lock out the pump before opening the Liquid Trap.
- 2) Have a flat bladed screwdriver at hand before opening the Liquid Trap. Be prepared for product spillage and release of residual line pressure when opening the Liquid Trap. Assume that the blank closure plate will be removed first, it does not have a CAUTION label on it. Firmly grasp the blank closure plate's handle with one hand while the other hand presses and releases the band clamp's safety latch. Lift the clamp's overthrow lever to release the blank closure plate. Depending upon the Liquid Trap's orientation be prepared to support the weight of the released cap. Rock and twist the handle to see if the plate can be separated from the body. If it is stuck to the body, carefully wedge the tip of the flat-bladed screwdriver into the crack between the end cap and body, and twist. Be careful not to damage the L-ring gasket. Remove the blank closure plate from the body. Carefully remove the L-ring gasket from the blank closure plate or the body and set it aside for cleaning. Remove the magnetic element from the body by repeating step 2) above. The magnetic element has a yellow CAUTION label affixed to it. Be careful not to put the magnetic element on a steel tabletop or pass it near any other magnet.
- 3) Check the magnetic element for trash by gently washing away all product from the magnetic fingers to expose any collected debris. Have a piece of white plastic or paper handy and proceed to transfer the collected trash from the magnetic fingers to the white paper or plastic for lab analysis.
- 4) Some suggestions for removing captured contaminants from the magnetic tubes are:
 - -Use water, low pressure compressed air or your fingers to move all trash to one side of the magnetic tubes.
 - -Depending upon the size and shape of the trash, use a gloved hand to pull the trash to the tip of each tube.
 - -Firmly grip the shaft of a flat bladed screwdriver so about ½" of the blade protrudes between the thumb and forefinger.
 - -With a rocking motion, carefully touch each pile of trash with the blade tip. Trash will jump to the blade. Transfer the trash to the paper or plastic.
 - -Finish with sticky tape. This will remove the very finest particles.
- 5) After the trash has been removed, wash the magnetic tubes, the blank endcap, the gasket seals, the clamps and the inside of the Liquid Trap body before reassembling the unit. Inspect the L-ring gaskets for surface damage. Bend the gaskets to check their flexibility, but do not stretch them. Replace any gasket that has cuts or abrasions or has hardened and is not capable of providing a proper seal. L-ring diameters are made slightly smaller than the parts they fit. Good L-rings fit smoothly and stay in place when assembled.
- 6) When cleaning the inside of the Liquid Trap body, inspect both gasket seal areas for cleanliness to assure that nothing is present to prevent achieving a good seal. Captured ferrous items will leave rust stains on the Liquid Trap's interior surfaces and on the magnetic elements. These stains can be removed with scouring powder.