

How it works. . .



The unique floating pick-up skims the tramp oil and coolant mix from the top of the machine sump. As the liquid moves slowly through the patented steel coalescing plates, oil droplets as small as 20 microns are separated from the coolant and rise to the top of the PhaSep unit.

When the oil layer builds up sufficiently in the unit, it passes over a specially designed weir and is trapped, away from the clean coolant. The oil can then be removed periodically through the waste oil drain.

Coolant, cleaned of 99% of contaminating oils, is returned directly to the machine sump.



Top 3 Features and Benefits

1. Increase Coolant Life by 100%: Oil contamination is the number one cause of metal working fluid disposal. An independent study has shown that PhaSep's patented oil removal technology will improve metal working fluid life by at least 100%, reducing the need for new coolant and saving the cost of disposal.

2. Increase Tool Life by 25%: Metal working fluids lose valuable cooling and lubrication properties when contaminated with oil and fines. Oil free coolant continues to provide proper lubrication and cooling for the life of the tool.

3. Eliminates Harmful Bacteria: Along with polluting the working environment with a foul odor, bacteria are the primary cause of skin rash among operators. The bacteria grow and feeds on the contaminants in the coolant. Removing the tramp oil eliminates the food source and the bacteria, providing a safe, more pleasant environment for the machine operator.





PhaSep vs. The Competition

Feature	PhaSep	Wheel / Belt Skimmers	Plastic Media Separators	Centrifugal Separators
Process Efficiency	Excellent: 99% of waste oil removed from liquid. Capable of operating unattended around the clock.	Poor: Removes only what the belt or wheel surface touches.	Poor: Oil does not release from plastic media, quickly rendering it useless.	Fair: Good solids separation. Marginal tramp oil removal. Potential exists for splitting coolant.
Durability	Excellent: All steel construction; no media to replace or dispose of. Years of dependable service.	Poor: Wheels crack or belts wear out. Motors are short- lived. Not a long term solution.	Fair: Media has reasonable life in coolant applications; not suitable for washer applications.	Fair: Relatively durable. Many moving parts to replace. Wear depends on usage.
Maintenance	Low Maintenance: Two to three cleanings per year. No moving parts in coalescor. Plate packs removed and replaced in seconds.	High Maintenance: Often needs to be replaced due to wear. Constantly spilling contents onto floor.	High Maintenance: Frequent cleaning required to maintain efficiency. Very cumbersome and time consuming.	High Maintenance: Requires cleaning once a week or more. 14 to 15 steps required to dismantle and clean.
Processing Capability	Excellent: Smallest unit processes 1000 gallons per day. Frequent tank volume turnover significantly improves liquid purity.	Poor: Doesn't process sumps of any size. Very ineffective means of tramp oil removal.	Fair: Depending on size of unit, processing capacity is acceptable.	Fair: High maintenance diminishes unit usage. Difficult operation limits shop participation.



Dedicated Separators

For most processing applications, a PhaSep dedicated unit provides the maximum oil removal for the minimum investment. The "Mini" and "Junior" units process sumps from 40 – 200 gallons. Larger units can be designed for up to 400GPM flow, making them ideal for waste water treatment and central coolant systems.





Stainless Steel Separators

Able to handle a wide variety of temperatures and pH levels, PhaSep stainless steel units are ideal for parts washer applications.

Portable Separators

For operations requiring occasional coolant turnover, portable processing units are available. Each portable PhaSep unit is designed with dual tanks: one for dirty coolant and the other for clean. The portable separator can be used as a one-step system for treating sumps or changing coolant.

