

White Paper: Why Skim Oil from Process Tanks?

The short answer is to extend the life of the water-based solution you use in your process.

Whether it's a machine tool coolant sump, parts washer holding tank, process tank or pit, oil skimming removes any oils that may have ended up in solution during operations.

Doing so, has these benefits:

- 1. Greatly extends of the bath life, thus saving you time and money between bath/sump changes.*
- 2. It also affects the coolants ability to cut cooler, cleaner and quicker.*
- 3. Detergent baths stay cleaner longer thus cleaning better.*
- 4. Removing oils from process sumps eliminates bacterial growth as well as inhibits anaerobic activity, commonly depleting and souring a water-based coolant or detergent bath.*

Oil Skimmers can only remove "free floating" oils which are able to break emulsion and float to the top of the solution. You should confer with your chemical supplier and determine if that is a possibility. Some detergents and coolants inhibit separation and keep the oils in emulsion--- these can only be removed via membrane separation. A far more expensive option. You can also, visually inspect the top of the sump area and see if you see an oily layer floating atop. If it is there, an oil skimmer can get it out.

Belt type oil skimmers are economical, low profile and designed to fit in tight spaces.

Belt material, type and speed determine their ability to attract, lift and remove these free-floating oils.

The skimmers materials of construction also play a huge part in the unit's long-term life span. Materials that are not designed to withstand a humid environment can corrode—whether painted or coated, will fail and implicate the operation of the skimmer. Water-based solutions used in today's coolants and detergents need materials which are non-corrosive, from pulleys to skimmer hardware and materials, to a belt material that's oleophilic (has an affinity for oil) ...not all skimmers are created equal.

Ask the questions, review your options, and make the best choice for this investment. Create a checklist: Material of construction/Operating Cost-use power usage/Belt Material/Overall design elements/Warranty/Cost per unit/Replacement Parts-Belt and motor costs.