

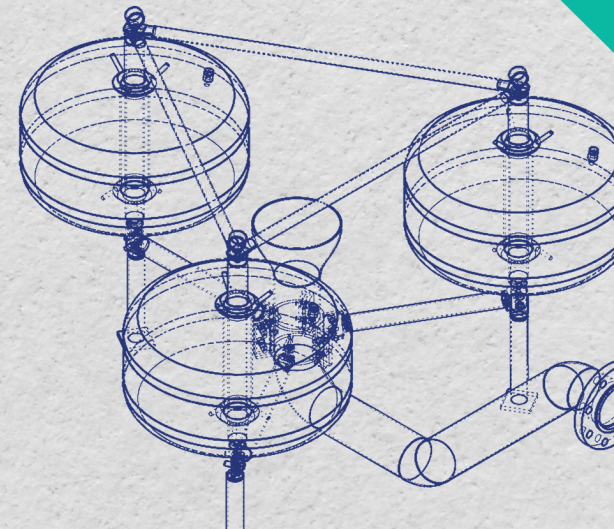
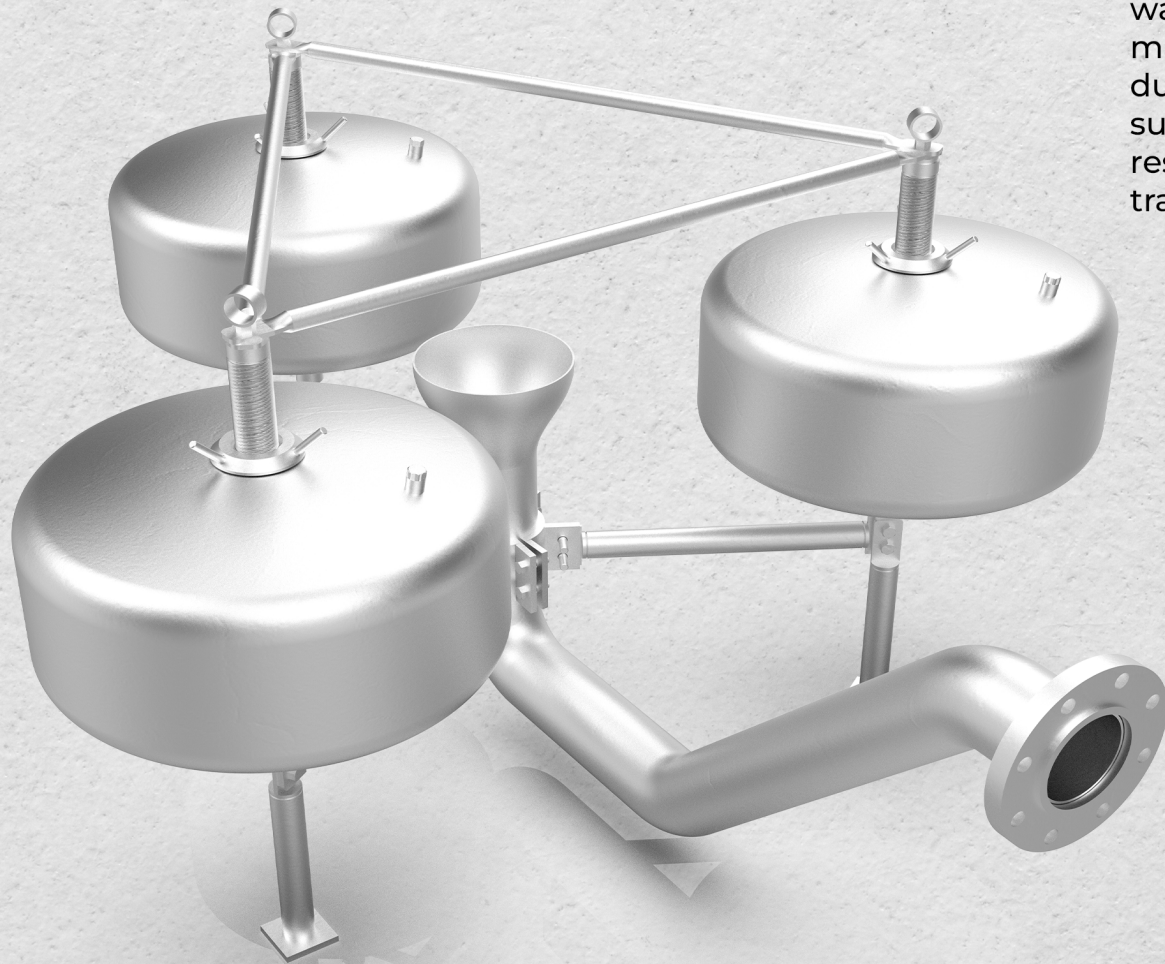
FLOATING WEIR

A Gravity Oil Skimmer Product

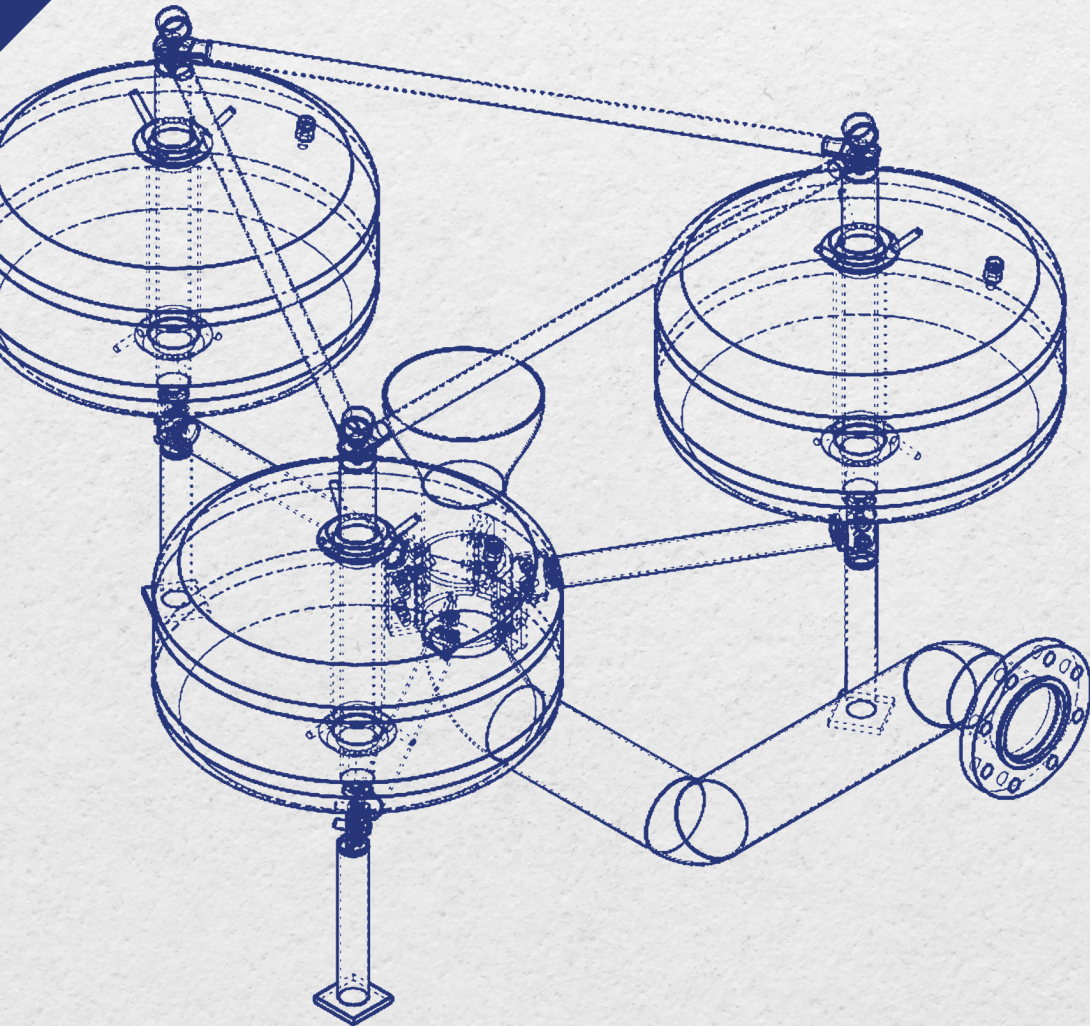


FLOATING WEIR

Floating weir oil skimmer is a high-capacity, easy-to-deploy skimmer. A weir skimmer is a device designed to remove surface oils, and contaminants from water bodies such as ponds, lakes, industrial tanks, or wastewater treatment facilities. The skimmer works on the principle of buoyancy of the floating structure, surface tension of the floating liquid. Floating weir oil skimmers float on the surface of water. A 3-bar mechanism consisting of three floats maintains the weir in a horizontal plan at all times, even during disturbance (waves). Floating weir oil skimmers are suitable for permanent installation or emergency oil spill response situations, due to their light weight, ease of transportation and one person operation.



ABOUT PROBLEM



Float puncture

Puncture of the float may take place inside the tank which can lead to potential operational problems.



Skimmer requires constant manual adjustments

When a skimmer requires constant manual adjustments, it can be a significant operational issue.



Twisting of suction hoses

This issue is particularly relevant in situations where precise positioning and stable operation are crucial.



High Cost

The high cost associated with additional electrical or moving parts in a floating skimmer can present several significant challenges.

OUR SOLUTION

Pump Skid

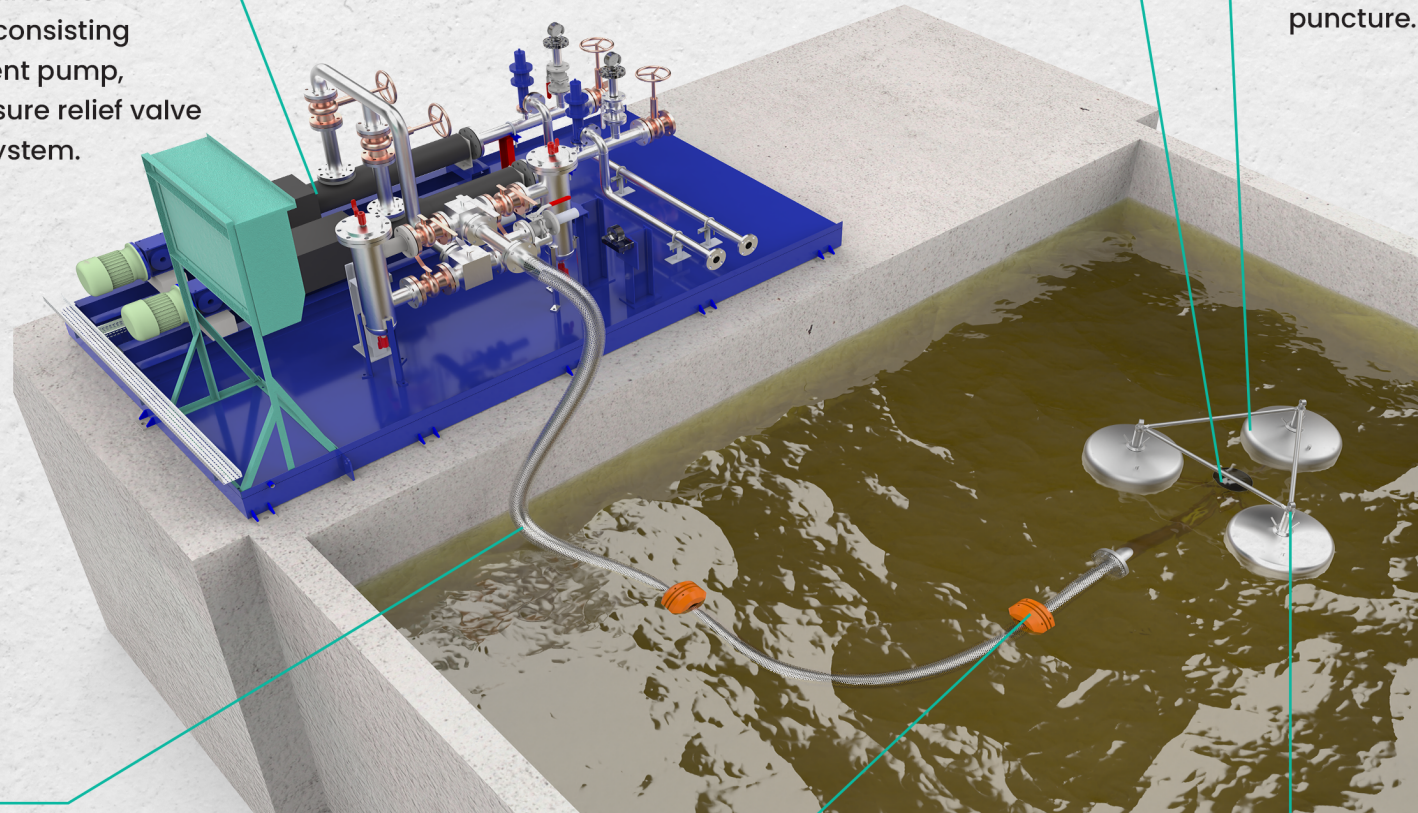
In some case, like underground tank where gravity drain is not possible a pump skid consisting of positive displacement pump, set of valves and pressure relief valve is also supplied with system.

Weir

The weir is positioned perpendicular to the water flow, creating a gentle slope towards the skimmer's intake. It is allowing the oil skimmer to efficiently remove thin or thick layers of oil or pollutant.

Float

Partially submerged 3 vertical floats are used in our system. All our floats are filled with foam to nullify the chance of float submergence due to puncture.



Flexible Hose

Our system consists of a double braided flexible hose pipe. MOC of all pipes and fittings will be SS316L, SS316, SS304, SS304L or any other material on request.

Pipe Float

Standard size pipe floats are used in our system to maintain the hose position.

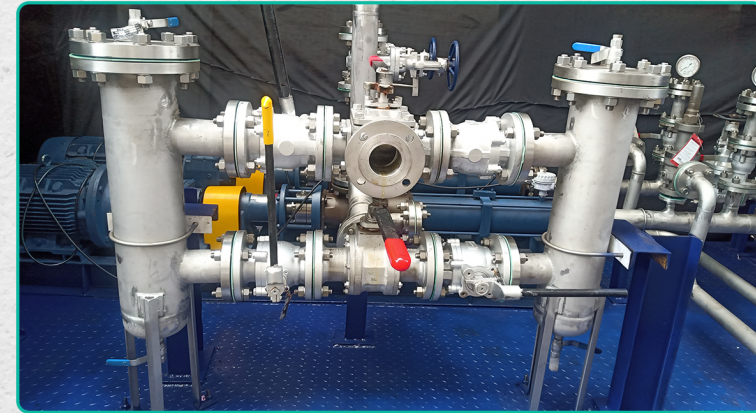
Skimmer Head

Skimmer Head is an assembly which consists of three bar mechanism structure, 3 adjustable vertical floats and a central intake weir maintains the weir in a horizontal plan at all times.

SALIENT FEATURE

- ✔ Solid, reliable, robust construction.
- ✔ Customized MOC and arrangements as per requirements.
- ✔ Proven & Tested Technology.
- ✔ Tri-float design provides exceptional stability.
- ✔ Easy to adjust the Float position for varying density of Recovery oil.
- ✔ Draws fluid from all directions around the skimmer.
- ✔ Large oil removal in very less time. Minimum stroke/ no power consumption, thereby reducing operating costs.

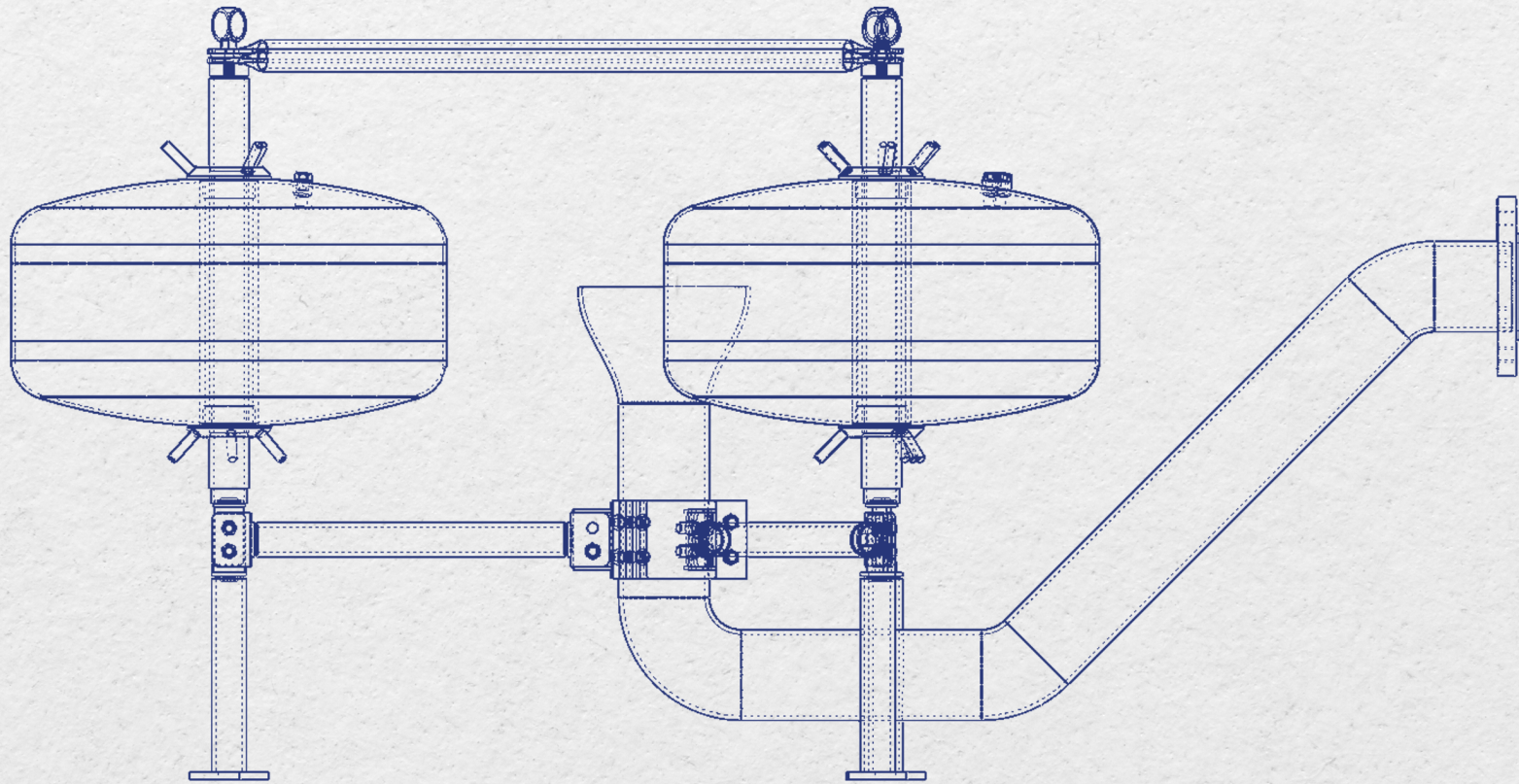
Pump Skid System



A Pump Skid System is employed in scenarios where gravity drainage is unfeasible, such as in underground tanks. This system includes a positive displacement pump, a set of valves, and a pressure relief valve. Operating on a cyclonic principle, the oily effluent enters the cyclone chamber, subjected to centrifugal forces up to 1000 times gravity.

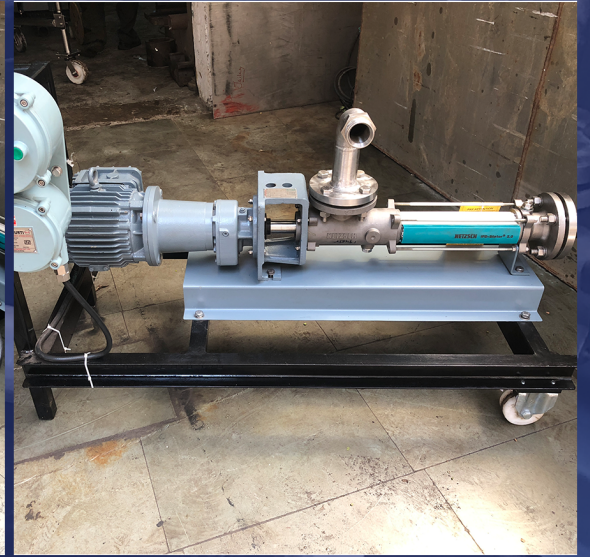
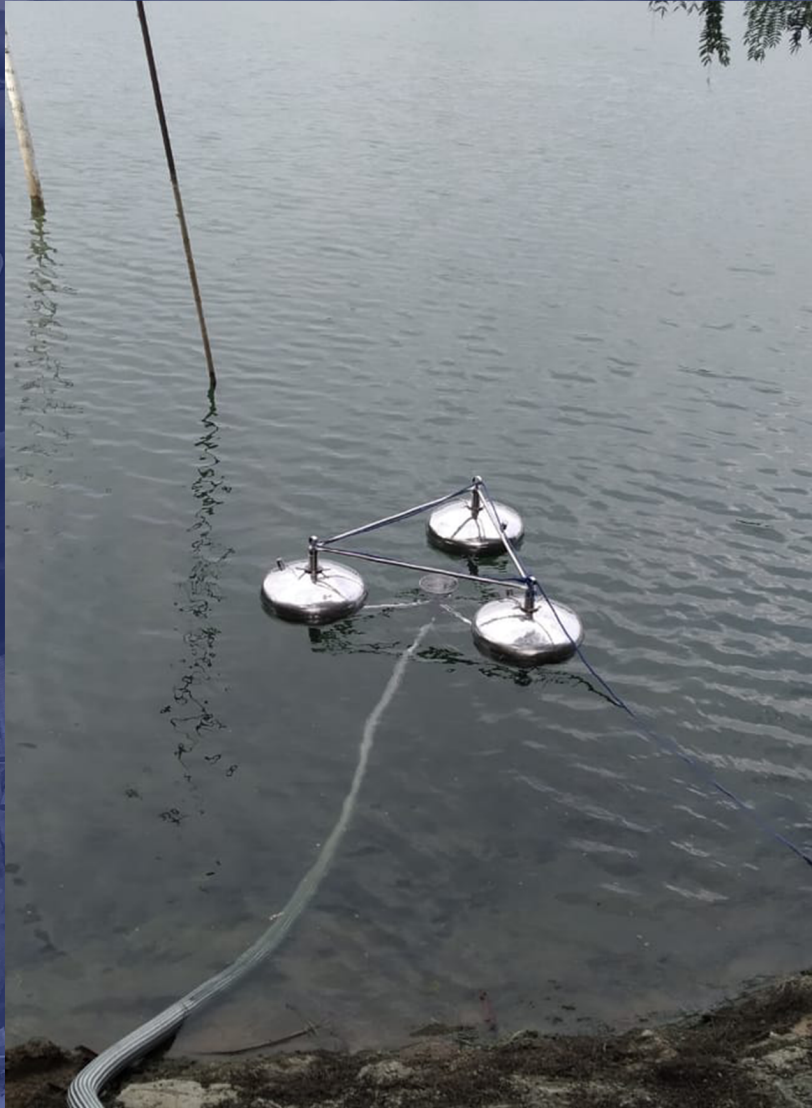
The pump skid system utilizes density differences to separate oil and water. As the wastewater is pumped tangentially, a powerful vortex forms, compelling lighter oil droplets to the vortex center. This results in two distinct streams: treated water, ready for discharge or reuse, and separated oil for storage and disposal. The heavier water phase is pushed outward to the cyclone wall, while the lighter oil phase migrates to the center core. Separated oil is discharged from one end of the cyclone, while treated water is released from the opposite end for additional treatment, filtration, or discharge.

MODEL SELECTION MATRIX



SIZE	CAPACITY	TYPE	MOC	PUMP MOUNTING	PUMP DRIVE	CONTROL PANEL
2"	5 m ³ /hr	Bellows	SS304	Shore	Hydro Electric Powerpack	FLP
3"	10 m ³ /hr	Funnel	SS304L	On Skimmer	Diesel Engine driven Hydraulic Powerpack	NFLP
4"	20 m ³ /hr	Half Moon Shaped	SS316			
6"	30 m ³ /hr		SS316L			
	50 m ³ /hr		Inconel			
	120 m ³ /hr		Duplex Steel			
	250 m ³ /hr		Super Duplex			

For custom sizes, please contact our sales team, sales@potential.net.in



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