

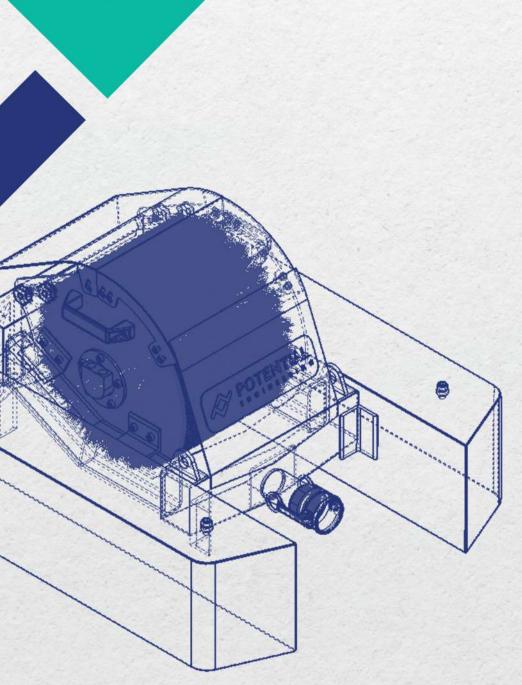




### **ROTARY SKIMMER**

Potential Engineering offers rotary skimmers that are highly adaptable skimmer used for recovering oil in different scenarios. They can handle oils with different thickness levels effectively. These skimmers are engineered to deliver top-notch performance while being cost-effective. The skimmer has a rotating component that is specially designed to attract and retain oil (this component is called an oleophilic apparatus). As it rotates, it picks up the oil from the surface of the water. The collected oil is then scraped off the rotating surface and funneled into a designated chamber for storage. This integrated chamber makes it easy to gather and contain the recovered oil.

In simple terms, the rotary skimmer efficiently captures oil from water, making it a valuable tool for cleaning up oil spills and managing oil-contaminated areas. Its design ensures that it works efficiently while being a cost-effective solution for various applications.



## **ABOUT PROBLEM**



### Storage space & size

Rotary skimmers can be quite large in size, especially when they are designed for high-capacity operations.



### Splashing of oil

When a rotary skimmer is in operation, there can be some splashing of the oil



### Complex assembly & more time taken

Rotary skimmer are complex in assembly due to more number of components and joints



### High maintenance of cost of pump

Rotary skimmer pumps can require a significant amount of maintenance. This is due to the demanding nature of their work in harsh environments



### **Bulky weight**

Rotary Skimmer can be quite heavy and bulky due to their robust construction and the materials used to withstand the demanding environments



## **OUR SOLUTION**



### COMPACT SIZE Scraper & Recovery Tank

Stiff stainless-steel scraper gathers oil from brush module, transferring it to the compact recovery tank for easy handling and skimmer deployment.



#### **MODULAR BANK**

Modular Recovery Bank are the most efficient solution for recovery of Light, Medium & Heavy oil, with corrosion resistance, hydrophobicity, high strength, and light weight. The rated capacity of single recovery bank is 5–15 m<sup>3</sup>/hr.



## QUICK SETUP & OPERATION Float

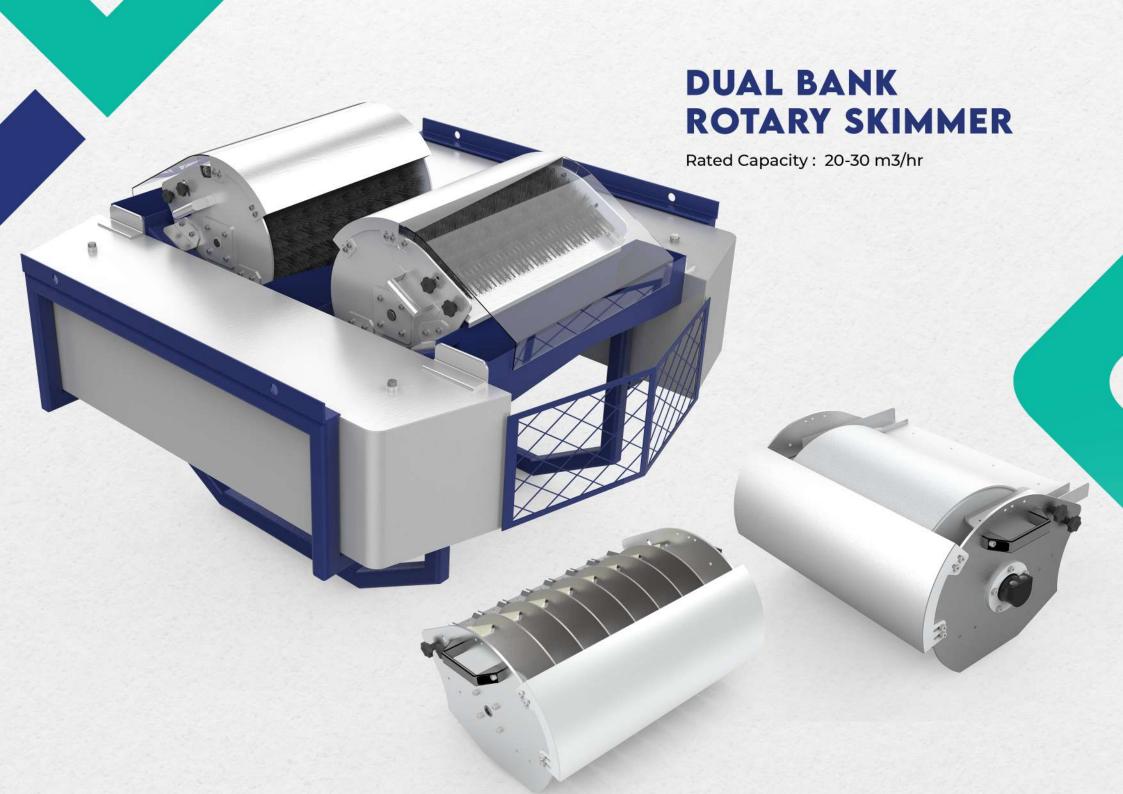
Aluminium floats offer strong yet lightweight build, minimizing joints and stress points for enhanced durability. Skimmer assembly requires only an M8 Allen key, reducing setup time and effort.



### LOW MAINTENANCE Pump & Hydraulic Motor

The pump is crucial for reaching skimmer capacity. A low-maintenance centrifugal pump is chosen over other systems.

See Pump Specification Table for details.



## **OUR SOLUTION**

## QUICK SETUP & OPERATION Float

Aluminium floats: optimal strengthto-weight ratio, fewer joints, lower stress points for durability. Skimmer assembly uses M8 Allen key, saving setup time and effort.



#### **MODULAR BANK**

Modular Recovery Bank are the most efficient solution for recovery of Light, Medium & Heavy oil, with corrosion resistance, hydrophobicity, high strength, and light weight. The rated capacity of Dual Recovery bank is 30-40 m<sup>3</sup>/hr



# AVOID OVERFLOW. Recovery Tank

The recovery tank of Dual bank rotary skimmer has double volume capacity for the recovered oil. As the capacity of the dual bank rotary skimmer is double to that of the single bank rotary skimmer...



## HIGH STRENGTH

The Frame adds structural strength, prevents float punctures, and serves aesthetic and ergonomic goals for the skimmer.



## **OUR SOLUTION**



### **MODULAR BANK**

Modular Recovery Bank are the most efficient solution for recovery of Light, Medium & Heavy oil, with corrosion resistance, hydrophobicity, high strength, and light weight. The rated capacity of Dual Recovery bank is 50-60 m<sup>3</sup>/hr



#### TANK

The recovery tank of Triple bank rotary skimmer has triple volume capacity for the revovered oil.

As the capacity of the triple bank rotary skimmer is thrice as compared to the single bank rotary skimmer.



#### FLOAT

Floats offer optimal strength-to-weight ratio, fewer joints, reducing stress points for enhanced durability. Skimmer assembly using M8 Allen key saves setup time and effort.



#### FRAME

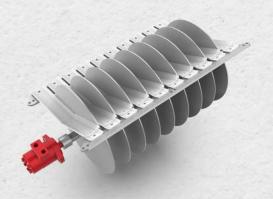
Frame enhances skimmer's structural strength, prevents float punctures, and achieves aesthetic and ergonomic goals.

## TYPES OF OIL RECOVERY BANKS



#### **Brush Bank-Polypropylene**

Crimped Polypropylene Bristle brush bank efficiently recovers Medium & Heavy oil, with corrosion resistance, hydrophobicity, high strength, and light weight compared to other plastics.



### Disc Bank-PVC, SS, Al

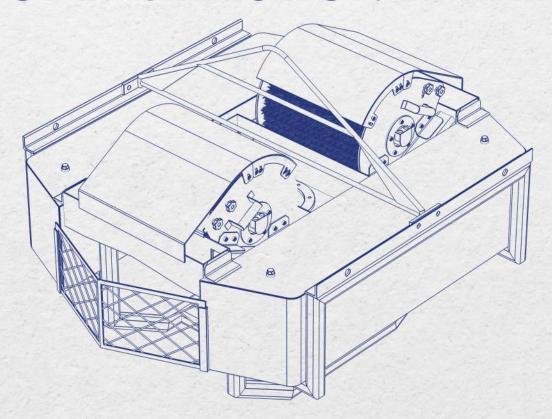
Oleophilic Disc bank excels in light & medium oil recovery. Rotating discs capture oil on contact, separated by a scraper into an integrated collection tank.



#### Drum Bank-Grooved PP, SS, Al

Oleophilic Drum bank excels in light & medium oil recovery. Modular Banks are interchangeable based on oil viscosity targets.

# MODEL SELECTION MATRIX



| MODEL       | TYPE  | RATED CAPACITY | NO. OF RECOVERY MODULES. | SKIMMER MOC | PUMP TYPE               | ACCESSORIES              |
|-------------|-------|----------------|--------------------------|-------------|-------------------------|--------------------------|
| Single Bank | Brush | 5-15 m3/hr     | 1                        | SS316       | Positive Displacement   | Quick release connectors |
|             | Disc  | 5-10 m3/hr     |                          | SS304       | AODD                    | with lock rings          |
|             | Drum  | 5-10 m3/hr     | 1                        | AL 5052     | Submersible Centrifugal | Hydraulic Hoses          |
| Dual Bank   | Brush | 20-30 m3/hr    | 2                        | PP          | Spate Pump              | Camlock Couplings        |
|             | Disc  | 15-20 m3/hr    | 2                        |             |                         | Hose Floats &            |
|             | Drum  | 10-20 m3/hr    | 2                        |             |                         | Fixing ropes             |
| Triple Bank | Brush | 50-60 m3/hr    | 3                        |             |                         |                          |
|             | Disc  | 40-50 m3/hr    | 3                        |             |                         |                          |



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