Ultra-SurfCleaner

The most effective way to separate oil on water surfaces

+ **Automatic:** Once initial set-up is complete, collection and separation of oil (with up to 100% separation capability) is done automatically.

+ **High Performance:** Capacity to collect and separate 8,000 liters (2,113 gal) of pure oil per hour

+ **Heavy-Duty:** Continuous operation - 24 hours per day, 7 days a week, with minimal service requirements, even over long periods of time

+ **Cost-efficient:** Energy and cost-efficient operation with low maintenance, enabling substantial cost savings.

+ **Low Maintenance:** Requires no pump, no powerpack, no hydraulics, and no pneumatics.

+ **User-Friendly:** Easy handling, installation and service.

+ **Capable:** Automatically removes and separates without need to change speed for low viscosity oils or sheens

+ **Environmentally-Friendly:** Reduces CO_2 and VOC emissions by up to 95%

Conventional solutions are often manual, inefficient and expensive
Oil spill solutions, such as skimmers, barriers, chemicals, and burning, are used to collect and/or remove oil. But the majority of these solutions do not have the capability to collect gasoline, diesel, or other low viscosity oils, and these are often left to evaporate into the air.

Ultra-SurfCleaner – a well-proven, energy efficient solution
Ultra-SurfCleaner is a skimmer/separator hybrid that is a well-proven, energy-efficient system that collects and separates pollutants from water surfaces. Ultra-SurfCleaner will separate oil, gasoline or diesel, from the water surface at the location of the pollution.

The Ultra-SurfCleaner technology is based on gravimetric separation, collecting both the carrier fluid and the top layer substance – allowing up to 100% separation of the top layer substance and a separation capacity of up to 8,000 liters (2,113 gals) per hour.

Advanced yet simple
Ultra-SurfCleaner's patented collection and separation process has been developed into a self-managing solution consisting of only two moving parts. The separated oil is discharged to an external storage tank. Disposal costs are minimized since the oil is up to 100% pure and recyclable.

An Ultra-SurfCleaner operating in an API separator.

Ultra-SurfCleaner – Facts and Information

Ultra-SurfCleaner benefits:

+ Continuous separation of oil from water in refineries, oil depots, harbours, and industrial facilities - often installed in API separators
+ Handling of oil spills in harbours, seas, lakes and rivers
+ Oil caverns: removing surface oil or diesel from the water base to allow change of contents
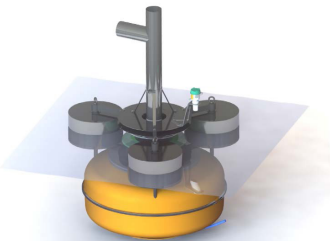
Automatic or manual discharge
Ultra-SurfCleaner offers both automatic and manual discharge. In automatic discharge mode the discharge process is controlled by a load cell or sonar and a control system.

Options
The system can be delivered in ATEX/EX design as an option. Another option is remote control and diagnostics.
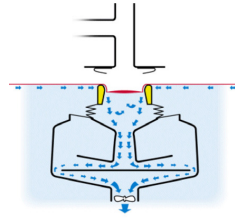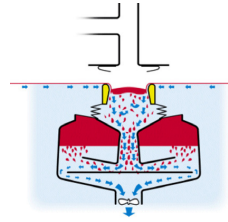

SCO 1000

SCO 8000

## Ultra-SurfCleaner's three-step process:

1. Collection

The propeller creates a negative pressure, causing the water with the oil on the surface to flow into the Ultra-SurfCleaner.

2. Separation

Deflection disks force the oil and the water to the periphery. As the flow velocity drops, the oil is forced upwards to the ceiling while the water is forced down towards the propeller and the outlet. Separation of the oil from the water is up to 100%.

3. Discharge
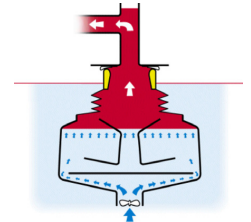
With the water acting as a piston, the oil is discharged at the rate of up to 8,000 liters (2,113 gal) of pure oil per hour into an external storage tank.

Ultra-SurfCleaner – Technical Data

	SCO 1000	SCO 8000
Part#	0943	0940
Separation capacity, incl. discharge:	Up to 1,000 liters (264 gal) per hour	Up to 8,000 liters (2,113 gal) per hour
Viscosity:	From light to medium <1,000 cP, density 0.75 - 0.95 kg/l (1.7 - 2.1 lbs/l)	
Layer thickness:	> 0.1 µm	
Solids size, max:	50 mm (2 in), depending on shape	
Maximum flow capacity:	7,000 l/h (1,849 gal/h)	50,000 l/h (13,209 gal/h)
Chemical resistant:	Oil, gas, diesel	
Fluid temperature, max:	45°C (113°F)	
Head:	1.0 m (3.3 ft)	
Dimensions		
Depth:	0.45 m (1.5 ft)	1.1 m (3.6 ft)
Diameter:	Ø 1.4 m (4.6 ft) (in transport mode < 0.6 m (2 ft))	Ø 2.0 m (6.6 ft)
Weight:	< 25 kg (55 lbs)	210 kg (463 lbs)
Outlet pipe:	Ø 80 mm (3.1 in)	Ø 160 mm (6 in)
Power and control		
Power:	< 20 W average	500 W, 2 phase, 50/60 Hz, 16A
Control system:	Remote via app	Siemens Simatic

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