

## INSTALLATION OF TWO SURFCLEANER SYSTEMS TO REDUCE VOC EMISSIONS



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**Sonatrach Augusta**

سوناطراک



sonatrach

### VOC emissions reduction is effectively managed by Sonatrach Raffineria Italiana thanks to Surfcleaner technology

The Sonatrach refinery in Augusta, Sicily, is one of the largest refineries in Italy. They use API basins to clean oily wastewater from the plant and needed a solution to clean water containing contaminant traces, such as oily paraffins, as well as gasoline, gas oil, lubricant oils, fuel oils, and diesel. To achieve further VOC (Volatile Organic Compounds) emissions reduction, the refinery required continuous and automatic removal of water surface contaminants in the API basins. This necessitated an oil removal rate of 2m<sup>3</sup> per hour, which is 25% of the Surfcleaner capacity.

### After the installation in 2019, Sonatrach says:

*“The Surfcleaner systems operate continuously, with good reliability after some early adjustments, and automatically adapt the inflow depending on the thickness of the oil – from light fractions to thick oil – The SCO 8000 can work with every type of slop. Before investing in a Surfcleaner SCO 8000, we had to manually control the speed of the disc skimmers, which consumed many man hours.*

*We have been able to reduce our VOC emissions considerably, and we can re-refine the oil that is separated, a double goal achieved in terms of environmental sustainability. We are very happy with the support that Surfcleaner has provided us during the set-up but also with optimizing the process.”*

### Surfcleaner recovers the oil, with a water content of less than 5%

Surfcleaner is a self-adjusting, floating oil surface separator that is suitable for continuous operation. The Surfcleaner SCO 8000 has a separation capacity of 8m<sup>3</sup> per hour and a maximum flow capacity of 50m<sup>3</sup> per hour. The installation environment requires the Surfcleaner to be ATEX certified for Zone 0.

### The Surfcleaner technology is unique by combining variations in inflow velocity and direction with gravimetric separation

The process is very efficient – keeping pollutants from accumulating on the water surface and therefore help minimizing VOC emissions. The design makes it possible to recover the oil, with a water content of less than 5%. The low water content allows Sonatrach to re-refine the separated oil from the wastewater in light of the new concepts of circular economy within a path of sustainability that the company pursues in terms of values for several years. And the latter was an important factor behind making the decision to buy the Surfcleaner system.



Equipment: SCO 8000ATEX  
Separation capacity: 8000 l/h

Systems installed:

2019: 2 units

2023: 1 unit