



SURFCLEANER IN OPERATION IN ONE OF EUROPE'S LARGEST COPPER PLANT



“Improved control of water-continuously and a minimal operational cost”

Sustainability manager
Sofia Med

SOFIA MED

Sofia Med - One of the largest copper plants in Europe

Sofia Med produces a wide range of rolled and extruded copper and copper alloy products, such as sheets, strips, plates, plated copper bus bars, and wire, used in various building and industrial applications. Sofia Med is a subsidiary of ElvalHalcor, Greece and is one of the largest copper producing companies in Europe. Sofia Med recognize that water is a precious natural resource and that water resources must be conserved, and aquatic life must be protected. Sofia Med makes efficient use of water in their operations and strives to reduce water consumption and increase water reuse and recycling. Constant monitoring of water quality is crucial to meet the demanding limits.

Improved water quality after installing Surfcleaner systems

The company needed an efficient way to further improve the quality of the treated wastewater to increase the wastewater recycling rate, by having increase the efforts to reduce water consumption and increase water reuse and recycling. The Surfcleaner SCO 1000 is a self-adjusting, floating oil surface separator that is suitable for continuous operation in these kinds of installations. The Surfcleaner has a separation capacity of 1m³ per hour and a maximum flow capacity of 3,5m³ per hour. As the installation space was limited the SCO 1000 has been commissioned without buoys and water surface level is kept constant.

Why the final decision to choose Surfcleaner?

Sofia Med evaluated the Surfcleaner technology at site during a two week's demonstration project and concluded quickly that the Surfcleaner technology was very efficient method for removing oil from the oil-containing wastewater. Within hours after the SCO 1000 was put into operation the oil was collected, separated and discharged at a very high rate. One of the advantages with the SCO 1000 is that it can cope with various operating conditions, being able to collect both oil layers from 0.1 µm and upwards, continuously keeping the water surface completely free from oil. The continuous separation with minimal manual efforts has significantly optimized the treatment process.

What were your expectations on the investment in Surfcleaner?

“We needed additional equipment to clean the oil contained in the wastewater generated from our production processes. The Surfcleaner system has exceeded our expectations, both in terms of capacity and maintenance. Sofia Med has earlier tested various technologies, but none has been found to be that satisfactory.”

The result so far

The SCO 1000 system has made daily work easier for operators at the plant. The SCO 1000 can be operated via a tablet and will look after itself and sends an alarm if there is a problem.



Equipment: SCO 1000
Separation capacity: 1,000 l/h

Systems installed:
2023: 1 unit