

Oreco's MoClean® system

Automated cleaning of oil product tanks



Automated cleaning of tanks for oil products and petrochemicals

The MoClean® system is a mobile, fully integrated process system offering internal cleaning of tanks for oil products like gasoline, diesel oil, kerosene, chemicals and petrochemicals. The system is automated meaning that there is no need for humans to enter tanks during the cleaning process.

A versatile solution

Today, service providers most often use high-pressure jetting equipment and simple manual sludge removing procedures to clean tanks. If the entire inner surface has to be thoroughly cleaned, scaffolding must be erected. Consequently, the tank may be out of operation for weeks at a time. Now the Oreco MoClean® system has combined traditional vacuum truck facilities with tank cleaning

and separation processes, delivering an entirely new, mobile solution to tank cleaning.

The answer to escalating pressure

While MoClean® answers the need for faster, better cleaning of tanks, our engineers also has taken into account the demands presently being formulated by authorities around the world for less hydrocarbon emission and less or no involvement of personnel inside the tank during cleaning. At the same time, MoClean® enables more frequent inspection of the tanks – warding off another fast-approaching problem for tank farm managers.

Easy operation

The MoClean® system is an advanced, highly effective mobile tank cleaning solution for oil product tanks. No personnel needs to enter the tank during

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| For oil product tanks | |
|---|--|
| Oil types Gasoline Diesel oil Kerosene / jet fuel Edible oils Chemicals Petrochemicals etc. | Tank capacity Up to 30,000 m ³ (Up to 186,000 bbl) |
| | Tank diameter Up to 35m (Up to 115 ft) |

cleaning and thanks to the user-friendly design of the truck, it is possible for only one person to operate the cleaning process within few hours.

Effective cleaning process

The process is very simple. As seen in the diagram below, one or more specially designed tank cleaning nozzles are installed via openings in the tank to be cleaned. Once connected to the MoClean® truck, the cleaned-out sludge is separated so that the cleaning liquid can be re-circulated back into the tank through the nozzles. This enables more sludge to be fluidised and pumped out for separation. Once the tank is emptied of sludge, it may undergo a last hot-water wash.

After ventilation, the tank is now opened for inspection and is ready for hot-work if needed.

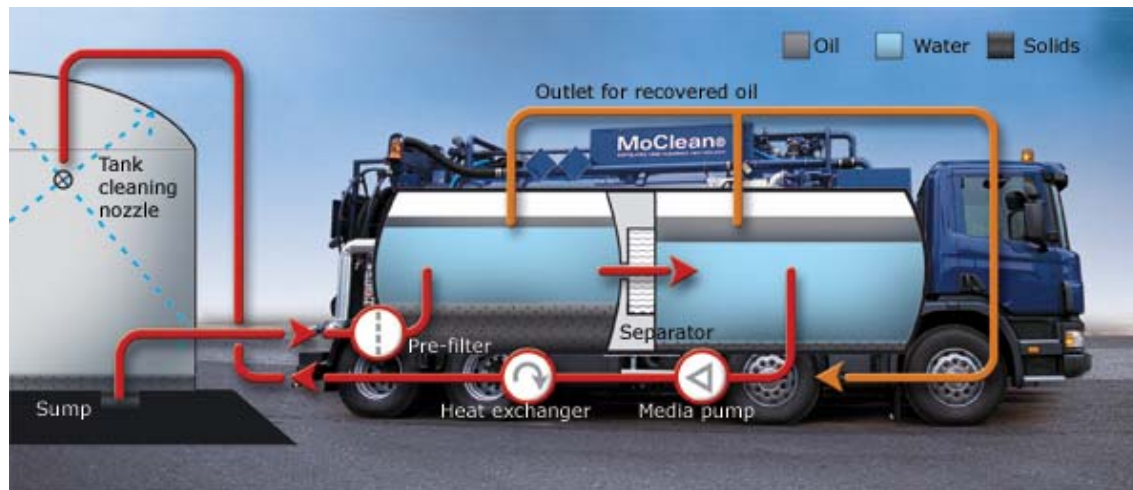
Safe operation

During the cleaning process, the tank's atmospheric condition is constantly monitored to ensure that the overall operation remains within specified safety limits. The entire process is carefully monitored, to comply with the strictest international safety regulations.

Unique technology

The tank cleaning nozzles are a key element in the cleaning process. They ensure that all internal surfaces on the bottom, walls and roof are cleaned, thus optimising the cleaning result.

The nozzles produce far-reaching, low pressure, high-impact rotating jets, which provide efficient cleaning of all internal surfaces in a precise indexed pattern, making use of re-circulated cleaning liquid. Tank cleaning nozzles operating at low pressures have proved far more efficient in terms of time and water usage compared with traditional high pressure methods.



The MoClean® system is a non-man entry tank cleaning system for oil product tanks combining efficient and fast tank cleaning with simultaneously recovery of valuable hydrocarbons.