

## Automated tank cleaning



> **FILTRATEC**

We specialise in automated tank cleaning systems. Our comprehensive know how and cutting-edge technology ensure stringent safety standards are always met

[filtratec.com](https://www.filtratec.com)

# FILTRATEC automated tank cleaning. Truly convincing

Industrial tanks that are used to store liquids such as crude oil, slop, wastewater and other products need to be emptied and cleaned at regular intervals. Allowed to accumulate, residue impacts negatively on the valuable tank contents. What's more, deposits reduce the volume of the tank and, consequently, its costly storage capacity. FILTRATEC offers automated cleaning services that prevent such outcomes.

The product in the tank is pumped out, heated up and then returned to the tank so it can be used as a cleaning media

## Safely and cost-effectively

Our automated cleaning systems provide a whole host of advantages, especially if the tanks contain substances that are harmful to health and/or have a particularly unpleasant odour. By using this technology, we protect our employees, are able to make toxic gases, such as hydrogen sulphide, safe during the cleaning process and can clean any air removed from the tank via exhaust air purification systems – by deploying our FILTRASORBER model, for example.

FILTRATEC always delivers exemplary tank cleaning solutions that not only offer economic benefits to you, the tank operator, but also comply with the strict requirements regarding environmental protection, work safety and explosion control.

## > Your advantages

- Rapid cleaning times
- We recover the product stored in the tank by flushing out any reusable hydrocarbons, e.g. with crude oil tanks
- Less material needs to be sent for disposal
- Emissions are kept to a minimum as we deploy closed-loop cleaning technology
- High safety standards for staff and the environment
- Work safety is increased thanks to our non-man-entry systems
- If required, the tanks are made inert to provide comprehensive protection against explosion



Fast on-site installation as its modular design fits perfectly in to 20' containers

**Tank cleaning technology**

We are able to deliver robust, logical and comprehensive concepts thanks to the years of experience of our specialists, who have the skills to use and combine our many different systems to produce the best possible results. This means that our technology is deployed in the best possible way and that the very most is made of our technical capabilities – enabling us to meet the different requirements of each individual project, such as the type of tank (floating/fixed roof), size of tank and residual contents.

**Jet washer systems**

Our jet washer technology is generally deployed via a tank's floating roof. The residue in the tank is flushed out with the jetting equipment. The dissolved liquid is separated and, once it has been freed of any large particles and contaminants, used to clean the tank. Once the required saturation point has been reached, we then remove the liquid from the tank so we can treat it.

**Manway cannon systems**

As the name suggests, our manway cannon technology is attached to modified manways (at the side and/or on the roof) so that the equipment's cleaning nozzle can detach the sediment in the tank and drive the residual content towards the extraction point. We generally carry out this work using a closed circuit system.

**Technical details**

- High pressure pump up to 30 bar at 950 l/min
- Cannon nozzle with a camera and lighting system
- Online station to monitor the atmosphere in the tank

The system complies with the Machinery Directive and has been constructed in accordance with ATEX 114.

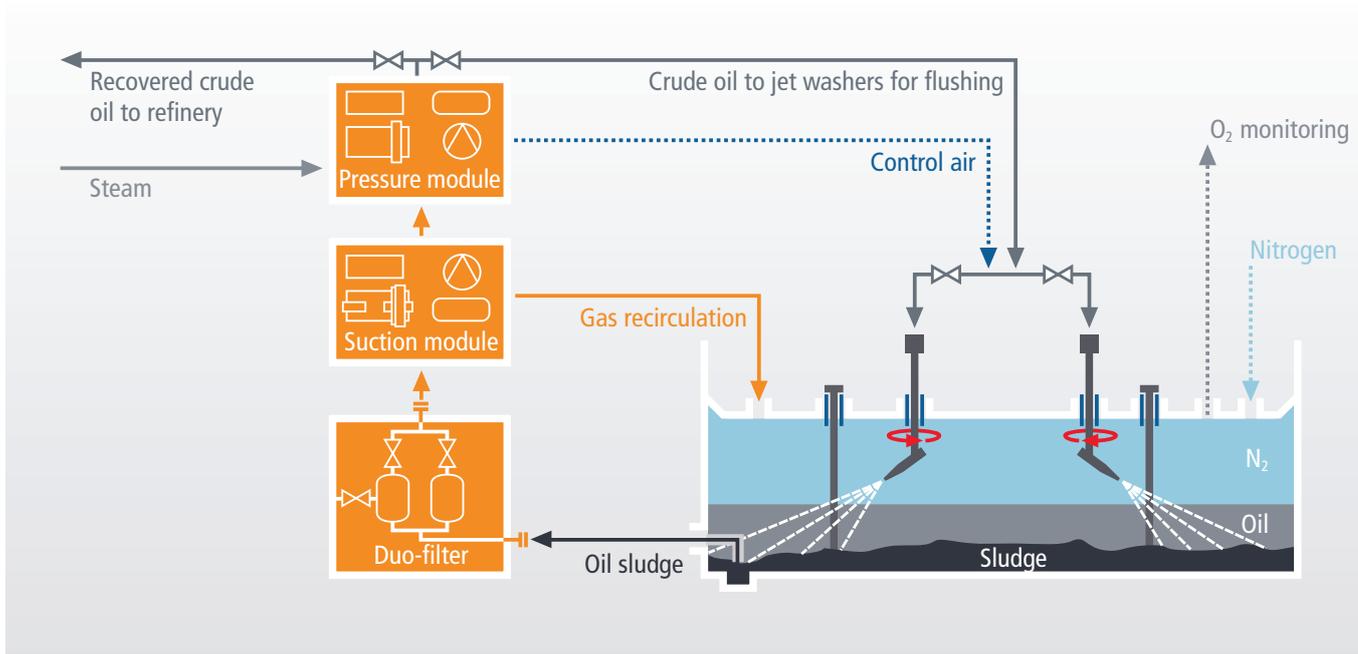
**A specialist treatment system for the very best results**

Depending on the residual content in the tank, we use a heat exchanger to heat up the cleaning media to facilitate and enhance the cleaning process. The contents of the liquid removed from the tank (a mixture of sludge from the floor of the tank and the cleaning medium) are then separated into solids, oil and water in our 3-phase decanter – a fully enclosed system with a nitrogen atmosphere. By the end of the process, there is just a small volume of solid material that needs to be sent for disposal.



The camera attached to the Manway Cannon records the cleaning work and also facilitates the documentation process

**How the jet washer systems works**



The product is first removed from the tank and heated up, before being returned to the tank at high speed and under pressure via the rotating jet washers where it is used to detach the solid and semi-solid contents



WORKING FOR THE FUTURE

FILTRATEC is part of the REMONDIS group, one of the world's largest recycling, service and water companies. The company group has branches and associated businesses in more than 30 countries across Europe, Africa, Asia and Australia. With over 30,000 employees, the group serves around 30 million people as well as many thousands of companies. The highest levels of quality. Working for the future.

**FILTRATEC Mobile**  
Schlammwässerung GmbH  
Weseler Str. 100  
46562 Voerde // Germany  
T +49 281 403-0 // F +49 281 403-172  
info.filtratec@filtratec.com // filtratec.com  
A company of the REMONDIS Group