

**FILTRATEC®**

WORKING FOR THE FUTURE

# We filter for you!

Specialist for treating and dewatering  
industrial sludge



# Your industrial sludge experts

FILTRATEC specialises in both dewatering sludge and separating oil sludge for industrial companies. Equipped with a wide range of machinery, we are able to handle this complex work, no matter what the challenge. Our clients have been using our services for more than 50 years now and primarily come from the chemical and petrochemical industry, the iron and steel sector as well as the construction and waste management industry.

## A full range of services

FILTRATEC uses a variety of dewatering units including chamber and membrane filter presses as well as three-phase decanters. We also deploy auxiliary equipment such as suction dredgers, modular screening devices and reaction tanks. Moreover, by collaborating with other companies from our group, we can offer additional services.

## Sludge dewatering

Our services are suitable for a whole variety of applications:

- \_ on a permanent basis, so clients do not need to invest
- \_ when a customer's unit breaks down
- \_ to cover peak periods
- \_ to handle small amounts of sludge
- \_ during turnarounds and cleaning work
- \_ to inspect and improve the processes in place
- \_ to safeguard investments



We not only plan, build and operate stationary sludge dewatering and oil sludge separation units – we even fully finance them

We assist our clients during major projects by setting up temporary full-scale chemical-physical treatment plants – made up of our mobile and modular equipment and assembled within no time at all.

## Mobile or stationary

Together with you, we take a close look at your set-up to decide whether a mobile or a stationary unit is the better option for your business. If you wish, we can also plan, build, operate and finance it on your behalf – whilst always making the very most of our 50+ years of expertise and experience in dewatering and filtering sludge.



## We treat the following types of sludge

- ✓ Sludge from chemical processes
- ✓ Sludge from removing particulate matter from furnaces, converters and foundries
- ✓ Sludge from crude oil or slop oil tanks
- ✓ Sludge from air preheaters, tanks and pipes
- ✓ Sludge from wastewater treatment
- ✓ Sludge from surface drainage
- ✓ Sludge and sediment from lakes and rivers



We  
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you ✓

**Specialist for emergencies**

FILTRATEC has a large stock of very different kinds of mobile sludge dewatering units and auxiliary equipment. We are, therefore, able to react quickly if you are faced with an emergency – e.g. if your own unit breaks down – and supply you with as many units as you need.

**Priority on quality and safety**

Our quality management system (based on EN ISO 9001) and our safety management system (as per SCCP) ensure we always meet our clients' quality and safety requirements.

Be it just the once, at regular intervals or on a permanent basis: we filter for you. To the very highest standard!

# Sludge dewatering with filter presses, oil-sludge separation with three-phase decanters

FILTRATEC provides its industrial clients with a whole range of mobile services: dewatering sludge, separating solids and liquids, treating sludge and wastewater as well as filtering products. These are the areas we specialise in and these are the tasks our teams of well-trained operatives carry out every single day – equipped, of course, with the latest technology.

## Mobile chamber filter presses

We use chamber filter presses to perform mechanical sludge dewatering tasks. This technology produces compact filter cake as well as a solid-free filtrate. We operate various different types and sizes of chamber filter presses to enable us to offer our clients the most cost-effective service:

- \_ Filter surface: 60m<sup>2</sup> – 350m<sup>2</sup>
- \_ Chamber volume: 0.6m<sup>3</sup> – 5m<sup>3</sup>

## Mobile membrane filter presses

Our membrane filter presses are deployed when the filter cake should contain the highest possible amount of solids. This equipment also allows the sludge/filter cake to be washed. We are also able to supply acid-resistant mobile membrane filter presses. The following types and sizes are available:

- \_ Filter surface: 33m<sup>2</sup> – 400m<sup>2</sup>
- \_ Output Chamber volume: 0.5m<sup>3</sup> – 6.1m<sup>3</sup>

## Mobile gas-tight decanters

FILTRATEC operates mobile gas-tight three-phase decanters to separate combustible and harmful substances from each other – such as crude-oil sludge, slop residue and sludge containing solvents. The sludge containing system is fully compliant with the ATEX Directive and covered with nitrogen at all times. Sludge and combustible liquids can be treated without risk, no matter what their flashpoint. By doing so, we achieve the highest safety standards – preventing explosions and protecting human health and the environment.

Mobile units can also be used to treat large volumes of sludge – in some cases, we can produce up to 300t of filter cake per shift



Our mobile sludge dewatering units are operated on-site by our own qualified personnel



FILTRATEC's gas-tight decanters cannot create their own explosive zone as they are covered with nitrogen. The three phases (oil, water and solids) are produced in one single step



One of FILTRATEC's specialities: Mobile gas-tight three-phase decanters

### Experts for special tasks

We also specialise in more complex tasks that go far beyond simply dewatering sludge. To be able to do this, we deploy a wide range of equipment including:

- \_ Storage, mixing and process vessels (able to hold up to 44m<sup>3</sup>)
- \_ Preparation and dosing units to condition sludge
- \_ Screening units and separators to pre-treat and fractionate suspensions
- \_ Pump, conveyor and transfer units
- \_ Agitators, heat exchangers and air washers

### In action throughout Europe

Our teams are on the road every day – operating our mobile filter presses, decanters and auxiliary equipment across the whole of Europe. Depending on the project, their work can last anywhere from just one day to up to several months. No matter whether the job involves a turnaround, a breakdown or an emergency – we are there whenever we're needed.

From sludge extraction to individual treatment and filtration, all the way to wastewater treatment and solids handling – we filter for you!



### Sludge extraction with floating suction dredges

FILTRATEC operates floating suction dredgers equipped with cutting devices to remove sludge and sediment underneath a water layer. Pumps are then used to remove the sludge and sediment, feeding the material to the treatment unit via floating tubes.





The main aim of sludge dewatering is to reduce the volume of waste material and increase product yield – the better the formula, the more effective the separation process

## Meticulous analysis and testing work

Before deploying its teams, FILTRATEC first analyses the material in its own laboratory to examine the contents and determine how it can best be treated. What is the solid content? How much water is in the mixture and, if applicable, how much oil? Will filtering agents be needed? Does water have to be added? By preparing for projects in this way, we can guarantee the best results: maximum solid content in the filter cake and a filtrate completely free of solids.



# Why you should opt for FILTRATEC!

The main aim of dewatering sludge is to separate the solids and liquid – and possibly oil – from each other in order to reduce the volume of waste. FILTRATEC is able to offer its clients a number of other advantages as well.

## 1 A specialist for industrial work

We specialise in the often complex and heavy-duty tasks needed by industrial businesses – our robust units have been designed to cope with just such challenges:

- \_ Our filter presses have solid bridge beams making them ideal for filtering heavy sludge, for instance, sludge containing metals
- \_ Acid-resistant and explosion-proof units make it possible for us to treat hazardous sludge and liquids

## 2 Extremely cost effective

Dewatering sludge on site often costs less than having to send the material away for treatment. What's more, you don't need to deploy your own staff or tie up capital – as you don't have to invest in setting up and expanding your own facilities. Moreover, you benefit from lower waste disposal costs and higher recovery rates.

## 3 Maximum flexibility

Using mobile equipment to treat substances at the place they are actually generated considerably reduces the volume of waste and, as a result, waste transport costs.

Other benefits:

- \_ We can handle large-scale projects as we can combine and operate several different units at once
- \_ All services are provided by just one company – including additional services on request
- \_ No task is too big or too small – our units can treat volumes of sludge ranging from <math>< 10\text{m}^3</math> to well over

## 4 Guaranteed availability

If you wish, we can guarantee 100 percent availability by designing the mobile/stationary units with additional components to cover all eventualities.

## 5 Great reliability

Our units are only ever operated by experienced and well-trained personnel.

## 6 Sustainable environmental protection

We achieve high recovery rates. Raw materials, for instance oil, can be fed to recycling, which reduces the environmental impact.

## 7 ATEX-compliant, three-phase separation

One of the main requirements of, for example, the petrochemical industry, is for its service providers to deploy explosion-proof measures in line with the ATEX Directive. FILTRATEC has mobile gas-tight three-phase decanters – designed and built by ourselves!



Our equipment is designed to meet the high expectations of our industrial clients. After all, that is our area of expertise!



WORKING FOR THE FUTURE

FILTRATEC is a member of the REMONDIS Group, one of the world's leading recycling, service and water companies. The Group has branches and associated businesses in more than 30 countries in Europe, Asia and Australia. It employs more than 45,000 people who work for millions of citizens and many thousands of companies. The highest levels of quality. Working for the future.

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