# Portfolio and certifications

## Light oil separators for below ground installation (EN858)









Oleopator G

Oleopator Bypass G

#### Grease separators for below ground installation (EN1825)





Lipumax G-H

# Sludge and storage tanks



Sludge Trap G



Sludge Trap G-H

# Also available:

- Fire water tanks
- Storage tanks
- Wastewater treatment plants
- Other customized solutions

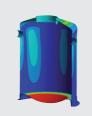
# Quality standards and tests

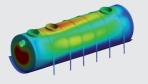
All ACO grease separators are manufactured in accordance with EN 1825, all ACO light oil separators are manufactured in accordance with EN 858. All the separators in the range are hydraulically tested.





Static calculations and optimization





Declaration of Performance data sheets available on request.

# **Technical features**

Glass reinforced plastic is a superb material for below ground installation. Its outstanding strength in combination with light weight makes it ideal material for construction industry.

It is characterized with very low level of degradation of mechanical and chemical parameters in time together with high resistance to external or internal environmental forces such as weather, temperature, UV radiation or chemical impacts. Non porosity of the material eliminates problems with corrosion and provides maximum security regarding the water tightness.

Due to chemical resistance of the material there is no need for additional surface coating. Its endurance against so called creep is stunning in comparison with some other materials. Your biggest advantage comes with flexibility in shape, size, resistance or surface finish and therefore each solution can be tailored directly to customers' needs.

# **ACO Group**

The family-owned company headquartered in Rendsburg/ Büdelsdorf, Germany, was founded in 1946 on the site of the Carlshütte foundry – Schleswig-Holstein's first industrial company. It still has very strong roots in the region. The major innovation strength of the ACO Group is built on intense research and development, and its technical expertise in processing polymer concrete, plastic, cast iron, stainless steel and reinforced concrete.

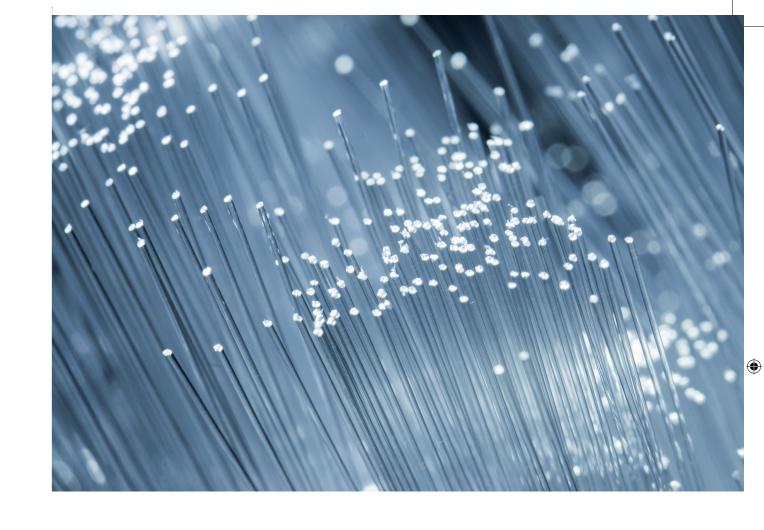
- 1946, company founded by Josef-Severin Ahlmann
- 4,200 employees in more than 40 countries (Europe, America, Asia, Australia, Africa)

ACO. The future of drainage.

- 30 production sites in 15 countries
- Sales 2016: 711 million €

www.aco.com

Creep strength	15 – 50 MPa
Elastic modulus	25 GPa
Density	1,85 g/cm <sup>3</sup>
Tensile strength	100 – 200 MPa
Compression strength	150 – 250 MPa
Max. extension	3%
Shore	110



GRP (Glass Reinforced Plastic) **ACO** material information







# **FRP (Fibre Reinforced Polymer)**

Composite material made of a polymer matrix reinforced with fibres. The fibres can be made from various materials like carbon, aramid, basalt or glass.

FRP is used in various industrial areas for its great material features.

- AEROSPACE
- AUTOMOTIVE
- MARINE
- CONSTRUCTION INDUSTRY

# ACO use...

#### **GRP** (glass reinforced plastics)

A lightweight composite material that is made from polyester resin binder reinforced by glass matting and fibers.

RESIN









GRP material is produced by winding and spraying

#### GLASS REINFORCED PLASTIC





Technical development, material optimization and static calculation.



Superior material for below ground construction

..."LIGHT AS PLASTIC. STRONG AS CONCRETE"

### **Features**

# Light weight

Cost-effective transportation and easy manipulation on site without need for heavy machinery



#### Fatigue resistant

Highly resistant to static and dynamic fatigues through its lifetime



# High creep resistance

Resistance to deformation from local pressures ensures shape consistency and durability



#### Stable material characteristics

Resistance to external conditions (weather, UV radiation ect.) without change in mechanical characteristics



# Non-porous material

No need of surface coating. non - corrosive



## **Easy customization**

GRP material separators allow for tailored customer solution regarding shape, surface, and chemical composition



# **Benefits**

No heavy machinery needed Not exceeding truck loading limit

 Savings in transportation and on construction site

Long term reliability, protection against fatal damages

 Reduction of material maintenance and ongoing repair/replace costs

Increasing reliability against product defect in time, decreasing risks of damages from incorrect installation

- Reduction of repair/replace costs
- Usage in wider application range

Constant material characteristics throughout its lifetime

 Reduction of maintenance and ongoing cost

Prevention to corrosion and leakage

- Reduction maintenance and ongoing cost
- Keeping its value for long term period

Tailor made solution

- Obtaining functional solution
- Reflecting customer specific requirements







