

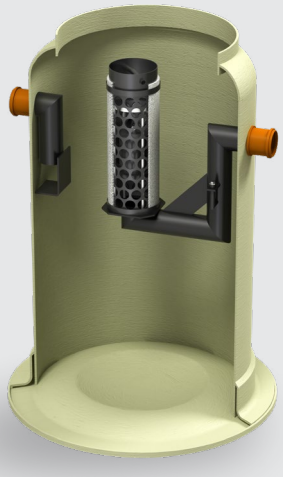
ACO Product Catalogue

GRP (Glass Reinforced Plastic)

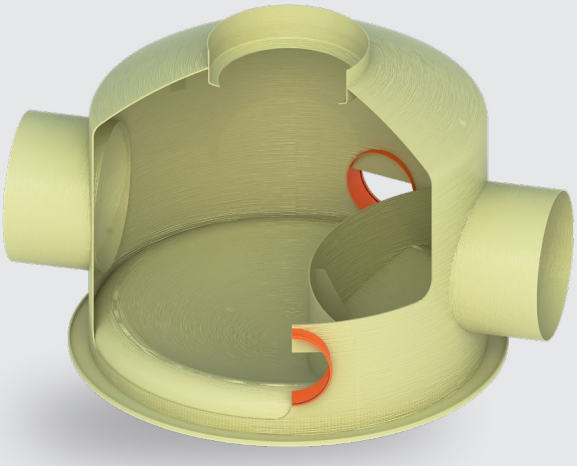
Surface Water Treatment Solutions – Overseas Transportable Products

ACO's GRP solutions combine strength, durability, and corrosion resistance to support sustainable water management. Designed for light liquid separation, and stormwater treatment, these systems ensure safe, efficient, and long-lasting performance in demanding environments.

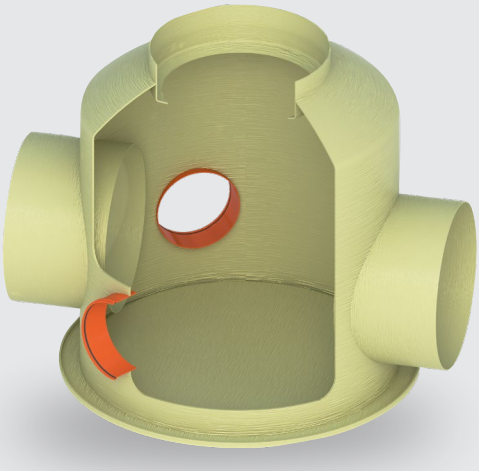
Oil Separators



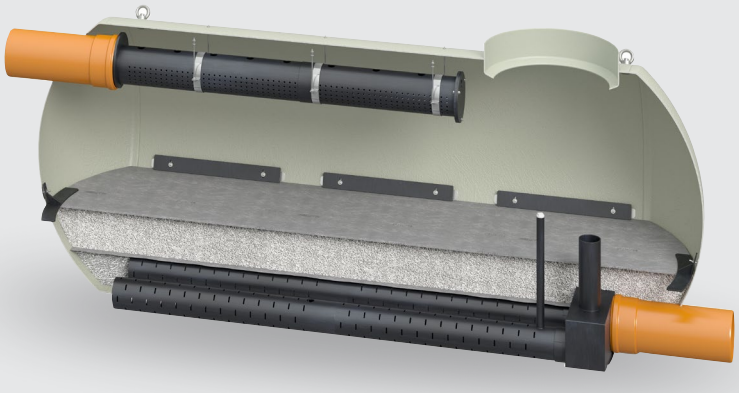
Dividing Shafts



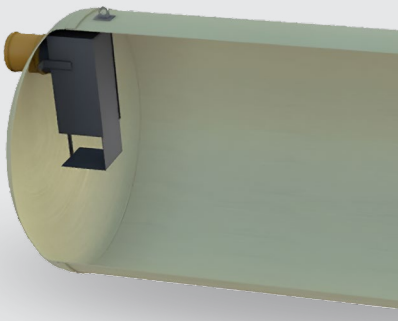
Merging Shafts



Filtration and Adsorption Systems



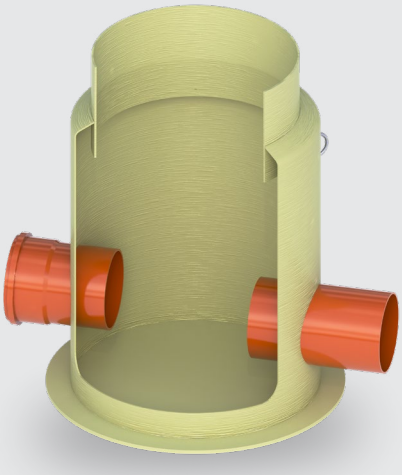
Sedimentation Devices

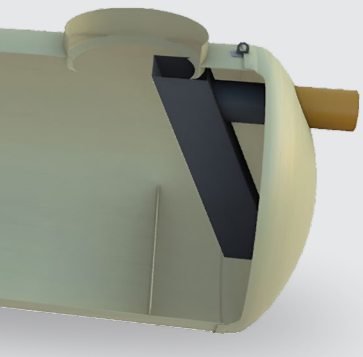


Sludge Traps



Sampling Shafts





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ACO. we care for water

ACO is a Water-Tech company that protects water. Building on our global drainage expertise that protects people from water, we increasingly see our mission as also protecting water from people.

With the ACO WaterCycle, ACO provides systems that collect and channel, clean, retain and ultimately reuse water. In this way, ACO contributes to the preservation of clean groundwater as a vital resource, and makes a contribution to tomorrow's world. In its Agenda 2030, the UN global community set the improvement of water quality as one of 17 sustainable development goals.

Intelligent drainage systems from ACO increasingly use smart technology to ensure that rainwater and wastewater are drained, or temporarily stored. With innovative separation and filtration technology, we prevent water contamination by pollutants such as fat and grease, fuels, heavy metals and microplastics.

Today, ACO goes one step further: we accept the challenge of reusing water, and thus establishing a resource-saving cycle. For all products and systems, ACO attaches great importance to durability, reusability and a low carbon footprint. The pursuit of sustainability is an ongoing process that we strive to meet every day.

The ACO Group is a global family business that is one of the world market leaders in the Water-Tech segment. Founded in Schleswig-Holstein in 1946, it operates as a transnational network in over 50 countries. Worldwide, ACO is characterised by a high level of decentralised ownership, and explicit regional market proximity.

www.aco.com



Holder
Iver and Hans-Julius Ahlmann



Headquarters of the ACO Group
in Rendsburg/Büdelsdorf



5.500

employees in more than 50 countries (Europe, North and South America, Asia, Australia, Africa)

1.14 Billion

Euro Sales in 2024

43

production sites in 20 countries





ACO Academy
for practical training



Dimensions designed
for **container transport**

Integrated lifting lugs
for **easy manipulation**

Low weight of the products
in regards to their size



General Catalogue Information

This catalogue provides an extensive overview of ACO GRP (Glass Reinforced Plastic) products, designed to deliver effective and sustainable solutions for water management. It offers detailed specifications and information to assist in selecting the most suitable products for various applications, focusing on their features, benefits, and technical parameters.

The catalogue focuses on Surface Water Treatment products, which are divided into two categories for easier navigation: one dedicated to the Light Liquid Separators portfolio and another to Stormwater Management. Within these sections, you will find comprehensive details about the products, including their key features, technical information, and dimensions. Please note that while the dimensions provided are as accurate as possible, slight variations may occur due to production tolerances or customizations. Users are advised to verify critical measurements before installation or procurement.

ACO GRP products are specifically designed with container transport in mind, featuring lightweight and modular designs that allow for secure, efficient handling and easy manipulation on-site without heavy machinery. This makes them particularly well-suited for international logistics and installations in various environments.

In addition to product descriptions, the catalogue introduces the GRP material and its exceptional properties, including resistance to corrosion, high structural stability, and the ability to withstand both static and dynamic fatigue. These attributes ensure that ACO GRP products deliver long-lasting performance, even under demanding conditions.

The catalogue also highlights the range of accessories available to complement ACO GRP products, such as extension shafts, manhole covers, and other components. These accessories enhance adaptability, functionality, and ease of installation, allowing for versatile applications tailored to specific project requirements.

For installation, the catalogue provides a general overview of the key steps and considerations to ensure proper structural reliability and performance. However, it is essential to refer to the full installation manual—accessible via a link provided in the catalogue—for detailed guidance and to ensure compliance with all necessary standards and procedures.

Should you have any questions or require further assistance, the ACO team is always ready to provide support and guidance to ensure the success of your project.

Logistic Information: Required Container Types

As mentioned earlier, this catalogue includes ACO GRP products that can be shipped using containers for overseas transportation. However, it's important to note that different container types may be required depending on the product type and dimensions.

When planning shipments, always consider the length of the product along with any associated accessories. The most commonly used container sizes are 20-foot and 40-foot containers.

Horizontal tank



Vertical tank



Products in Horizontal Tanks

For any product delivered in a horizontal tank, an **open-top high cube container** is required. This type of container is mandatory, as horizontal tanks are handled using lifting lugs to ensure the safe loading and unloading of the product. Vertical access is essential, and the open-top design enables safe and damage-free handling during transportation.





Products in Vertical Tanks

Products delivered in vertical tanks or those mounted on pallets do not require open-top containers. For these products, a **high cube container** is sufficient.





For detailed information about handling and storing the product, see the installation manuals for ACO GRP products.

If you are unsure about the appropriate container type for your order or have any questions regarding logistics, please do not hesitate to contact the ACO team. We will be happy to provide guidance to ensure smooth and efficient transport of your chosen products.

GRP Features

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

Fatigue resistant
Highly resistant to static and dynamic fatigue throughout its lifetime

High creep resistance
Resistance to deformation ensures shape consistency and durability

Stable material
Resistant to external conditions (weather, UV radiation) changes to mechanical characteristics

Non-porous
Noncorrosive and no need for surface coating

Easy customisation
GRP material separators allow for tailored solutions regarding shape, surface, and chemical composition



ACO use

GRP (glass reinforced plastics)
A lightweight composite material that is made from a polyester resin binder reinforced by glass matting and fibers.

Resin + **Glass fibres** →



GRP material is produced by winding and spraying

& Benefits



No heavy machinery needed
Does not exceed truck loading limits

- Save costs on transportation and at the construction site

Long-term reliability and protection against fatal damage

- Reduce maintenance and ongoing repair or replacement costs

Increased reliability against product defect over time, decreasing the risks of damages from improper installation

- Reduce repair and replacement costs
- Wider range of applications

Consistent material characteristics throughout its lifetime

- Reduce maintenance and ongoing costs

Resistant to corrosion and leakage

- Reduce maintenance and ongoing cost
- Retain value for the long-term

Tailor-made solutions

- Obtain functional solutions
- Reflect customer-specific requirements

GRP (glass-reinforced-plastic)



→ **Superior material for ground construction** →

“light as plastic, strong as concrete“

Technical development, material optimisation and static calculation.

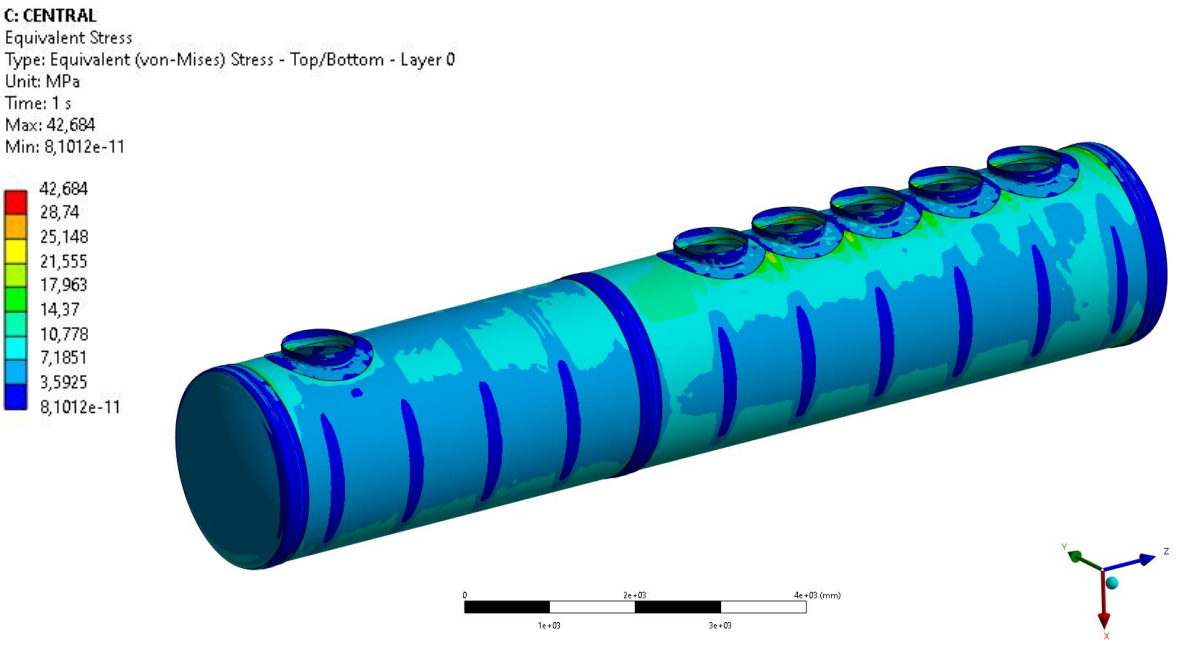
Installation of ACO GRP Products

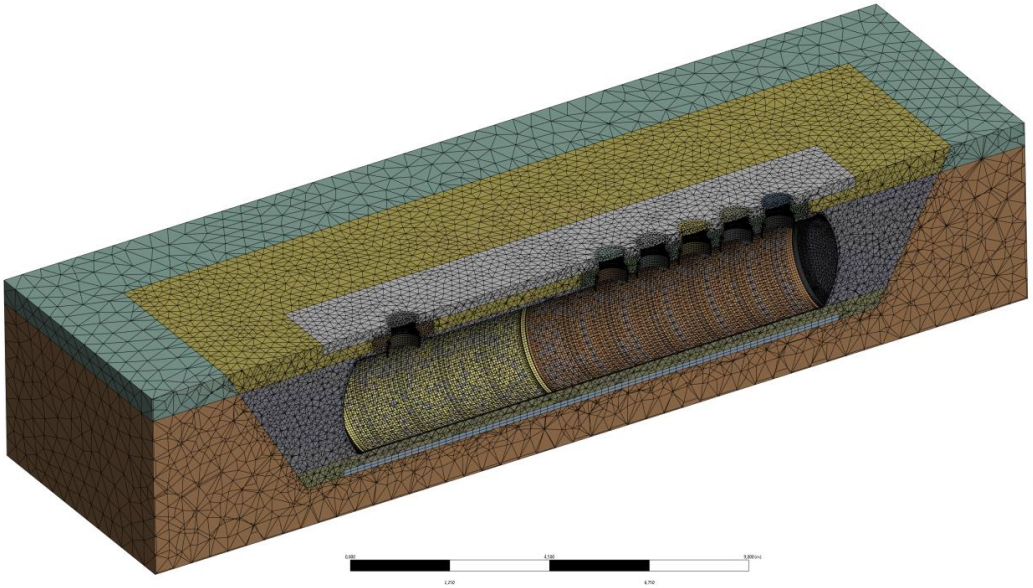
General information

ACO GRP products are designed for below-ground installation. Proper installation of each product is crucial to ensure their functionality, longevity, and safety. Correct installation prevents damage or failure and therefore protects the environment, and ensures the safety of all individuals involved in the process.

One significant benefit of ACO GRP products is their total cost of installation. Thanks to their structural stability and optimized installation processes, the installation costs can be minimized. The structural stability of ACO GRP products is designed to withstand specific loads, including those from surrounding soil, groundwater, and surface (static or dynamic). These designs are rigorously verified through calculations to ensure safety and durability.

To design the best installation procedures for our GRP products, we use the know-how of our GRP specialists from R&D department in cooperation with civil engineers majoring in the field of underground installations.





ACO GRP products are divided into two groups: vertical GRP products and horizontal GRP products. Each category has specific installation requirements. Detailed installation manuals for both groups are accessible via QR codes provided below. This section provides an overview of installation specifics but does not replace the installation manuals. Always refer to the installation manuals for precise instructions.

Installation Manual
for Vertical GRP Tanks



Installation Manual
for Horizontal GRP Tanks



Evaluating installation conditions

Before installation, it is essential to assess site conditions, including:
- Subsoil properties
- Groundwater levels
- Installation depth
- Expected load class

Based on these conditions, an appropriate installation procedure can be selected.

For our products, we differentiate between standard installation conditions and non-standard installation conditions.

Standard Installation Conditions include:
- Groundwater levels no higher than 2,0 m from the product's bottom
- Max installation depth not exceeding 2,25 m from the highest point of the product and also minimum installation depth not less than 585 mm above the highest point of the product
- Load class not exceeding D 400

Non-Standard Installation Conditions include:
- Higher loads (up to load class F 900)
- Greater or shallower installation depths
- High groundwater levels
- Above-ground free-standing solution

All of our products offered in the catalogue are designed to withstand standard installation conditions. In the case of any non-standard conditions on site, ACO offers individual approach to create tailored solutions. Our GRP specialists evaluate site conditions and ensure structural stability, safety, and product longevity by reinforcing products to suit project specifics.









Installation process

At the beginning of installation, site conditions determine whether a base concrete slab is needed. ACO offers solutions for installations with or without a base concrete slab according to the site conditions. In the case of buoyancy risk, ACO GRP horizontal tanks are stabilized by ACO belts to ensure a long-term stable position. Vertical GRP tanks do not require additional stabilization.



The advantage of ACO GRP products is also their low weight in relation to their size which significantly simplifies the installation process, product handling and manipulation and reduces the demands and costs of the necessary handling equipment. ACO GRP products mentioned in this catalogue are specially designed for container transport.





Backfilling and Compaction

A very important part of the installation procedure is the backfilling and compacting process. The proper backfilling process regarding materials and compaction works is essential to maintain structural stability of the tank, to avoid damage and to ensure long term product performance. To reduce the overall costs of installing ACO GRP products, specific soil types suitable for backfilling were selected. Therefore, if the excavated soil on site is suitable for backfilling, the costs of additional backfilling material could be saved. If the soil is not suitable, crushed stone is used instead. Other than suitable backfilling material also the suitable machinery for compaction is described in the installation manuals.



Extension shafts, load distribution elements and manhole covers

Depending on the load class of the installation, a decision must be made regarding the necessity of a load distribution element—such as a concrete slab. This slab protects the products from surface loads, which could negatively affect their structural stability.

ACO also offers compatible extension shafts and manhole covers suitable for specific load classes according to the EN 124 standard. When ordering these products, it is important to account for these additional items. To select the correct extension shafts and manhole covers, the installation depth and the expected load class must be considered first.



Extension shafts

Extension shafts which are offered by ACO are made of PE-HD, supplied with sealing and are fully compatible with ACO GRP products. These extension shafts come in different heights so you can choose the right height suiting the needs of your installation depth.



Manhole covers

Manhole covers are available in different DN sizes (DN 600 or DN 800) and various load class types, as defined by EN 124. Before ordering, it is essential to choose the load class according to the project's requirements.



Load distribution elements

Load distribution elements are specified to be used based on the chosen load class and their purpose is to protect the GRP product and extension shafts from the surface loads.

GRP Vertical products require load distribution elements for load class D 400 and greater. They use reinforced concrete rings which are installed above the GRP vertical products and beneath the manhole cover. These reinforced concrete rings could either be supplied along with the extension shafts and manhole covers or prepared on-site.

GRP Horizontal products require load distribution elements for load class D 400 and greater. The reinforced concrete slab is constructed on-site above the products according to the installation instructions.

Set of extension shafts (top sections) with accessories

To simplify the ordering process, this catalogue includes item numbers that represent sets of additional items for GRP products. These sets include an extension shaft, sealing, manhole cover and, in some cases, a prefabricated concrete load distribution ring. By using these item numbers, you can select the appropriate extension shaft length, manhole cover (correct DN size and load class), and a prefabricated load distribution ring if required.



Alarm devices

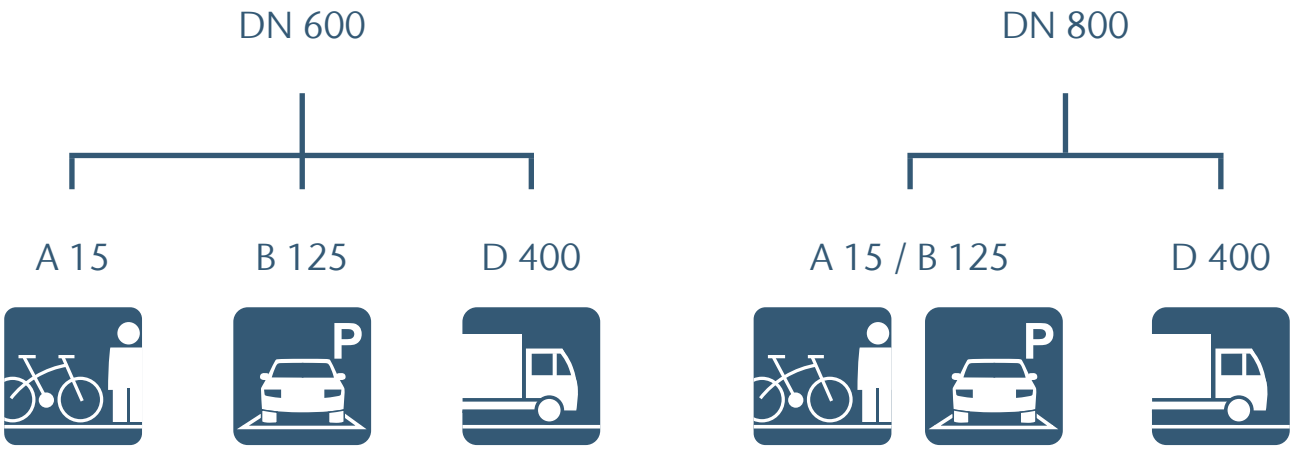
ACO GRP products can optionally be equipped with an additional alarm system, consisting of a control unit and selected sensors. This system monitors the operational status and can indicate, for example, when maintenance is required. Alarms systems could be ordered under separate item numbers for your chosen GRP product. In this case the alarm system is afterwards installed on-site. While the use of alarm systems is for some types of products optional and not explicitly regulated for all applications, their use is strongly recommended to ensure proper monitoring and maintenance. However, for some products such as light liquid separators, the use of an alarm system is required in accordance with the European standard EN 858.

Assembly concept

Each product range in this catalogue includes a description of the assembly concept for top sections (extension shafts) with corresponding manhole covers. Some products may require DN 800 manhole covers for maintenance works, while others can be installed with DN 600 covers. If you prefer DN 800 manhole cover, you can always substitute the DN 600 with DN 800 manhole cover.

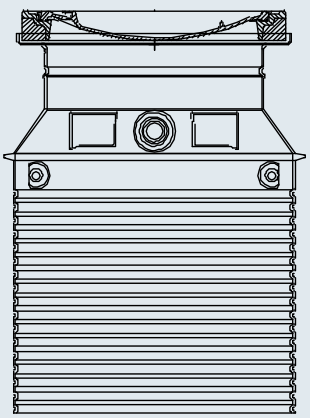
Assembly concept of extension shafts and manhole covers for GRP vertical products

For all GRP vertical products we differentiate between load class A 15, B 125 and D 400 manhole cover types, either DN 600 or DN 800 with corresponding installation procedure. For these combinations, we have following sets of extension shafts with corresponding manhole covers.

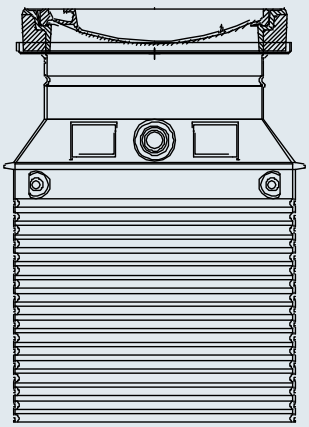


DN 600

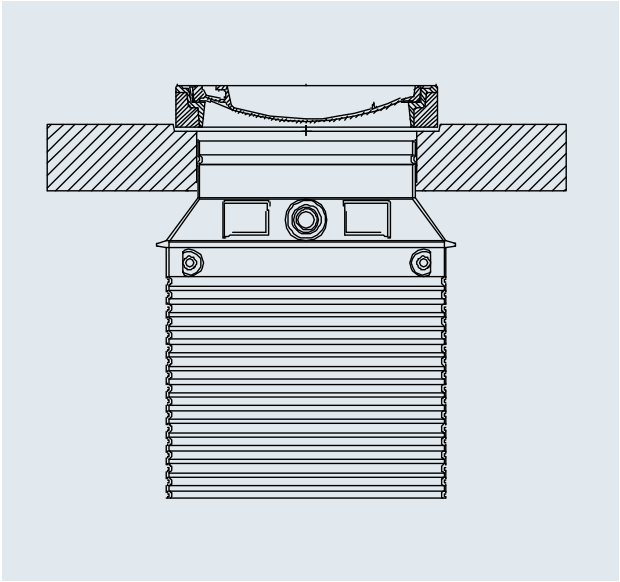
Load class A 15



Load class B 125

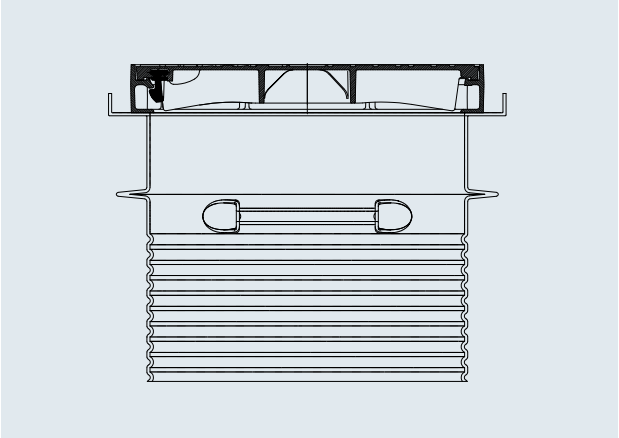


Load class D 400

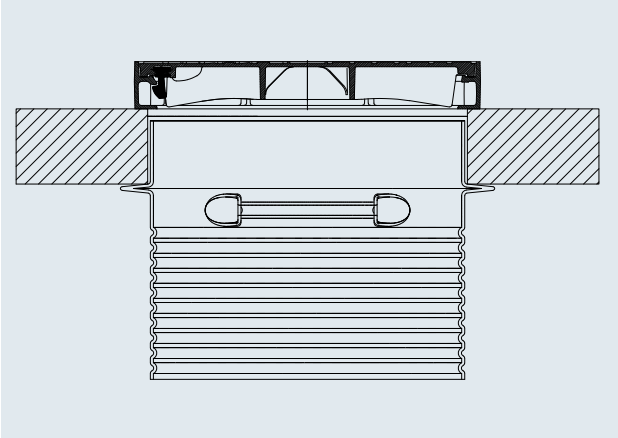


DN 800

Load class A 15 + load class B 125



Load class D 400



Note: For DN 800 manhole covers, one cover is used for all load classes up to D 400.

For vertical GRP products, it is necessary to use the load distribution concrete ring for installation into load class D 400 and greater. Load class types A 15 and B 125 do not require any concrete load distribution ring.

Assembly concept of extension shafts and manhole covers for GRP horizontal products

For all GRP horizontal products, we differentiate between DN 600 and DN 800 manhole covers. Regarding load classes and their installation procedures, there are two groups:

- Load class A 15
- Load class D 400

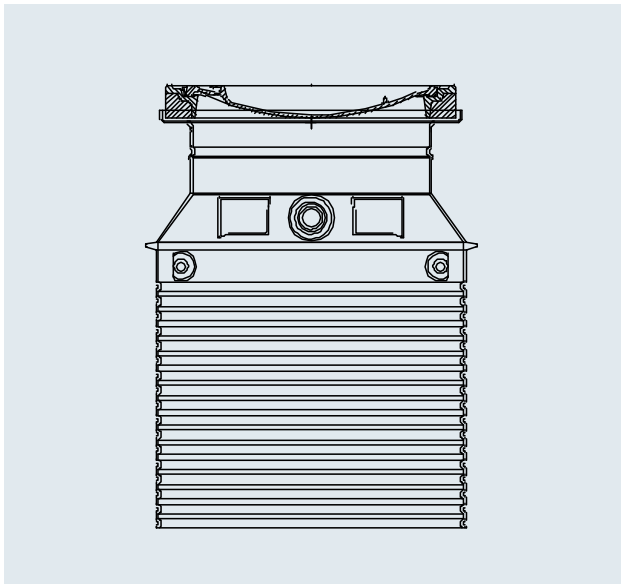
According to the installation manual, load class B 125 for GRP horizontal products follows the same installation procedure as load class D 400.

For the different DN of the manhole covers and different load classes, we have following sets of extension shafts with corresponding manhole covers.

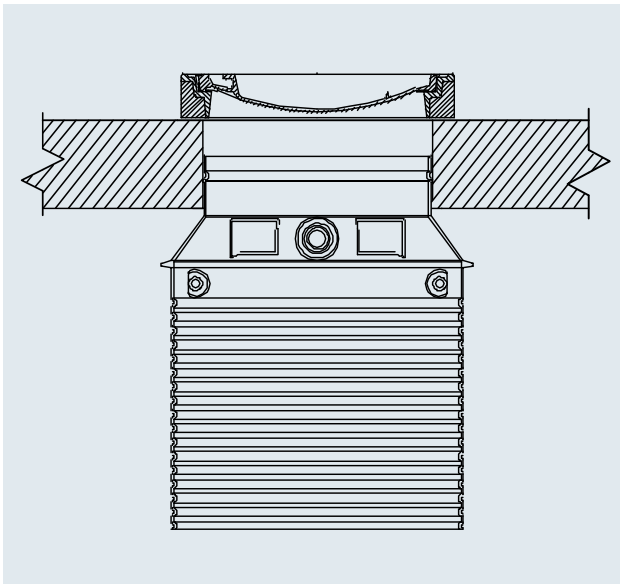


DN 600

Load class A 15

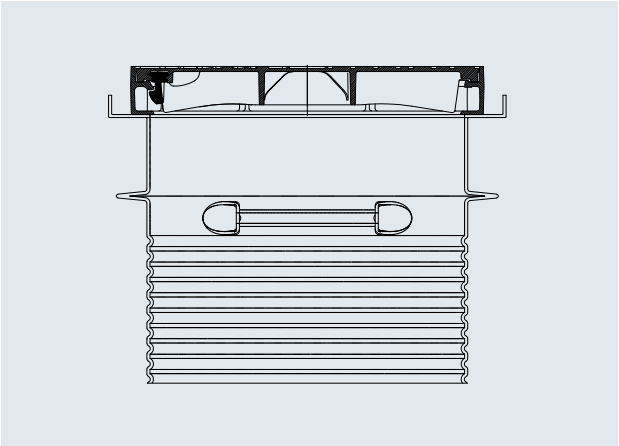


Load class D 400

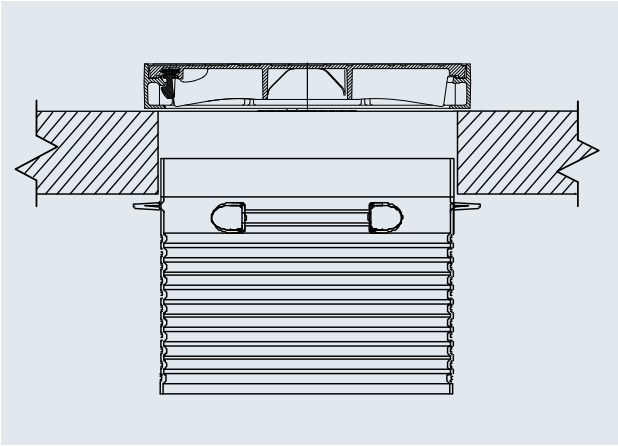


DN 800

Load class A 15

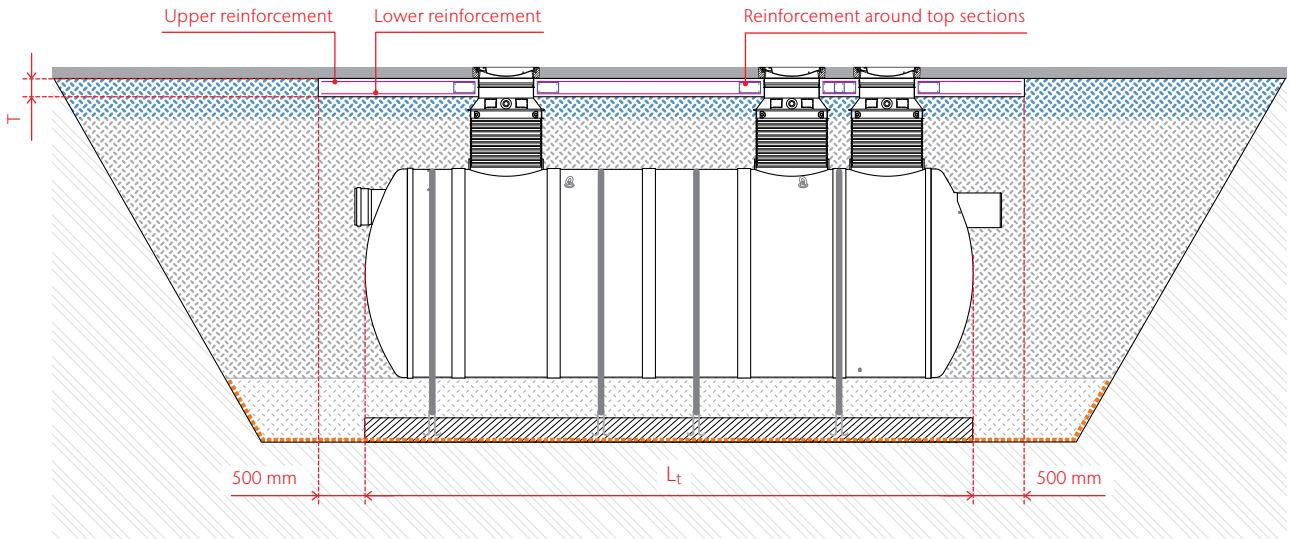


Load class D 400



Note: For DN 800 manhole covers, one cover is used for all load classes up to D 400.

For horizontal GRP products, it is necessary to construct the load distribution concrete slab for installation into loads greater than load class A 15. Load class type A 15 does not require any concrete load distribution slab. In the case of load class B 125, it is necessary to use the same installation procedure and accessories as for the load class D 400.



Surface Water Treatment



Across the world, we see how cities are transforming. Where once there were only impermeable concrete surfaces, new pockets of greenery and water features are emerging. Blue-green infrastructure is becoming a key element of modern urban design – improving city climates, quality of life, and water management.

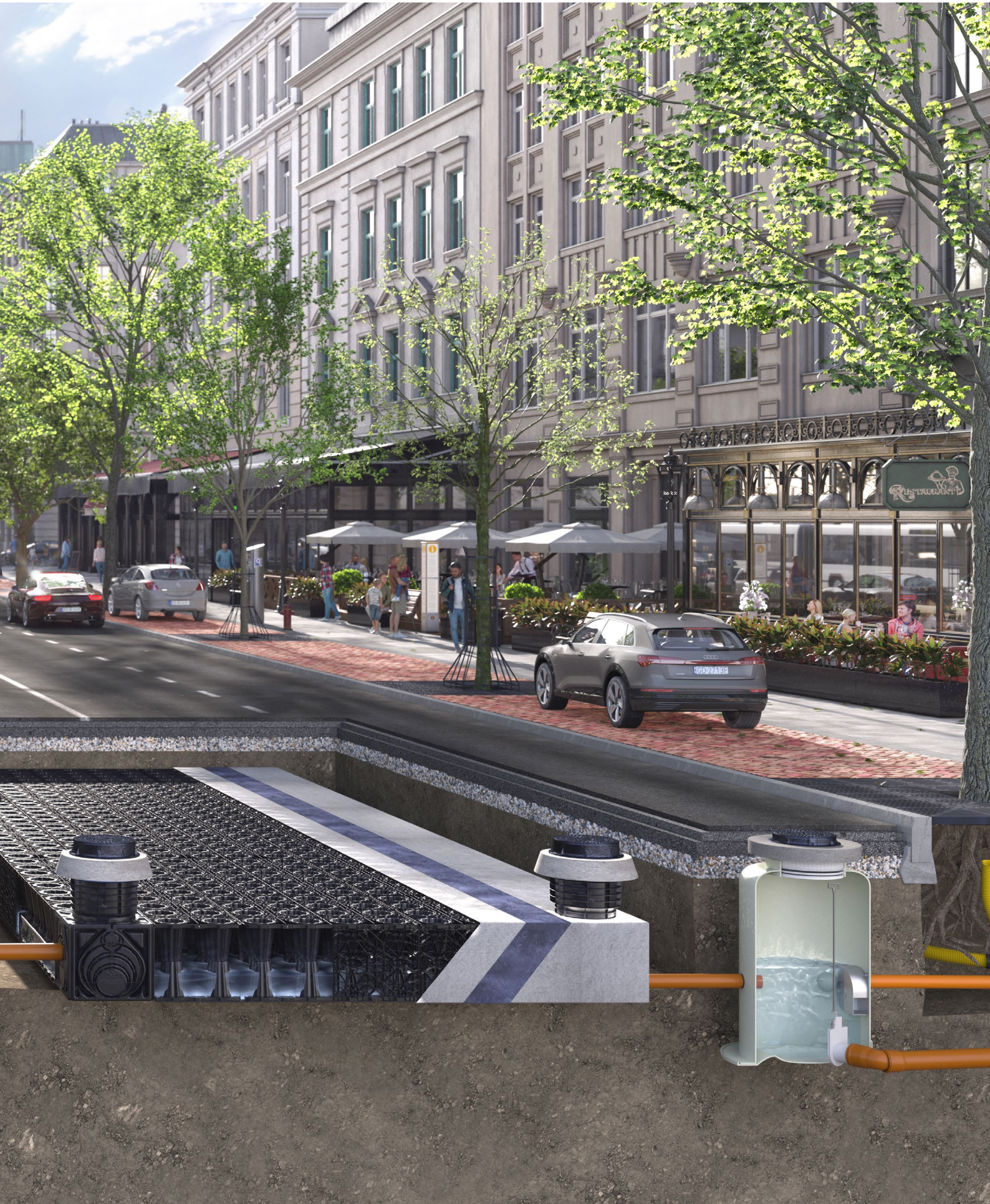
However, there are areas where nature-based solutions alone are not enough. Locations with high traffic or industrial activity require additional water pre-treatment before discharge into natural water sources to prevent pollution. Space limitations, high land prices, and the need for highly efficient solutions are also common challenges.

Why partner with ACO?

With over 75 years of experience, ACO understands the challenges of water management and how requirements evolve over time. We know that successful urban development isn't just about collecting and draining water – it's about finding smart ways to retain, treat, and protect it.

That's why we go beyond drainage. ACO offers advanced solutions for stormwater treatment and oil separation that actively reduce environmental pollution. Our systems are designed to capture and remove harmful substances such as hydrocarbons, heavy metals, microplastics, and suspended solids. By doing so, they help prevent contaminants from entering rivers, groundwater, and ecosystems – safeguarding water quality and supporting compliance with environmental regulations.

Our products are developed and manufactured to the highest standards and certified by independent institutes in line with European norms to ensure safety, reliability, and long-term performance.


RESTAURANT


1





Light Liquid Separators Portfolio

From logistics centres and fuel stations to industrial yards and car parks, light liquids such as oil, petrol, and hydrocarbons pose a persistent threat to surface water quality and underground infrastructure. Inadequate separation of these substances can lead to serious consequences—not only damaging drainage systems but also polluting watercourses and violating environmental regulations.

When spilled or washed into the drainage system, light liquids float on water and can travel long distances, forming films or slicks that are difficult to contain. They interfere with wastewater treatment, harm aquatic ecosystems, and increase the risk of fire or explosion in confined sewer spaces. In extreme cases, uncontrolled discharge of hydrocarbons has led to costly remediation efforts and environmental fines.

At ACO, we believe that reliable light liquid management requires more than a single product—it requires a complete system approach. Our range of GRP-based light liquid separators, sludge traps, and shaft solutions are designed to work together seamlessly, offering long-term performance, safety, and environmental protection. The portfolio is designed in accordance with the relevant European standards, primarily EN 858.

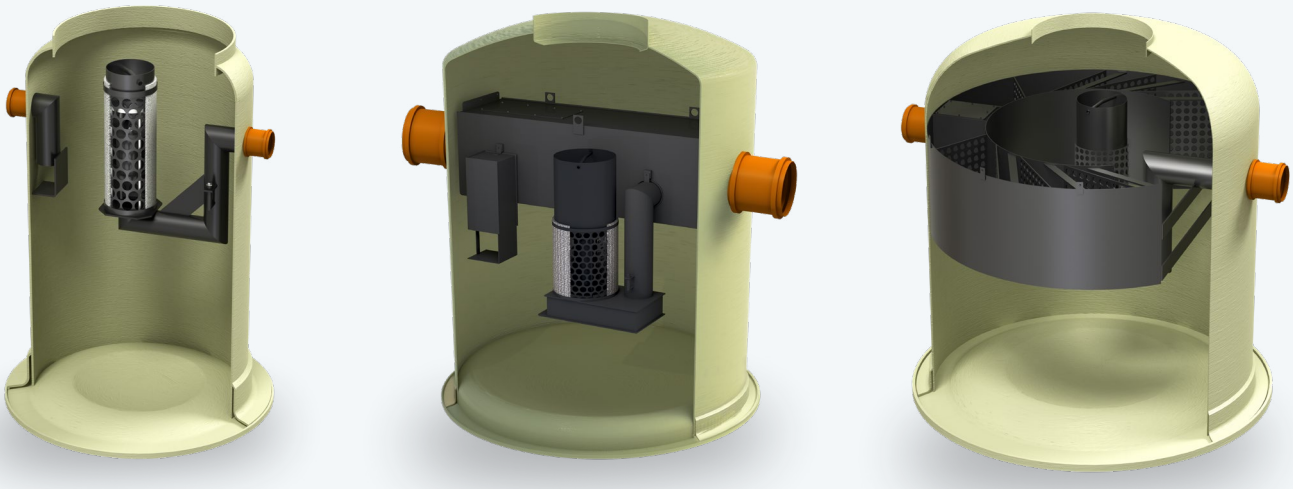
ACO's GRP light liquid separation systems deliver peace of mind through performance, but they also support broader environmental goals. By stopping hydrocarbons at the source, they reduce pollution risk and help customers comply with increasingly strict water protection laws.

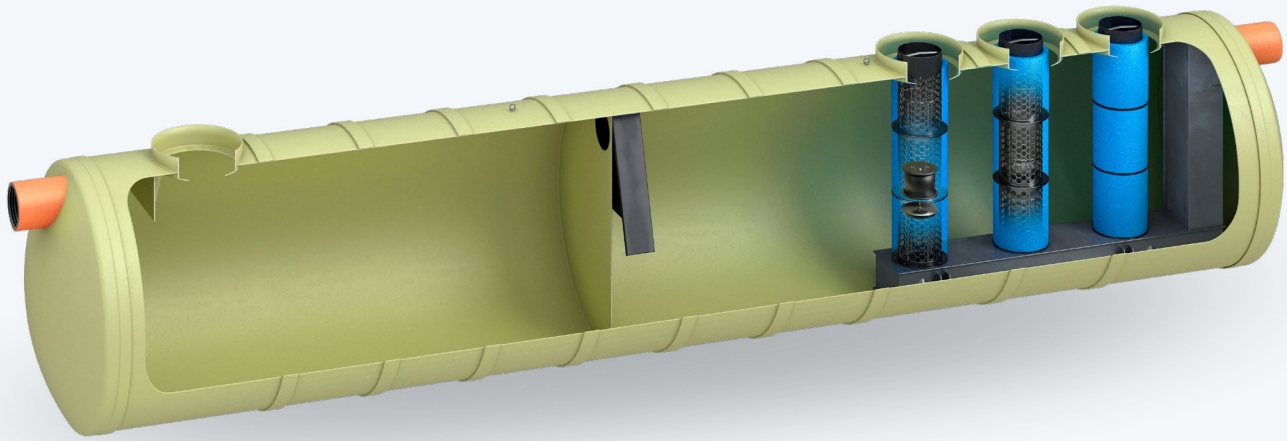
Combined with sludge traps and modular shaft solutions, ACO systems offer a reliable chain of protection—from inlet to outlet—ready to meet the demands of modern infrastructure projects.

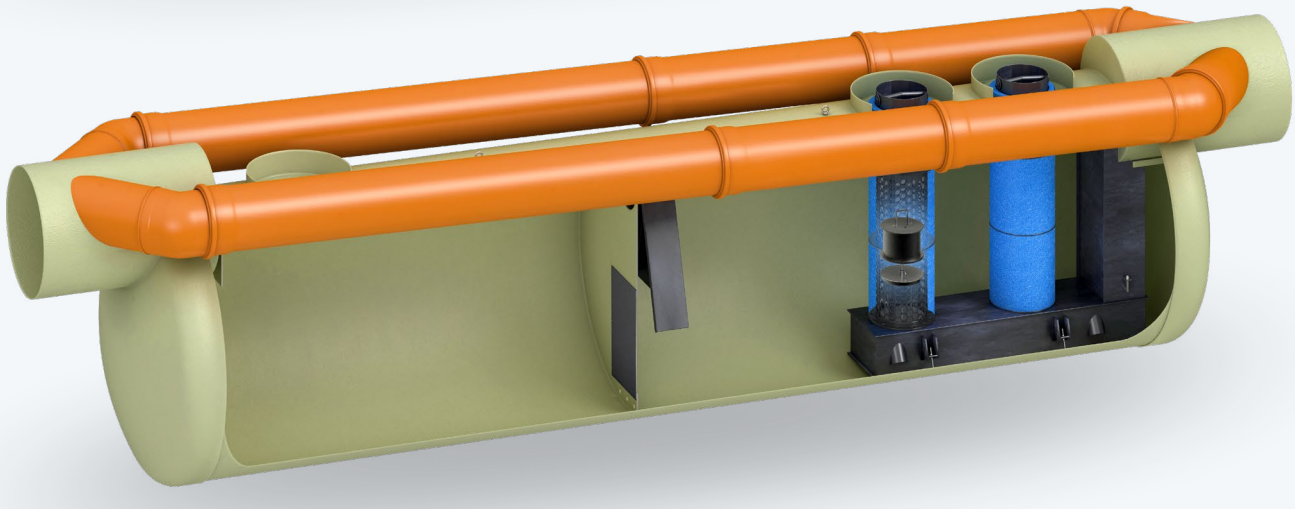
Light Liquid (Oil) Separators

Our separators are designed for the reliable removal of light liquids from contaminated water, ensuring compliance with environmental protection standards.

- Available as Class I separators with coalescence filters for high-efficiency separation.
- Offered in both full treatment versions and bypass versions.
- Available in vertical tanks for smaller nominal sizes (ideal for space-limited installations) and in horizontal tanks for greater nominal sizes where higher flow capacity is required.







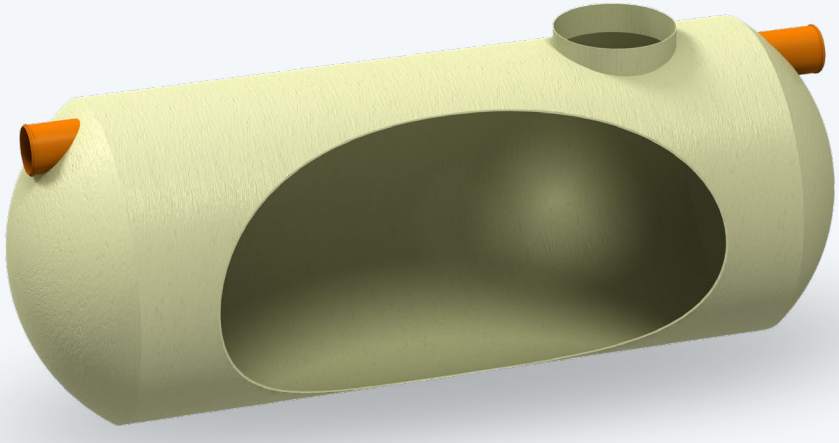
Sludge Traps

In many installations, the volume of sludge or solid debris entering the system exceeds what a standard separator can handle. This is especially common in sites with heavy traffic or poor surface cleaning practices. To prevent clogging and maintain separator efficiency, ACO offers dedicated sludge traps that:

- Extend the sludge storage capacity upstream of the separator,
- Meet all design and performance requirements of EN 858,
- Are available in multiple sizes to match project needs,
- And are made of durable, chemical-resistant GRP for long service life.

These units are essential wherever separators without integrated sludge chambers are used or where additional pre-treatment is needed.





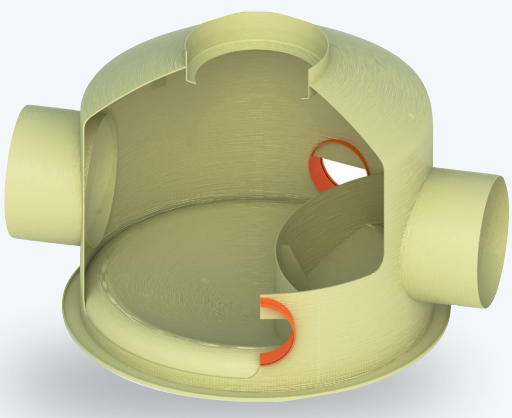
Dividing and Merging Shafts

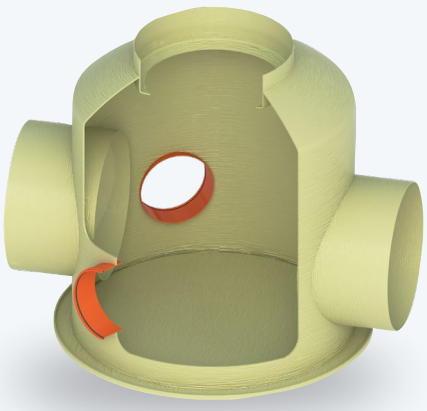
In complex drainage networks, flow control is key. ACO's GRP dividing and merging shafts offer a smart and robust solution for flow distribution, system branching, or consolidation—while also enabling a bypass option, even for systems originally not designed with one.

Bypass capability is especially important during heavy rainfall events, when the volume of surface runoff can exceed separator capacity. In such cases, ACO shaft systems help to:

- Prevent overflow or backflow,
- Protect drained areas from flooding,
- Ensure safe system operation under all weather conditions,
- And offer cost-effective scalability during design or future upgrade phases.

Our GRP shafts are fully compatible with the ACO Oleopator G and Oleopator G-H range and can be tailored to the piping and layout requirements of any site.









Light Liquid (Oil) Separators

Light liquid separators, also known as oil separators, are essential devices designed to remove oils and hydrocarbons from water before discharge.

By preventing hydrocarbon pollution in water bodies, light liquid separators help preserve water quality and safeguard aquatic ecosystems.

The proper function and separation efficiency of light liquids are crucial in protecting receiving water bodies. Therefore, it is important to have a reliable device that can operate effectively in real-world applications.

ACO light liquid separators are designed and constructed in compliance with EN 858 standards as class I separators and undergo rigorous third-party testing by the LGA institute. Thanks to this testing, along with long-term experience in the field of light liquid separators and a dedicated R&D team, ACO separators ensure maximum safety, reliability, and efficiency during their operations.

ACO light liquid separators are used in industrial, parking, and refueling facilities, where there is a risk of light liquid occurrence and high removal efficiencies are needed.

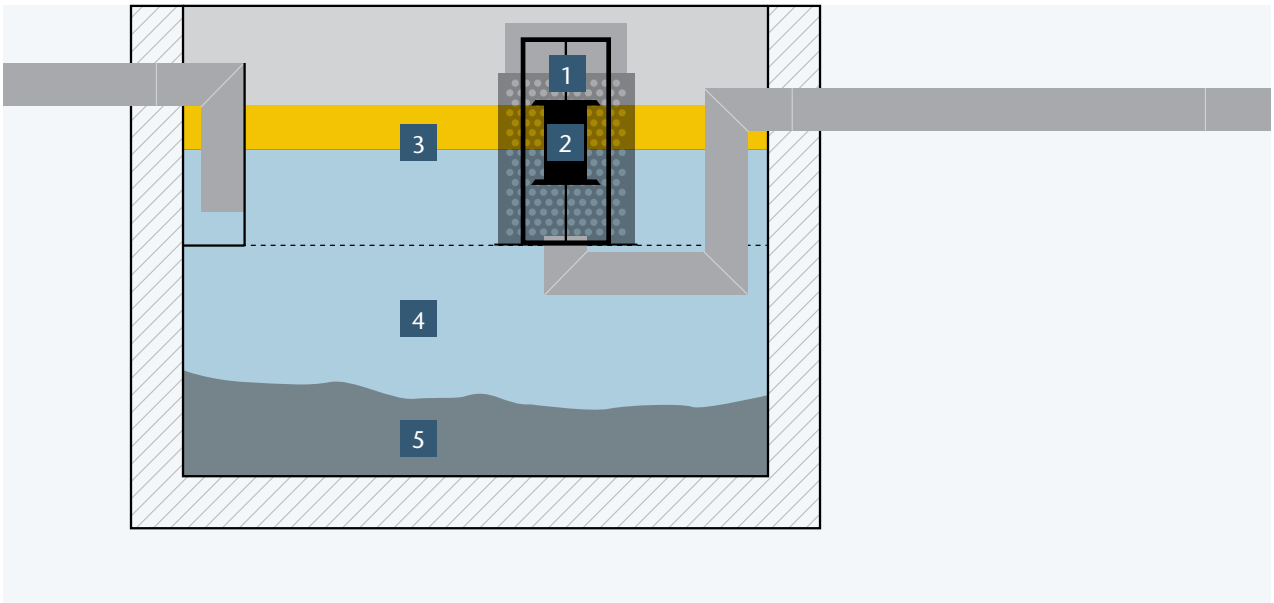
The environment inside a light liquid separator is aggressive, placing high demands on the materials used. This aggressive environment degrades materials over time, making it crucial to use high-quality materials in production to maintain the product's longevity, structural stability, and proper function over time. ACO materials used in production meet the requirements of the EN 858 norm, ensuring the longevity of the entire product.

To ensure the proper function of the separator, regular maintenance is required. ACO light liquid separators are designed for easy maintenance, with inner parts that are easily removable and accessible.

ACO light liquid separators work through gravity separation. Sludge and heavier particles sink to the bottom, while light liquids (oils), being lighter than water, rise to the surface. Treated water flows out. The development and testing of these products ensure that the hydraulics inside ACO light liquid separators provide suitable conditions for sedimentation and light liquid separation. Additionally, ACO coalescence units increase the separation efficiency of light liquids to help preserve water quality and safeguard aquatic ecosystems.

Functional principle of light liquid separation

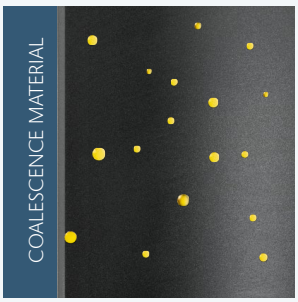
Wastewater containing light liquids (oils, etc.) reaches the separation chamber (4) via the inlet. Sediments (e.g. sand) fall to the floor of the tank and collect in the sludge trap (5). Lighter liquids (e.g. oil or petrol), on the other hand, rise to the surface and separate out into the light liquid layer (3). In order for the water in the Class I Separator to flow out of the device, it must flow through coalescence element (1) which ensures better separation efficiency of light liquids and lower the amount of light liquids residuals in the effluent. Class I separators according to the standard EN 858 (using coalescence element) must be able to reach up to 5 mg/l of light liquid concentration in the effluent during testing.



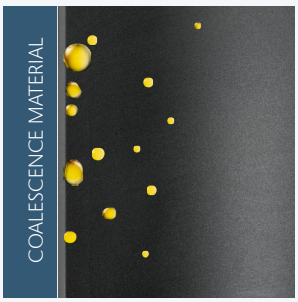
The application scope

Suitable applications include gas stations, parking areas, parking lots, roadways, washing areas, car wash facilities, brush/ portal washing systems, engine cleaning, workshops, vehicle recovery, scrap yards, transfer stations, transformer stations

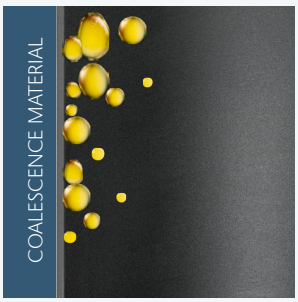
Function



Small oil droplets that are not separated because they have a different density to water bond with the oil-friendly coalescence element.



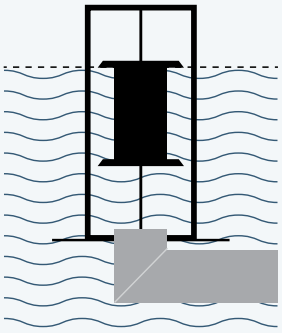
Oil droplets spread over the coalescence material, and additional oil droplets are adsorbed and the oil film continues to grow.



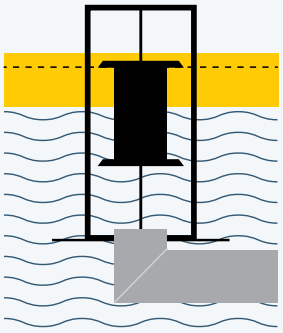
The adhesion of the oil film is exceeded. A large drop of oil begins to separate, floats upward and can therefore be separated.

The principle of self-activating sealing

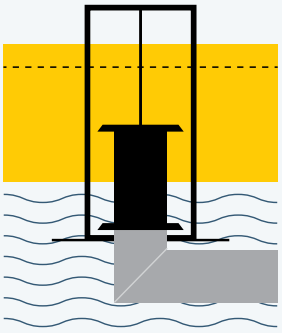
The substances which are held in the light liquid layer (3) must not reach the sewer system. This means that the separator installation must have a self-activating sealing mechanism, which automatically closes separator outlets once the maximum storage quantity of light liquids has been reached. This is ensured by using a float (2) with a specific density, which drops lower and lower as the layer of light liquids increases in size. Once the float closes off the inlet, no more wastewater can be discharged via the light liquid separator. Only when the contents of the separator have been disposed of by an approved recycling company and it has been refilled with water, can the wastewater intake be started.



Operating condition without light liquid



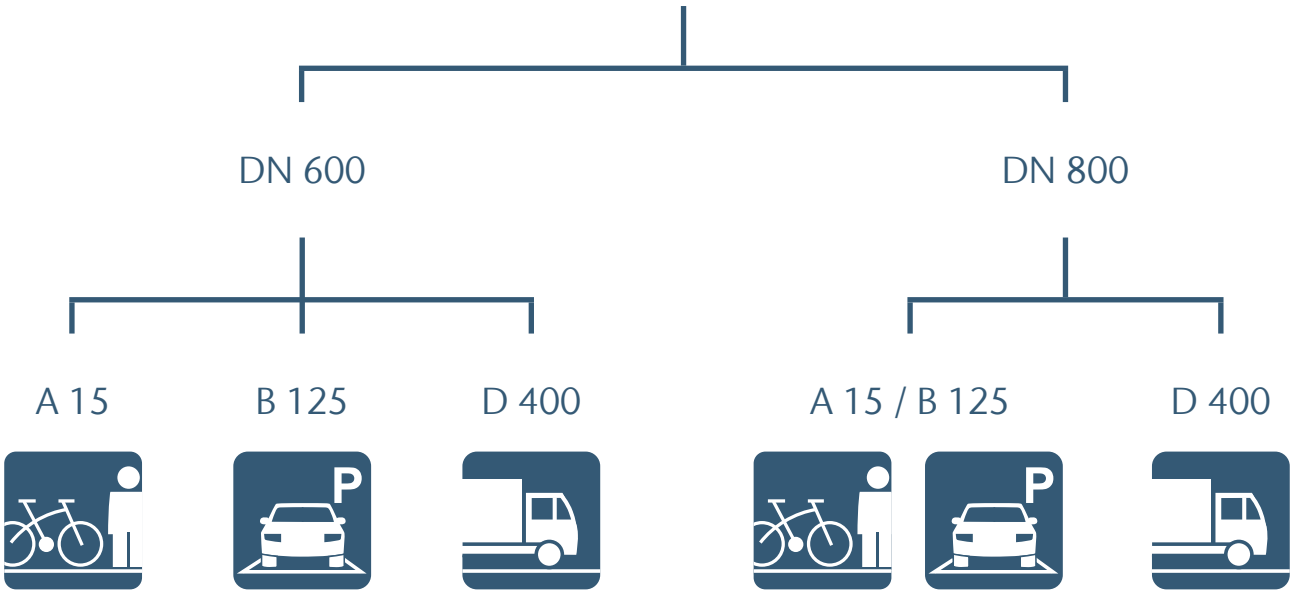
Operating condition with accumulating light liquid



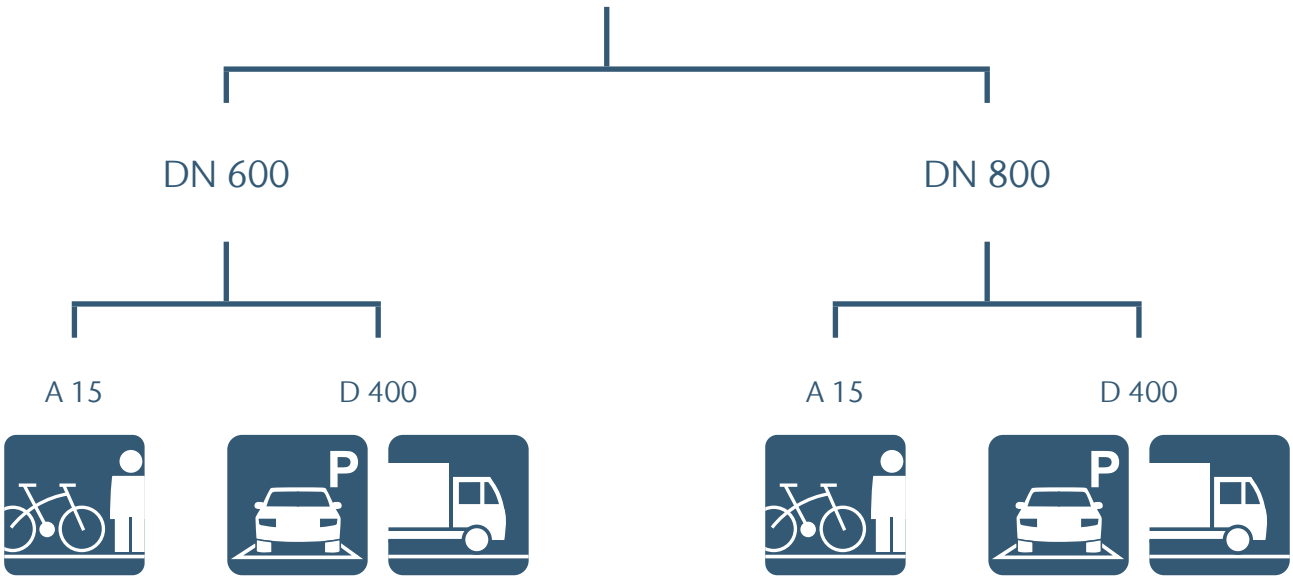
Maximum light liquid accumulation closes outlet via float switch

Assembly concept

Vertical



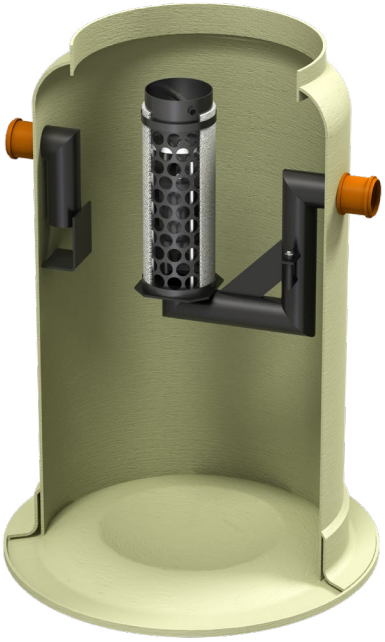
Horizontal

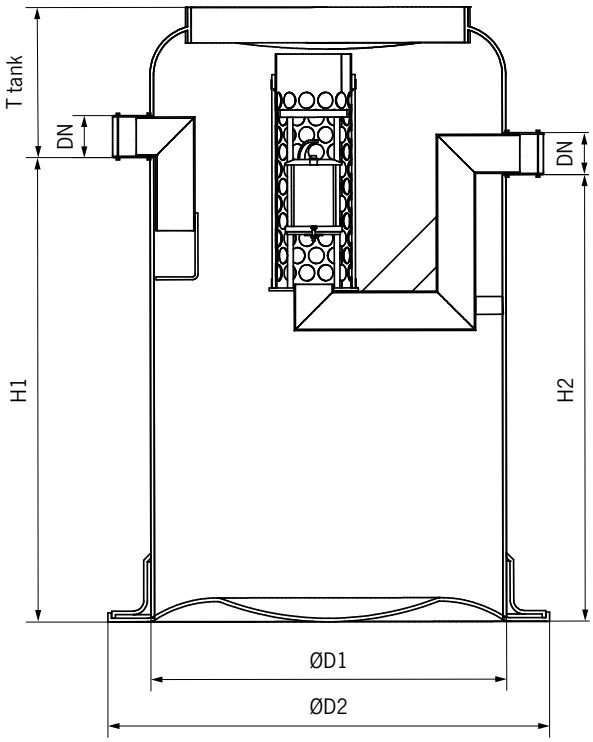


Oleopator G

Oleopator G is designed to treat oily wastewater and stormwater in applications where there is a risk of light liquids occurrence and where high removal efficiencies are needed. The product is classified as a class I separator or class II when coalescence unit is taken away according to the requirements of the European norm EN 858.

Its wide range of sizes makes ACO Oleopator G a suitable choice for small and medium-sized projects requiring long-term reliable operation. Thanks to its vertical design, ACO Oleopator G offers a compact footprint while still ensuring reliable function.





Benefits

- All nominal sizes tested by an independent third-party test institute (LGA)
- Easy access for maintenance, cleaning, and disposal thanks to the design of the internal components
- Coalescence unit (filter) and float are easily removable for cleaning without having to empty the separator
- Easy-to-clean coalescence unit
- Integrated connection on the outlet part for sampling system
- Alarm device available as optional accessories (sludge, oil, and overflow sensors)
- Wide range of nominal sizes
- Compact design with small footprint

Features

- Coalescence unit
- Inner parts made of HDPE
- Compliance with parts of standards:
  - EN 976: Underground tanks of GRP, horizontal cylindrical tanks for the non-pressure storage of liquid petroleum-based fuels
  - EN 978: Determination of factor alfa and factor beta β
  - EN 681-1: Elastomeric seals
  - EN 13501-1: Fire classification of construction products and building elements
  - ISO 1183: Plastics
- Vertical tank made of glass-reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Nominal size	Inlet/outlet DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
NS 3	110	300	163	647	110	12601.41	3000896
NS 3	110	600	163	910	125	12602.41	3000897
NS 3	110	900	464	1608	180	12603.41	3000898
NS 4	110	3300	380	3966	270	12672.41	3000899
NS 4	110	4500	552	5394	360	12673.41	3000844
NS 6	160	600	160	871	125	12611.41	3000843
NS 6	160	1200	236	1551	180	12612.41	3000842
NS 6	160	1800	434	2852	250	12613.41	3000841
NS 6	160	3200	630	4274	360	12674.41	3000840
NS 6	160	4200	630	5266	370	12675.41	3000829
NS 6	160	5200	630	6272	390	12676.41	3000828
NS 8	160	1800	434	2852	250	12678.41	3000827
NS 8	160	2500	434	3374	265	12679.41	3000826
NS 8	160	3200	630	4274	360	12680.41	3000825
NS 8	160	5200	630	6272	390	12682.41	3000824
NS 10	160	1000	273	1551	200	12621.41	3000823
NS 10	160	2000	630	2852	250	12683.41	2270870
NS 10	160	2500	630	3374	265	12684.41	3000822
NS 10	160	3200	630	4274	360	12685.41	3000821
NS 10	160	5200	630	6272	390	12686.41	3000820
NS 15	200	0	464	1774	230	12630.41	2270840
NS 15	200	1500	464	2305	240	12631.41	3000809
NS 15	200	3000	464	3807	285	12632.41	3000808
NS 15	200	6200	1027	7967	700	12677.41C	2270865
NS 20	200	0	594	1774	250	12641.41	2270843
NS 20	200	2000	594	3303	285	12645.41	3000806
NS 20	200	4000	1163	6561	660	12642.41C	2270845
NS 20	200	6000	1163	8063	700	12643.41C	2270847
NS 30	250	0	654	1739	270	12650.41	2270849
NS 30	250	3000	1513	6295	660	12651.41C	2270851
NS 30	250	6000	1513	8956	780	12652.41C	2270854
NS 40	315	0	1350	4147	680	12660.41C	2270856
NS 40	315	4000	1350	7397	730	12661.41C	2270858
NS 50	315	0	1350	4907	680	12670.41C	2270861
NS 50	315	5000	1350	8063	780	12671.41C	2270862

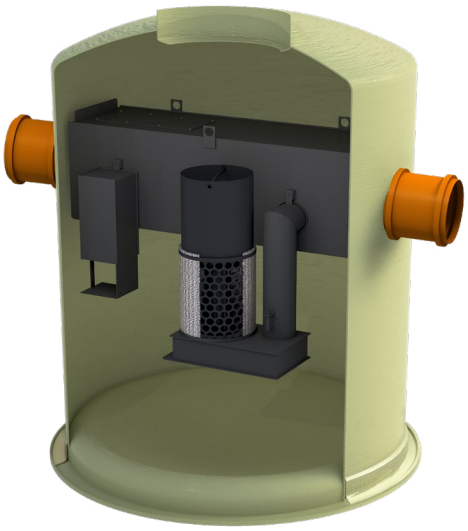
Dimensions

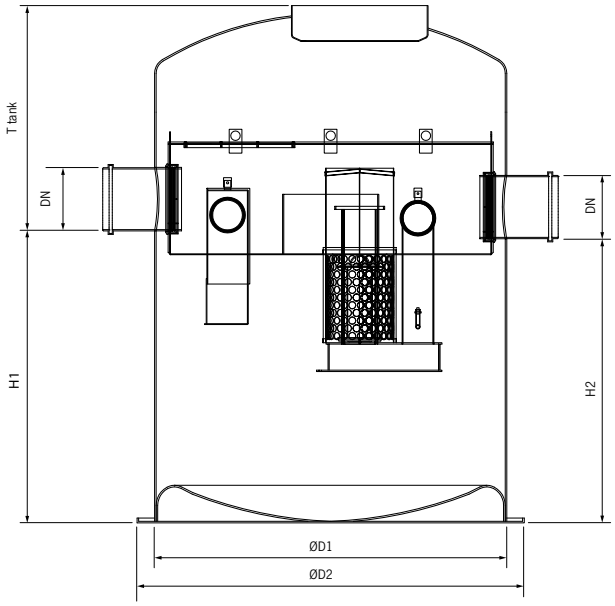
Item number		H1	H2	ØD1	ØD2	T tank	Total height	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12601.41	3000896	880	860	1000	1246	410	1290	1x DN 600
12602.41	3000897	1215	1195	1000	1246	410	1625	1x DN 600
12603.41	3000898	1480	1460	1200	1434	450	1930	1x DN 600
12672.41	3000899	2295	2275	1500	1759	550	2845	1x DN 600
12673.41	3000844	2170	2150	1800	2014	675	2845	1x DN 600
12611.41	3000843	1165	1145	1000	1246	460	1625	1x DN 600
12612.41	3000842	1430	1410	1200	1434	500	1930	1x DN 600
12613.41	3000841	1665	1645	1500	1759	600	2265	1x DN 600
12674.41	3000840	1730	1710	1800	2014	725	2455	1x DN 600
12675.41	3000829	2120	2100	1800	2014	725	2845	1x DN 600
12676.41	3000828	2515	2495	1800	2014	725	3240	1x DN 600
12678.41	3000827	1665	1645	1500	1759	600	2265	1x DN 600
12679.41	3000826	1960	1940	1500	1759	600	2560	1x DN 600
12680.41	3000825	1730	1710	1800	2014	725	2455	1x DN 600
12682.41	3000824	2515	2495	1800	2014	725	3240	1x DN 600
12621.41	3000823	1430	1410	1200	1434	500	1930	1x DN 600
12683.41	2270870	1665	1645	1500	1759	600	2265	1x DN 600
12684.41	3000822	1960	1940	1500	1759	600	2560	1x DN 600
12685.41	3000821	1730	1710	1800	2014	725	2455	1x DN 600
12686.41	3000820	2515	2495	1800	2014	725	3240	1x DN 600
12630.41	2270840	1055	1035	1500	1759	640	1695	1x DN 600
12631.41	3000809	1355	1335	1500	1759	640	1995	1x DN 600
12632.41	3000808	2205	2185	1500	1759	640	2845	1x DN 600
12677.41C	2270865	2260	2240	2200	2455	675	2935	1x DN 600
12641.41	2270843	1055	1035	1500	1759	640	1695	1x DN 600
12645.41	3000806	1920	1900	1500	1759	640	2560	1x DN 600
12642.41C	2270845	1890	1870	2200	2455	650	2540	1x DN 600
12643.41C	2270847	2285	2265	2200	2455	650	2935	1x DN 600
12650.41	2270849	1035	1015	1500	1759	660	1695	1x DN 800
12651.41C	2270851	1820	1800	2200	2455	720	2540	1x DN 600
12652.41C	2270854	2520	2500	2200	2455	720	3240	1x DN 600
12660.41C	2270856	1255	1235	2200	2455	965	2220	1x DN 800
12661.41C	2270858	2110	2090	2200	2455	825	2935	1x DN 800
12670.41C	2270861	1455	1435	2200	2455	765	2220	1x DN 800
12671.41C	2270862	2285	2265	2200	2455	955	3240	1x DN 800

Oleopator Bypass G

Oleopator Bypass G is designed to treat oily wastewater and stormwater in applications where there is a risk of light liquids occurrence and where extensive flow during high-intensity rainfall events may be diverted into a bypass system. The product is classified as a class I separator or class II when coalescence unit is taken away according to the requirements of the European norm EN 858. The integrated bypass system diverts water exceeding the treatment capacity of the separator during high flows (intensive rain events) into the bypass system. Thanks to this design, the separation process inside the separator is not influenced by high flow rates, ensuring proper separation function even during intensive rainfall events.

Its wide range of sizes makes ACO Oleopator Bypass G a suitable choice for small and medium-sized projects requiring long-term reliable operation. The additional bypass system offers cost-effective solution and makes ACO Oleopator Bypass G suitable for applications with high flow rate requirements without compromising the sludge and light liquid separation function inside the separator. Thanks to its vertical design, ACO Oleopator Bypass G offers a compact footprint while still ensuring reliable function.





Benefits

- All nominal sizes tested by an independent third-party test institute (LGA)
- Easy access for maintenance, cleaning, and disposal thanks to the design of internal components
- Coalescence unit (filter) and float easily removable for cleaning without having to empty the separator
- Easy-to-clean coalescence unit
- Integrated connection on the outlet part for sampling system
- Alarm device available as optional accessories (sludge, oil, and overflow sensors)
- Wide range of nominal sizes
- Integrated bypass system without influencing the treatment function of the separator
- Suitable for high flow rates thanks to the integrated bypass
- Compact design with small footprint

Features

- Coalescence unit
- Inner parts made of HDPE
- Compliance with parts of standards:
  - EN 976: Underground tanks of GRP, horizontal cylindrical tanks for the non-pressure storage of liquid petroleum-based fuels
  - EN 978: Determination of factor alfa and factor beta β
  - EN 681-1: Elastomeric seals
  - EN 13501-1: Fire classification of construction products and building elements
  - ISO 1183: Plastics
- Vertical tank made of glass-reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Nominal size	Max. flow* (NSB)	Inlet/outlet DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[l/s]	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
NS 6	60	315	600	412	1377	260	12541.41	2270774
NS 6	60	315	1200	412	1907	280	12542.41	2270775
NS 6	60	315	1800	412	2905	305	12543.41	2270776
NS 8	80	315	800	412	1907	280	12544.41	2270777
NS 8	80	315	1600	412	2384	290	12545.41	2270778
NS 8	80	315	2400	412	3409	325	12546.41	2270780
NS 10	100	400	1000	412	1801	300	12547.41	2270781
NS 10	100	400	2000	412	2799	320	12548.41	2270783
NS 10	100	400	3000	412	3780	360	12549.41	2270785
NS 15	150	400	1500	902	3520	660	12550.41C	2270788
NS 15	150	400	3000	902	4736	730	12551.41C	2270790
NS 15	150	400	4500	902	6238	800	12552.41C	2270793
NS 20	200	400	2000	1197	4736	750	12553.41C	2270796
NS 20	200	400	4000	1197	7397	810	12554.41C	2270799
NS 20	200	400	6000	1197	8994	900	12555.41C	2270801
NS 30	300	500	3000	1473	5858	790	12556.41C	2270804
NS 30	300	500	6000	1473	8614	920	12557.41C	2270807
NS 30	300	500	9000	1473	11617	1000	12558.41C	2270810

* Maximum flow (NSB) is considered here as 10 times NS. Maximum flow which is able to go through the whole system depends on the site conditions (flow velocity/slope of the piping on site, etc.).

Dimensions

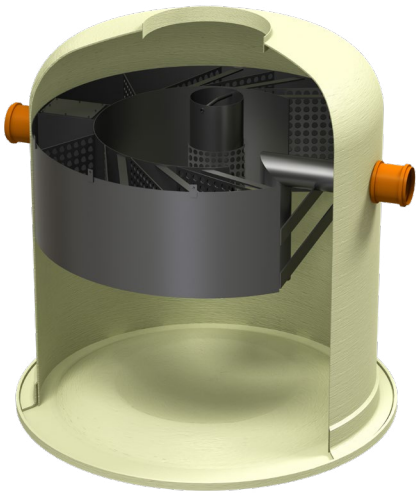
Item number		H1	H2	ØD1	ØD2	T tank	Total height	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12541.41	2270774	860	810	1500	1759	935	1795	1x DN 600
12542.41	2270775	1160	1110	1500	1759	935	2095	1x DN 600
12543.41	2270776	1725	1675	1500	1759	935	2660	1x DN 600
12544.41	2270777	1160	1110	1500	1759	935	2095	1x DN 600
12545.41	2270778	1430	1380	1500	1759	935	2365	1x DN 600
12546.41	2270780	2010	1960	1500	1759	935	2945	1x DN 600
12547.41	2270781	1100	1050	1500	1759	995	2095	1x DN 600
12548.41	2270783	1665	1615	1500	1759	995	2660	1x DN 600
12549.41	2270785	2220	2170	1500	1759	995	3215	1x DN 600
12550.41C	2270788	1120	1070	2200	2455	1150	2270	1x DN 600
12551.41C	2270790	1440	1390	2200	2455	1150	2590	1x DN 600
12552.41C	2270793	1835	1785	2200	2455	1150	2985	1x DN 600
12553.41C	2270796	1440	1390	2200	2455	1150	2590	1x DN 600
12554.41C	2270799	2140	2090	2200	2455	1150	3290	1x DN 600
12555.41C	2270801	2560	2510	2200	2455	1150	3710	1x DN 600
12556.41C	2270804	1735	1635	2200	2455	1250	2985	1x DN 800
12557.41C	2270807	2460	2360	2200	2455	1250	3710	1x DN 800
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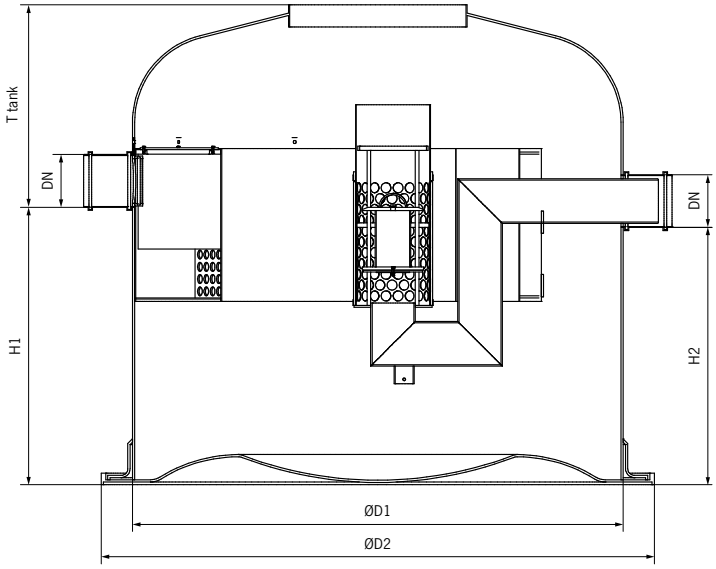
Oleosmart G

Oleosmart G is designed to treat oily wastewater and stormwater in the applications with risk of light liquids occurrence, where high removal efficiencies are needed and where low maintenance products are required. The product is designed as class I separator according to the requirements of the European norm EN 858.

Its unique design put emphasis on low maintenance need. The specially designed inner parts in Oleosmart G allow to eliminate the need of having coalescence filters which are subject to regular maintenance while still maintaining efficient light liquid separation (thir party tested). ACO Oleosmart G is equipped with special coalescing multi-channel technology ensuring long flow distance for better separation efficiency and also substituting the function of the foam filters. Thanks to this design, ACO Oleosmart G needs no coalescence filters eliminating the risk of clogged coalescence and the need of coalescence maintenance. This is resulting into the low maintenance product with reliable function over time.

ACO Olesomart G is suitable choice for small and medium-sized projects with long-term reliable operation and very low maintenance needs. Thanks to the vertical design, ACO Oleosmart G offers compact design with small footprint while still ensuring reliable function.





Benefits

- All nominal sizes tested by independent third party test institute (LGA)
- Low-maintenance need thanks to filter free coalescence technology
- High sedimentation rate thanks to long flow distance
- Easy access for maintenance
- Easily removable float for cleaning without having to empty the separator
- Integrated connection on the outlet part for sampling system
- Alarm device available as optional accessories (sludge, oil and overflow sensors)
- Wide range of nominal sizes
- Compact design with small footprint

Features

- No coalescence filters (no risk of clogging)
- Inner parts made of HDPE
- Compliance with part of standards:
  - EN 976 Undeground tanks of GRP Horizontal cylindrical tanks for the nonpressure storage of liquid petroleum based fuels
  - EN 978 Determination of factor alfa and factor beta β
  - EN 681-1 Elastomeric seals
  - EN 13501-1 Fire classification of construction products and building elements
  - ISO 1183 Plastics
- Vertical tank made of glass reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Nominal size	Inlet/outlet DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
NS 4	160	400	142	871	120	12700.41	3000875
NS 4	160	800	142	1271	150	12701.41	3000876
NS 6	160	600	396	1845	225	12713.41	3000877
NS 6	160	1200	396	2375	250	12714.41	3000878
NS 10	160	1000	396	2375	250	12703.41	3000879
NS 10	160	2000	396	3374	300	12704.41	3000890
NS 15	200	1500	744	4508	650	12706.41C	2270877
NS 15	200	3000	744	5725	720	12707.41C	2270878
NS 20	250	2000	1121	5535	750	12708.41C	2270879
NS 20	250	4000	1121	7036	800	12709.41C	2270880

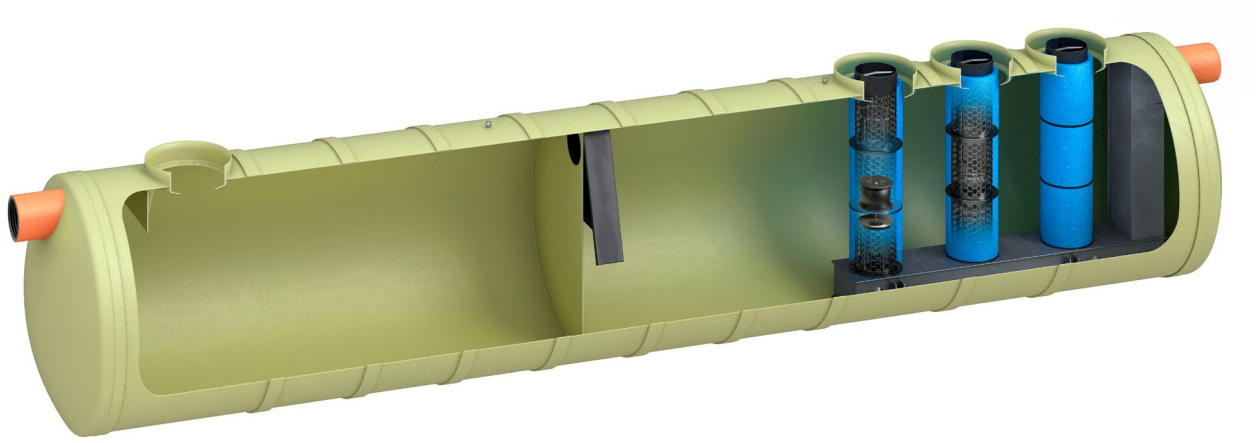
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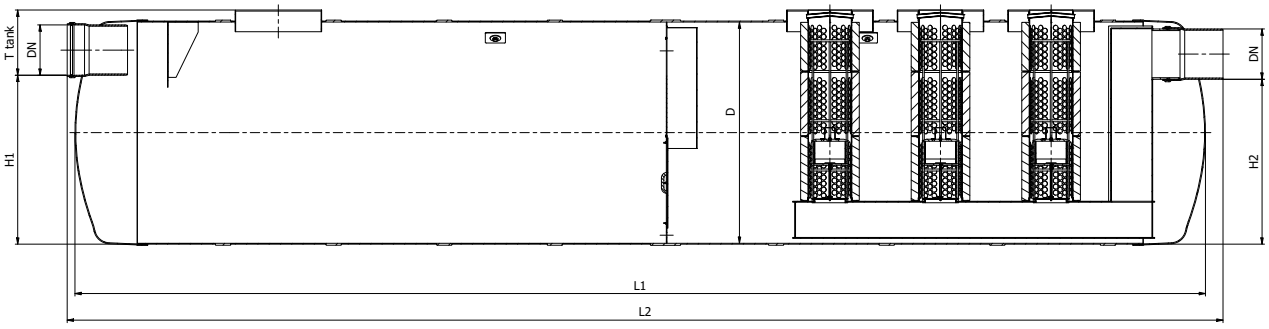
Item number		H1	H2	ØD1	ØD2	T tank	Total height	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12700.41	3000875	1165	1145	1000	1246	560	1725	1x DN 600
12701.41	3000876	1675	1655	1000	1246	560	2235	1x DN 600
12713.41	3000877	1095	1075	1500	1759	600	1695	1x DN 600
12714.41	3000878	1395	1375	1500	1759	600	1995	1x DN 600
12703.41	3000879	1395	1375	1500	1759	600	1995	1x DN 600
12704.41	3000890	1960	1940	1500	1759	600	2560	1x DN 600
12706.41C	2270877	1350	1330	2200	2455	870	2220	1x DN 600
12707.41C	2270878	1670	1650	2200	2455	870	2540	1x DN 600
12708.41C	2270879	1620	1600	2200	2455	920	2540	1x DN 600
12709.41C	2270880	2015	1995	2200	2455	920	2935	1x DN 600

Oleopator G-H

Oleopator G-H is designed to treat oily wastewater and stormwater in applications where there is a risk of light liquids occurrence and where high removal efficiencies are needed. The product is classified as a class I separator according to the requirements of the European norm EN 858.

ACO Oleopator G-H is a good choice for medium and large-sized projects thanks to the wide range of nominal sizes. The design of the separators in horizontal GRP tanks allows for larger nominal sizes while still maintaining light weight (easy manipulation) and ensures proper hydraulics, separation function, and long-term reliable operation.





Benefits

- Easy access for maintenance, cleaning, and disposal thanks to the design of internal components
- Coalescence units (filters) and floats easily removable for cleaning without having to empty the separator
- Easy-to-clean coalescence unit
- Integrated connection on the outlet part for sampling system
- Alarm device available as optional accessories (sludge, oil, and overflow sensors)
- Wide range of nominal sizes
- Large nominal sizes for high flow rates

Features

- With coalescence unit(s)
- Inner parts made of HDPE
- Compliance with parts of standards:
  - EN 976: Underground tanks of GRP, horizontal cylindrical tanks for the non-pressure storage of liquid petroleum-based fuels
  - EN 978: Determination of factor alfa and factor beta β
  - EN 681-1: Elastomeric seals
  - EN 13501-1: Fire classification of construction products and building elements
  - ISO 1183: Plastics
- Horizontal tank made of glass-reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Nominal size	Inlet/outlet DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
NS 40	315	4000	1620	8550	600	12577.01	2270829
NS 50	315	5000	2070	10500	700	12578.01	2270830
NS 65	315	6500	4220	15500	1000	12561.01	2270811
NS 80	400	8000	4400	20400	1400	12562.01	2270812
NS 100	400	10000	4980	21400	1550	12563.01	2270813
NS 150	400	15000	6030	29150	1870	12564.01	2270814
NS 200	400	20000	6510	37800	2250	12565.01	2270815

Dimensions

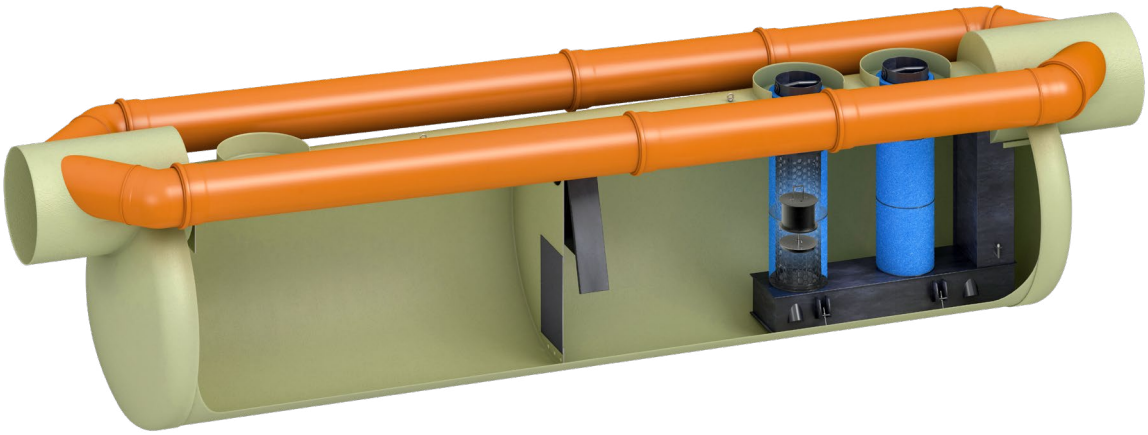
Item number		H1	H2	D	T tank	Total height	L1	L2	ACO Belt*	Top sections	Coalescence units and floaters
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs]		
12577.01	2270829	1830	1810	2200	520	2350	2743	3155	2	1x DN 800	1x
12578.01	2270830	1830	1810	2200	520	2350	3393	3794	3	1x DN 800	1x
12561.01	2270811	1870	1830	2200	450	2320	4833	5035	6	2x DN 600	1x
12562.01	2270812	1690	1650	2200	650	2340	6333	6723	6	3x DN 600	2x
12563.01	2270813	1690	1650	2200	650	2340	7233	7644	7	3x DN 600	2x
12564.01	2270814	1690	1650	2200	650	2340	9613	10013	8	3x DN 600	2x
12565.01	2270815	1690	1650	2200	650	2340	11243	11495	9	4x DN 600	3x

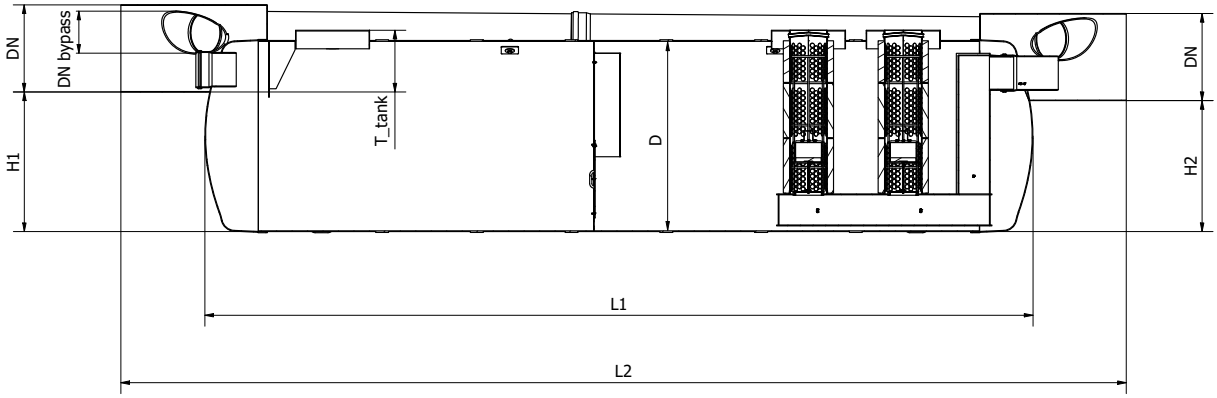
* Number of ACO Belts specified for cases with groundwater occurrence. In cases where there is no risk of buoyancy, use a minimum of two ACO belts.

Oleopator Bypass G-H

Oleopator Bypass G-H is designed to treat oily wastewater and stormwater in applications where there is a risk of light liquids occurrence and where extensive flow during high-intensity rainfall events may be diverted into a bypass system. The product is classified as a class I separator according to the requirements of the European norm EN 858.

ACO Oleopator Bypass G-H is a good choice for medium and large-sized projects thanks to its wide range of nominal sizes. The design of the separators in horizontal GRP tanks allows for larger nominal sizes while still maintaining light weight (easy manipulation) and ensures proper hydraulics, separation function, and long-term reliable operation. The integrated bypass system offers cost-effective solution and makes ACO Oleopator Bypass G-H suitable for applications with high flow rate requirements without compromising the sludge and light liquid separation (treatment function) inside the separator.





Benefits

- Easy access for maintenance, cleaning, and disposal thanks to the removable and accessible cage component
- Coalescence units (filters) and floats easily removable for cleaning without having to empty the separator
- Easy-to-clean coalescence unit
- Integrated connection on the outlet part for sampling system
- Alarm device available as optional accessories (sludge, oil, and overflow sensors)
- Wide range of nominal sizes
- Large nominal sizes for high flow rates
- Integrated bypass system without influencing the treatment function of the separator

Features

- With coalescence unit(s)
- Inner parts made of HDPE
- Compliance with parts of standards:
  - EN 976: Underground tanks of GRP, horizontal cylindrical tanks for the non-pressure storage of liquid petroleum-based fuels
  - EN 978: Determination of factor alfa and factor beta
  - EN 681-1: Elastomeric seals
  - EN 13501-1: Fire classification of construction products and building elements
  - ISO 1183: Plastics
- Horizontal tank made of glass-reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers

Order information

Nominal size	Max. flow (NSB)*	Inlet/outlet DN	Bypass DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[l/s]	[mm]	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
40	400	600	2x DN400	4000	1620	8550	850	12579.01	2270831
50	500	600	2x DN400	5000	2070	10500	950	12580.01	2270832
65	650	800	2x DN400	6500	4220	15500	1350	12566.01	2270816
80	800	1000	2x DN500	8000	4400	20400	1900	12567.01	2270817
100	1000	1000	2x DN500	10000	4980	21400	2200	12568.01	2270818
150	1500	1000	2x DN500	15000	6030	29150	2350	12569.01	2270819

* Maximum flow (NSB) is considered here as 10 times NS. Maximum flow which is able to go through the whole system depends on the site conditions (flow velocity/slope of the piping on site, etc.).

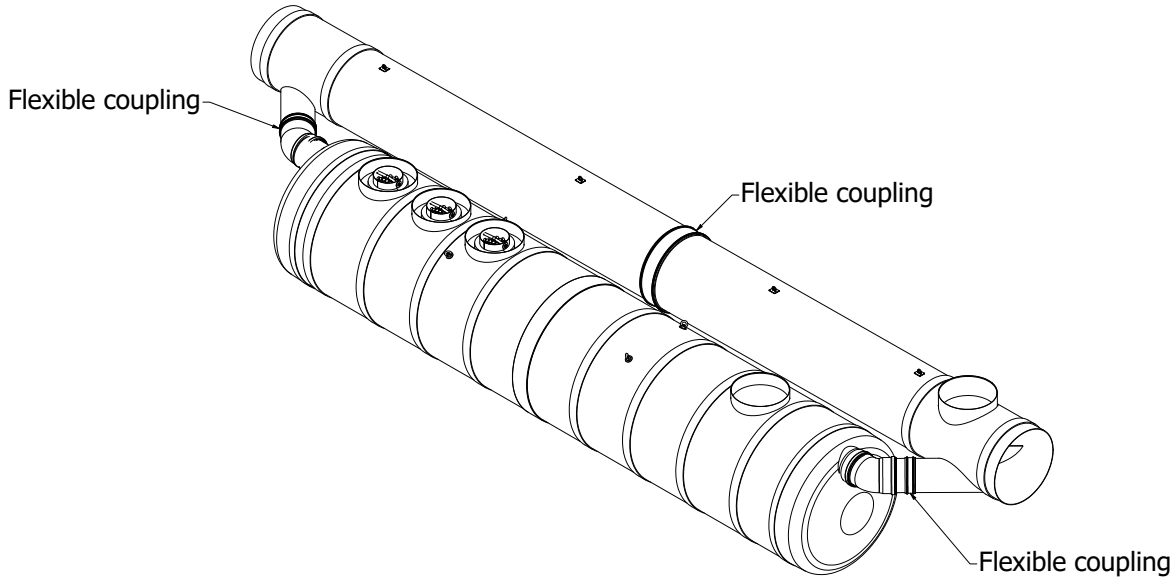
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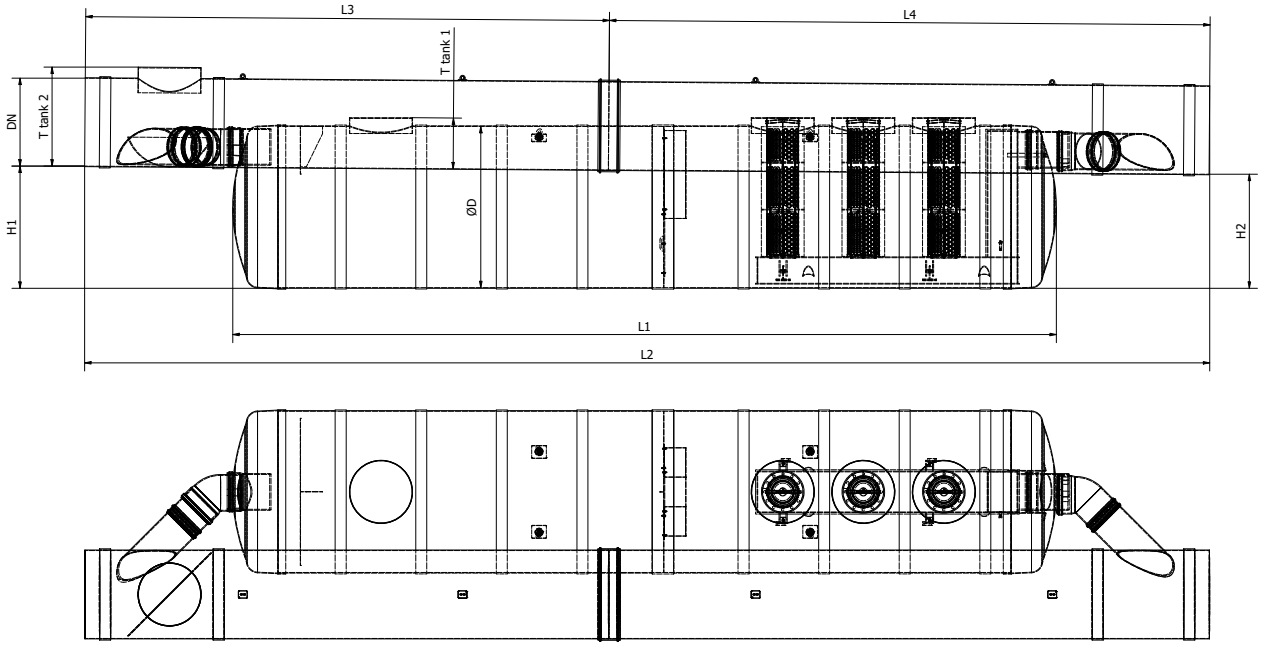
Item number		H1	H2	D	T tank	Total height	L1	L2	ACO Belt**	Top sections	Coalescence units and floaters
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs]		
12579.01	2270831	1793	1743	2200	554	2416	2743	4455	2	1x DN 800	1x
12580.01	2270832	1793	1743	2200	554	2416	3393	5205	3	1x DN 800	1x
12566.01	2270816	1770	1720	2200	550	2580	4833	5870	6	2x DN 600	1x
12567.01	2270817	1623	1573	2200	715	2647	6333	8393	6	3x DN 600	2x
12568.01	2270818	1622	1522	2200	707	2642	7233	9353	7	3x DN 600	2x
12569.01	2270819	1620	1520	2200	718	2632	9613	11673	8	3x DN 600	2x

** Number of ACO Belts specified for cases with groundwater occurrence. In cases where there is no risk of buoyancy, use a minimum of two ACO belts.

Oleopator Bypass NS200 – with external bypass assembled on-site

Due to container size limitations, the nominal size 200 of the Oleopator Bypass G-H could not follow the same concept as the whole range of ACO Oleopator Bypass G-H in order to be fitted in the container. Therefore NS 200 Oleopator Bypass G-H is designed as Oleopator G-H with external bypass assembled on-site.





The bypass consists of two external GRP bypass pipes with prepared PVC piping for joining to the separator. These two GRP pipes are joined together on-site with supplied flexible coupling. This external bypass is joined to the separator's inlet/outlet PVC piping again using supplied flexible coupling.

The scope of supply when ordering N S200 Oleopator Bypass (item number 12570.01) includes Oleopator G-H (item number 12565.01) and two GRP bypass pipes with flexible couplings (item numbers 12570.BP1 and 12570.BP2).

Note: When ordering Oleopator Bypass G-H NS 200, bear in mind the necessity of more containers for transporting the whole system (Oleopator G-H and 2x GRP bypass pipes with accessories). If you have any questions regarding transportation or the overall assembly concept of this product, please contact ACO.

Order information

Nominal size	Max. flow (NSB)*	Inlet/outlet DN	Volume Sludge trap	Volume Oil storage	Total capacity	Weight	Item number	
	[l/s]	[mm]	[l]	[l]	[l]	[kg]	NAV	SAP
200	2000	1200	20000	6510	37800	3000	12570.01	2270820

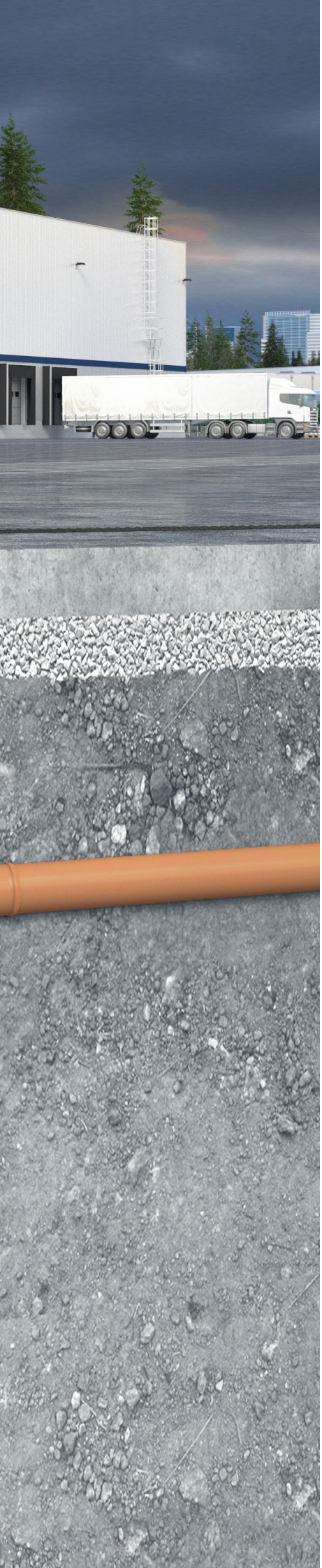
* Maximum flow (NSB) is considered here as 10 times NS. Maximum flow which is able to go through the whole system depends on the site conditions (flow velocity/slope of the piping on site, etc.).

Dimensions

Item number		H1	H2	D	T tank1	T tank2	Total height	L1	L2	L3	L4	ACO Belt**	Top sections	Coalescence units and floaters
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs]		
12570.01	2270820	1667	1556	2200	1352	693	3020	11243	15350	7150	8200	9	5x DN600	3x

** Number of ACO Belts specified for cases with groundwater occurrence. In cases where there is no risk of buoyancy, use a minimum of two ACO belts.



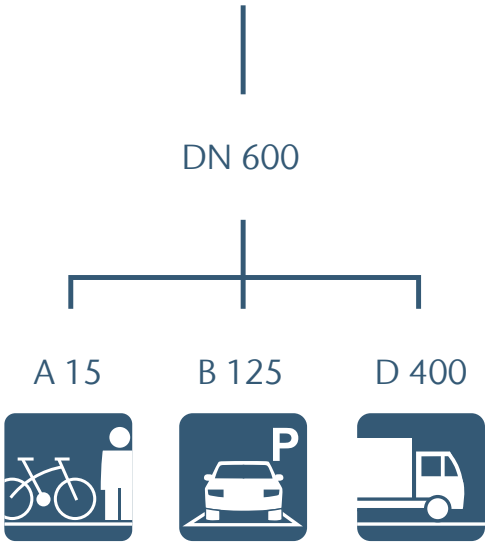


Sludge Traps

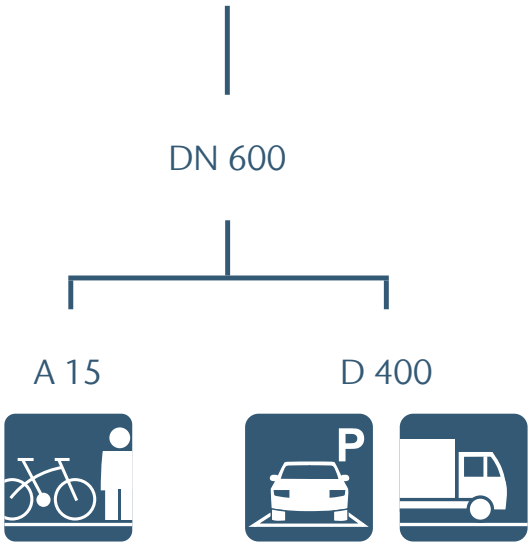
Sludge traps for light liquid separators are used in applications where the standard sludge volume of the separator is insufficient, and an extension of sludge storage volume is required, or where a light liquid separator without an integrated sludge volume is used, necessitating an additional sludge trap. ACO sludge traps are designed according to EN 858 requirements, with a wide range of sizes to suit the needs of each project.

Assembly concept

Vertical



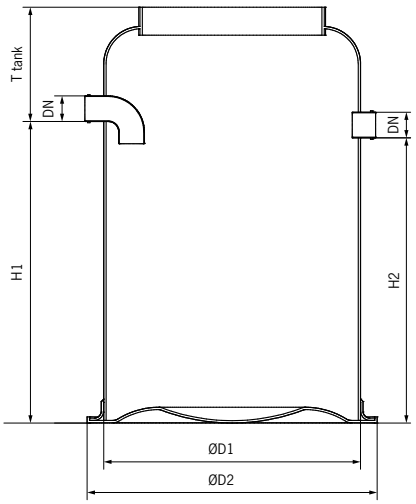
Horizontal



Sludge trap G

ACO Sludge trap G is vertical GRP tank designed to offer required sludge storage capacity for specific application. Thanks to the wide variability of sizes ACO Sludge trap G is a suitable choice for small and medium-sized sludge volume requirements.





Benefits

- Wide range of sizes
- Compact design with small footprint
- Ensures enough sludge storage volume for specific installation or for the products without integrated sludge trap
- Alarm device available as optional accessories (sludge and overflow sensors)
- Complies with EN 858 requirements

Features

- Compliance with parts of standards:
  - EN 976 Underground tanks of GRP Horizontal cylindrical tanks for the nonpressure storage of liquid petroleum based fuels
  - EN 978 Determination of factor alfa and factor beta β
  - EN 13501-1 Fire classification of construction products and building elements
- Vertical tank made of glass reinforced plastic – no heavy machinery for manipulation required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Volume Sludge trap	Inlet/outlet DN	Weight	Item number	
[l]	[mm]	[kg]	NAV	SAP
600	110	95	12812.41	3000698
1000	110	110	12813.41	3000699
1500	160	160	12815.41	3000810
2000	200	235	12816.41	3000811
3000	250	270	12817.41	3000812
4000	315	340	12818.41	3000813
5000	315	530	12819.41C	2270901

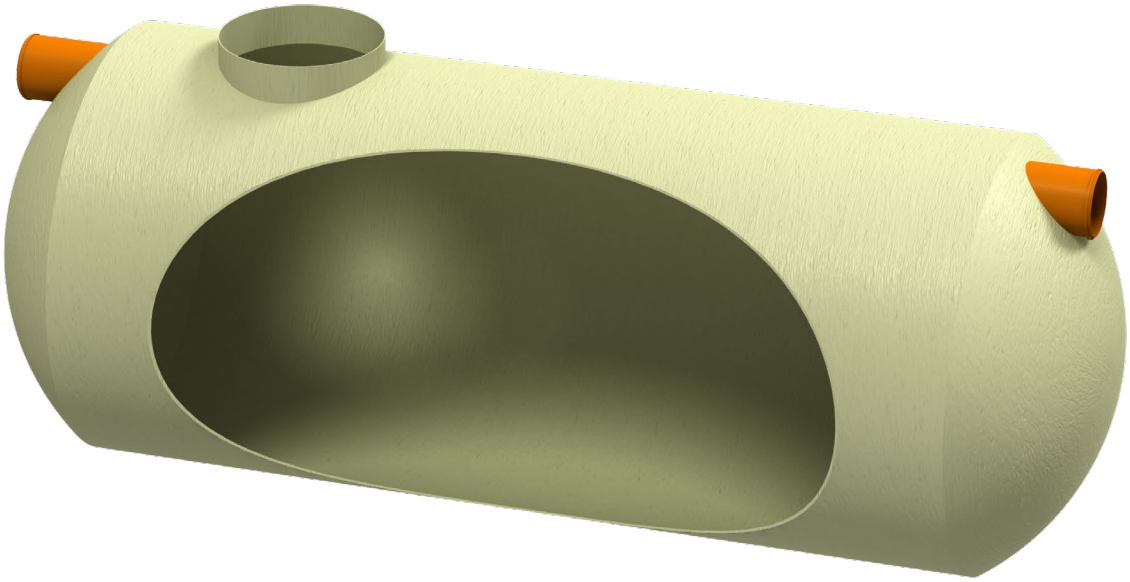
For different Inlet/Outlet DN contact ACO

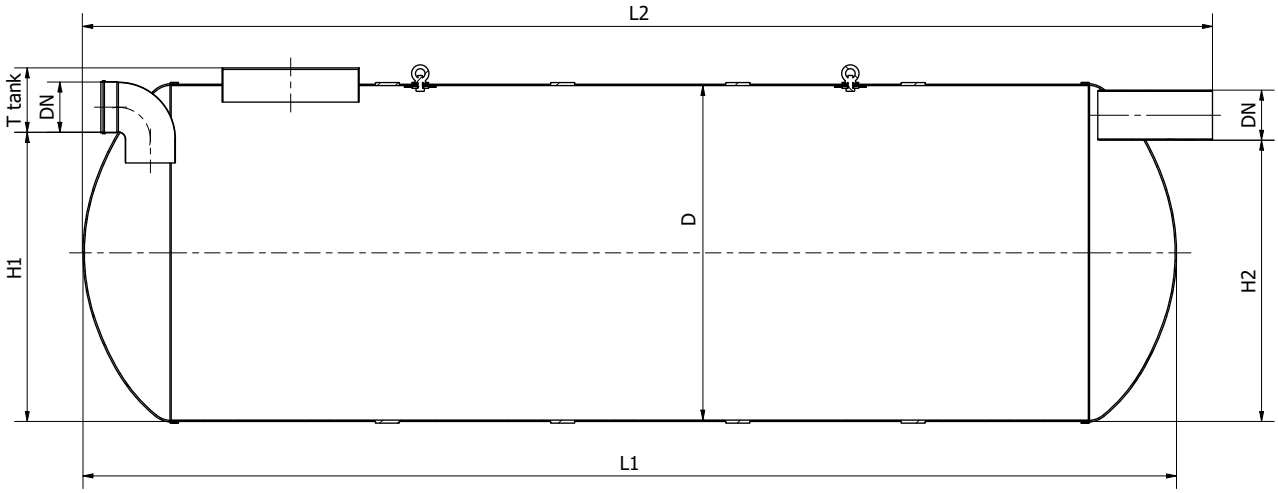
Dimensions

Item number		H1	H2	ØD1	ØD2	T tank	Total height	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12812.41	3000698	930	910	1000	1246	360	1290	1x DN 600
12813.41	3000699	1265	1245	1000	1246	360	1625	1x DN 600
12815.41	3000810	1480	1460	1200	1434	450	1930	1x DN 600
12816.41	3000811	1405	1385	1500	1759	590	1995	1x DN 600
12817.41	3000812	1920	1900	1500	1759	640	2560	1x DN 600
12818.41	3000813	1625	1605	1800	2014	830	2455	1x DN 600
12819.41C	2270901	1485	1465	2200	2455	735	2220	1x DN 600

Sludge trap G-H

ACO Sludge trap G-H is a good choice for medium and large-sized projects thanks to the wide range of sizes. The design in horizontal GRP tanks allows for larger volumes while still maintaining light weight for easy manipulation.





Benefits

- Wide range of sizes ranging into large volumes
- Light weight even for the large volume products
- Alarm device available as optional accessories (sludge and overflow sensors)
- Complies with EN 858 requirements

Features

- Compliance with parts of standards:
  - EN 976 Undeground tanks of GRP Horizontal cylindrical tanks for the nonpressure storage of liquid petroleum based fuels
  - EN 978 Determination of factor alfa and factor beta β
  - EN 13501-1 Fire classification of construction products and building elements
- Horizontal tank made of glass reinforced plastic – no heavy machinery required, resistant and durable material
- Suitable top sections and manhole covers
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets needed)

Order information

Volume Sludge trap	Inlet/outlet DN	Weight	Item number	
[l]	[mm]	[kg]	NAV	SAP
3000	200	220	12800.01	2002502
6500	200	408	12801.01	2002504
10000	250	593	12802.01	2002506
15000	250	760	12803.01	2002508
20000	315	1060	12804.01	2002510

For different Inlet/Outlet DN contact ACO

Dimensions

Item number		H1	H2	D	T tank	L1	L2	ACO Belt*	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs]	
12800.01	2002502	1030	980	1200	290	3280	3400	2	1x DN 600
12801.01	2002504	1630	1580	1800	290	3145	3145	2	1x DN 600
12802.01	2002506	1580	1530	1800	340	4705	4747	3	1x DN 600
12803.01	2002508	1880	1830	2100	340	5065	5065	4	1x DN 600
12804.01	2002510	1815	1765	2100	415	6995	7105	5	1x DN 600

* Number of ACO Belts specified for cases with groundwater occurrence. In cases where there is no risk of buoyancy, use a minimum of two ACO belts.





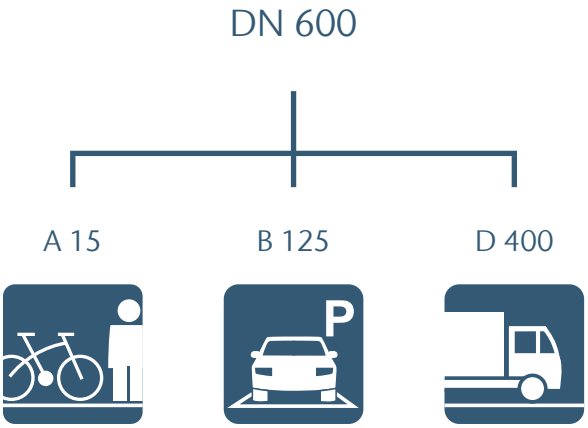
Dividing and Merging Shafts

Dividing and merging shafts allow for customized flow management, and can be used to add a bypass function to full-treatment separators that do not have it integrated.

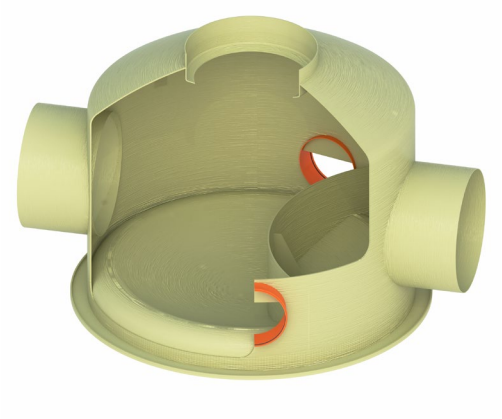
- A dividing shaft splits the incoming flow: under normal flow conditions, water is directed to the separator for full treatment. When the inflow exceeds the nominal capacity (e.g., during intense rainfall), the excess is automatically diverted into a bypass pipe, preventing overload of the treatment unit.
- A merging shaft then rejoins the treated and bypassed flows into a single outlet, ensuring consistent discharge from the system.

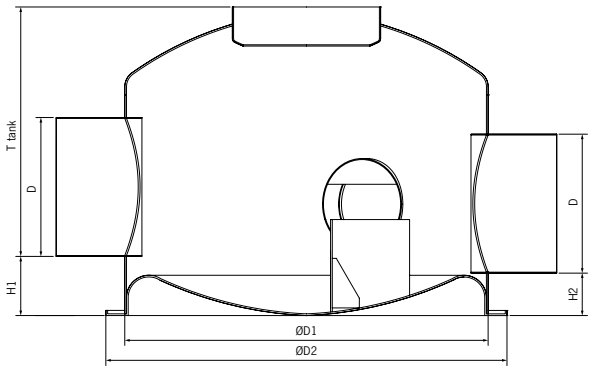
This modular approach is ideal for projects where a bypass feature needs to be retrofitted or added to standard separators without altering the main treatment unit.

Assembly concept



Dividing shafts





Benefits

- Option for drainage of large areas in combination with traditional separator technology
- Space efficient

Features

- Tank made of glass reinforced plastic
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets)
- One-piece construction

Order information

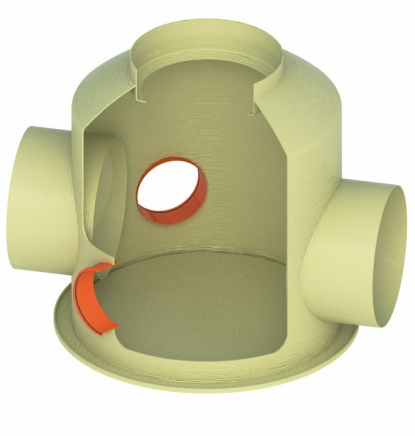
Nominal size	Max. flow*	Inlet DN	Outlet DN	Pipe DN into the separator	Weight	Item number	
	[l/s]	[mm]	[mm]	[mm]	[kg]	NAV	SAP
NS 40	400	500	500	315	156	12750.41	2270881
NS 50	500	600	500	315	149	12751.41	2270882
NS 65	650	800	600	315	468	12752.41	2270883
NS 80	800	800	600	400	469	12753.41	2270884
NS 100	1000	800	800	400	472	12754.41	2270885
NS 200 (2x NS 100)	1000	800	800	2x 400	475	12755.41	2270886
NS 130 (2x NS 65)	1300	1000	1000	2x 315	465	12756.41	2270887
NS 160 (2x NS 80)	1600	1000	1000	2x 400	469	12757.41	2270888
NS 200 (2x NS 100)	2000	1200	1200	2x 400	459	12758.41	2270889
NS 200	2000	1200	1200	500	463	12760.41	2270890
NS 250	2500	1200	1200	500	463	12761.41	2270891

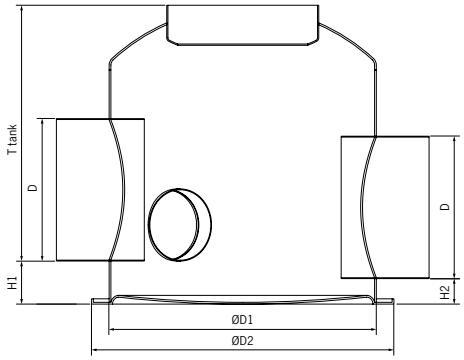
* Maximum flow here is considered as 10 times NS. Maximum flow which is able to go through the whole system depends on the site conditions (flow velocity/slope of the piping on site, etc.).

Dimensions

Item number		H1	H2	ØD1	ØD2	T tank	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	
12750.41	2270881	170	70	1500	1759	1170	1x DN 600
12751.41	2270882	170	70	1500	1759	1170	1x DN 600
12752.41	2270883	350	250	2200	2455	1830	1x DN 600
12753.41	2270884	350	250	2200	2455	1830	1x DN 600
12754.41	2270885	350	250	2200	2455	1830	1x DN 600
12755.41	2270886	350	250	2200	2455	1830	1x DN 600
12756.41	2270887	350	250	2200	2455	1830	1x DN 600
12757.41	2270888	350	250	2200	2455	1830	1x DN 600
12758.41	2270889	350	250	2200	2455	1830	1x DN 600
12760.41	2270890	350	250	2200	2455	1830	1x DN 600
12761.41	2270891	350	250	2200	2455	1830	1x DN 600

Merging shafts





Benefits

- Option for drainage of large areas in combination with traditional separator technology
- Space efficient

Features

- Tank made of glass reinforced plastic
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets)
- One-piece construction

Order information

Nominal size	Max. flow*	Inlet DN	Outlet DN	Pipe DN from the separator	Weight	Item number	
	[l/s]	[mm]	[mm]	[mm]	[kg]	NAV	SAP
NS 40	400	500	500	315	81	12770.41	2270892
NS 50	500	500	600	315	74	12771.41	3029793
NS 65	650	600	800	315	117	12772.41	2270893
NS 80	800	600	800	400	118	12773.41	2270894
NS 100	1000	800	800	400	158	12774.41	2270895
NS 200 (2x NS 100)	1000	800	800	2x 400	162	12775.41	2270896
NS 130 (2x NS 65)	1300	1000	1000	2x 315	160	12776.41	2270897
NS 160 (2x NS 80)	1600	1000	1000	2x 400	160	12777.41	2270898
NS 200 (2x NS 100)	2000	1200	1200	2x 400	221	12778.41	2270899
NS 200	2000	1200	1200	500	221	12780.41	3029800
NS 250	2500	1200	1200	500	221	12781.41	2270900

* Maximum flow here is considered as 10 times NS. Maximum flow which is able to go through the whole system depends on the site conditions (flow velocity/slope of the piping on site, etc.).

Dimensions

Item number		H1	H2	ØD1	ØD2	T tank	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	
12770.41	2270892	220	120	1000	1246	1080	1x DN 600
12771.41	3029793	220	70	1000	1246	1080	1x DN 600
12772.41	2270893	340	140	1200	1434	1340	1x DN 600
12773.41	2270894	340	140	1200	1434	1340	1x DN 600
12774.41	2270895	250	150	1500	1759	1460	1x DN 600
12775.41	2270896	250	150	1500	1759	1460	1x DN 600
12776.41	2270897	250	150	1500	1759	1460	1x DN 600
12777.41	2270898	250	150	1500	1759	1460	1x DN 600
12778.41	2270899	250	150	1800	2014	1870	1x DN 600
12780.41	3029800	250	150	1800	2014	1870	1x DN 600
12781.41	2270900	250	150	1800	2014	1870	1x DN 600


2



Stormwater Management

Urban environments are increasingly challenged by the impacts of climate change, rapid development, and the proliferation of impervious surfaces. These factors contribute to excessive stormwater runoff, which can overwhelm drainage systems, cause flooding, and transport pollutants into natural water bodies.

Effective stormwater management is essential to mitigate these issues. By implementing solutions that not only collect and convey stormwater but also treat and reuse it, we can protect infrastructure, preserve water quality, and promote sustainable urban living.

ACO's Approach to Stormwater Management



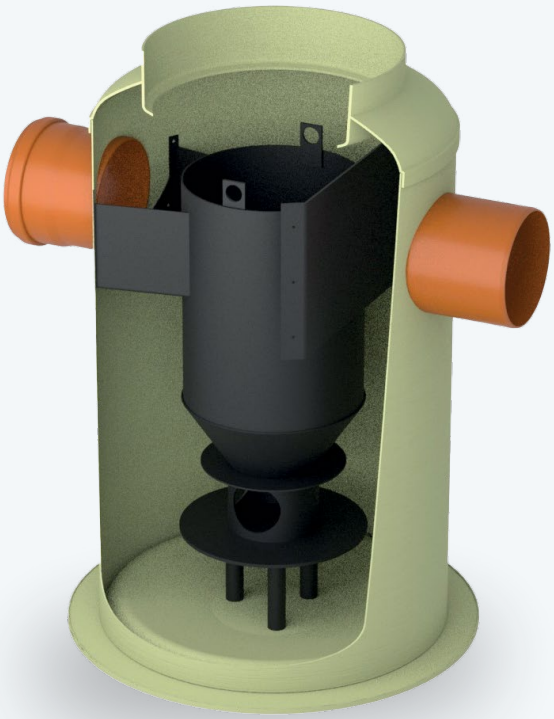
At ACO, we understand the complexities of stormwater challenges. Our comprehensive system chain addresses each stage of the WaterCycle:
Collect: Capturing runoff efficiently from surfaces.
Clean: Removing pollutants through sedimentation and filtration.
Hold: Temporarily storing water to prevent flooding.
Reuse: Repurposing treated water for non-potable applications.

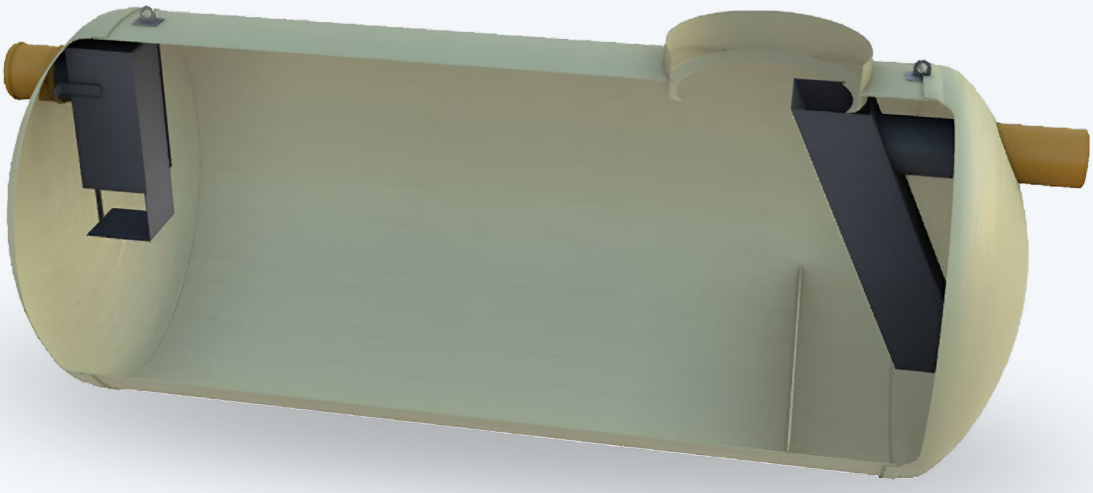
Our solutions are designed with flexibility in mind, utilizing materials like glass-fibre reinforced polyester (GRP) to ensure durability, chemical resistance, and ease of installation.

See the brochure
for more information about
ACO Stormwater Management

Sedimentation Units

Devices like ACO Stormsed and Stormsed Vortex effectively remove suspended solids and associated pollutants, enhancing the performance and lifespan of downstream systems.

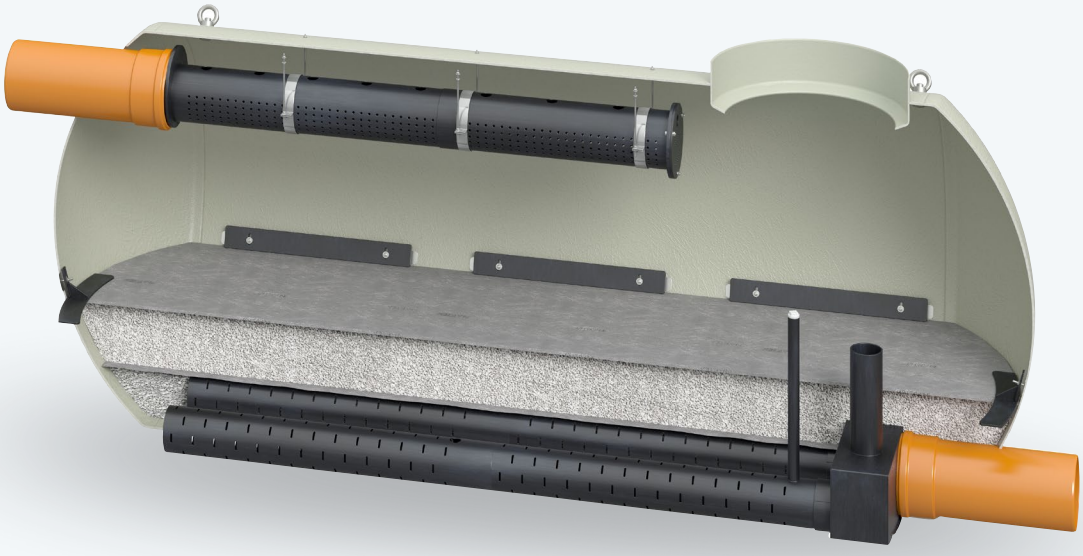




Advanced Treatment Systems

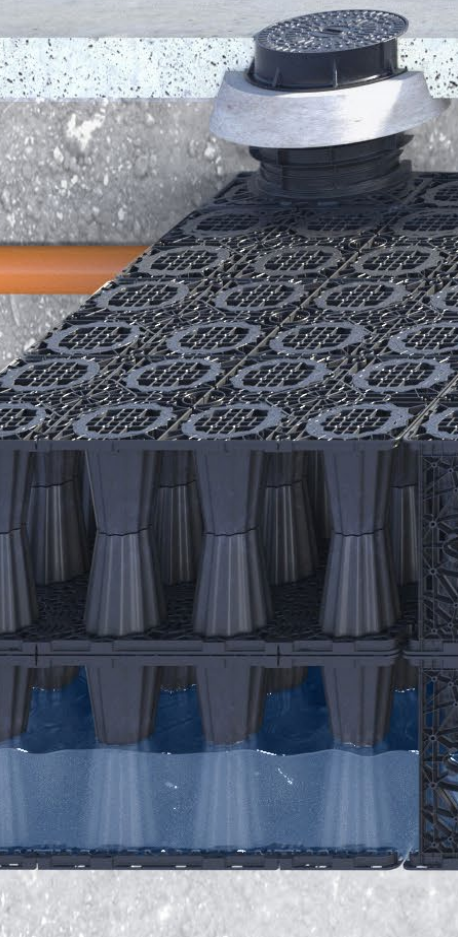
For areas with higher pollutant loads, ACO Stormclean offers a compact solution that combines sedimentation, filtration, adsorption, and precipitation to achieve high levels of contaminant removal.











Sedimentation Devices

The simplest treatment method of removing pollutants from stormwater before it leaves the urban environment is sedimentation.

Sedimentation removes suspended solids (particles) and any associated bound pollutants. Around 75% of chemical pollution, such as metals and residual oils, is attached to sediments.

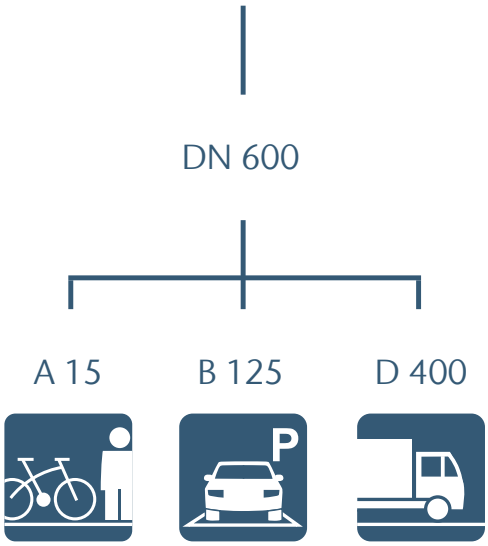
Sedimentation devices can be used either independently or as a preliminary stage in stormwater treatment. Implementing them in stormwater management solutions can extend the service life of downstream products and shorten their maintenance intervals (blockage of ACO Filter Media Storm/Storm+, Stormbrixx).

ACO offers two types of sedimentation devices: Stormsed and Stormsed Vortex. Both products are effective in capturing sediment, as well as other pollutants such as organic substances and oil.

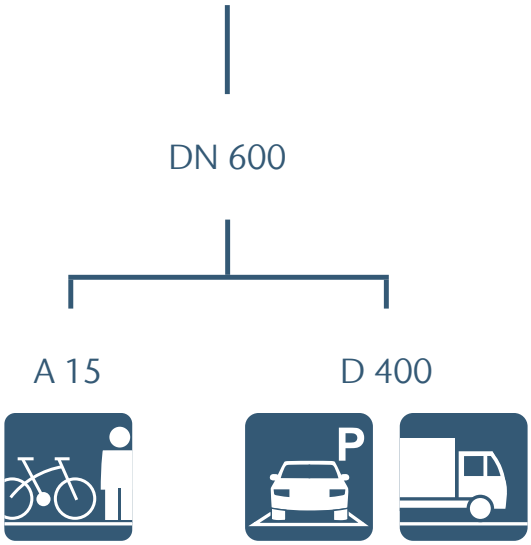
See the brochure
for more information about
ACO Sedimentation Devices

Assembly concept

Vertical

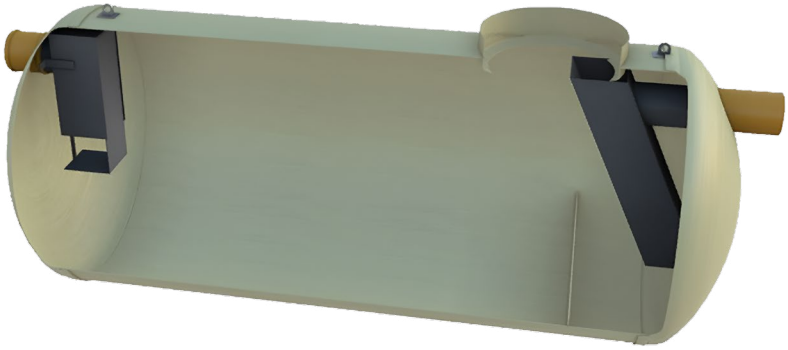


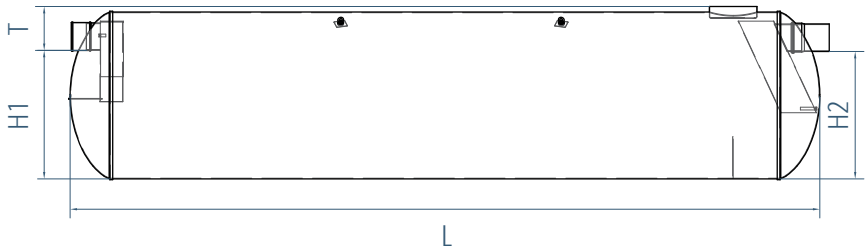
Horizontal



Stormsed G-H

The ACO Stormsed stormwater treatment unit captures and retains pollutants, such as fine sediment and residual oils. It is a modern solution for applications with a low risk of high mineral oil spillage, making it ideal for use on streets and car parks where compliance with EN 858 is not required. ACO Stormsed is also an ideal treatment element to be connected to attenuation systems or used for pre-treatment with the Stormclean stormwater filter.





Benefits

- Captures and retains fine sediment and residual oils
- Cost-effective solution for sites with a low risk of major mineral-oil spills
- Designed to remove 80 % of sediments and floatables, helping meet discharge limits
- Large retention volume extends maintenance intervals and lowers lifecycle costs
- Functions as an ideal pre-treatment ahead of attenuation systems
- Suitable for streets and car parks

Features

- Treats water by removing sediments and floatables
- Horizontal GRP separator body with a spacious sedimentation chamber
- Inlet diffuser distributes flow evenly and prevents resuspension of settled material
- Angled outlet with integrated baffle captures floatables and residual oils
- Wide range of nominal sizes to match required flow rates
- “SMART” internal geometry that outperforms standard sludge traps
- Convenient service access for inspection and clean-out

Order information

Desc.	Inlet/Outlet DN	Water flow (SLR 18 m*h-1)	Water flow (SLR 9 m*h-1)	Total vol.	Max. oil stor.	Sludge trap vol.	Weight	Item number	
[m²]	[mm]	[l/s]	[l/s]	[l]	[l]	[l]	[kg]	NAV	SAP
3.8	200	19	10	3460	1860	600	270	12835.01	3010039
5.2	200	26	13	4780	2550	940	310	12836.01	3010040
8.1	250	40	20	8890	6510	1720	465	12837.01	3010041
10.3	250	52	26	15040	8530	2840	920	12838.01	3010042
14.1	315	71	35	19900	12600	3950	1100	12839.01	3010043

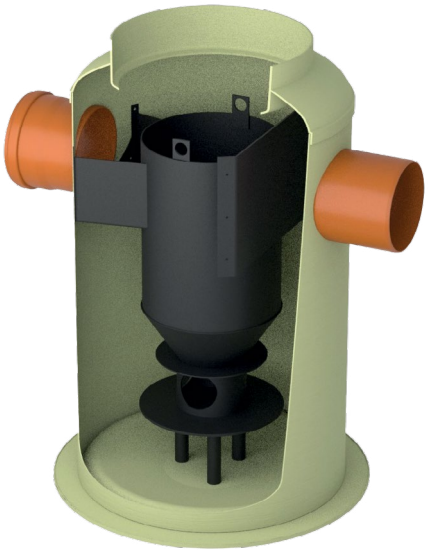
Dimensions

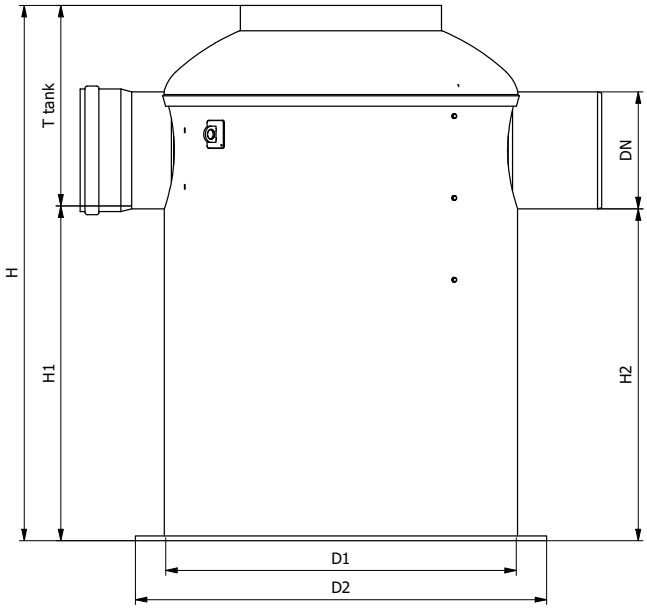
Item number		L GRP body	Total lenght incl. pipes	Diam. D	H1	H2	T tank	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12835.01	3010039	2720	2950	1520	1150	1130	462	1x DN 600
12836.01	3010040	3650	3880	1520	1150	1130	462	1x DN 600
12837.01	3010041	4610	4780	1820	1400	1380	514	1x DN 600
12838.01	3010042	4890	5250	2200	1780	1760	542	1x DN 600
12839.01	3010043	6630	6840	2200	1715	1695	607	1x DN 600

Stormsed Vortex G

ACO Stormsed Vortex enables sedimentation through hydrodynamic or vortex separation. Designed according to NJDEP specifications, the patented solution can remove up to 80% of pollutants and capture 100% of floatables. The unique design of ACO Stormsed Vortex separates high flows from captured sediment, allowing it to treat a wide range of flow rates from sites of less than 1,000 sqm to over 20,000 sqm depending on the country of specification. Its small footprint requires less excavation during installation, and variable connection outlet angles are available.

Vortex flow allows Stormsed Vortex to operate at high treatment flow rates without the hydraulic shortcutting or sediment remobilisation issues found in other sedimentation technologies, making it perfect for high flow applications!





Benefits

- Removes pollutants and suspended solids from storm water by efficient vortex sedimentation.
- Captures and retains silt to protect downstream tanks and infiltration/attenuation systems.
- Integrated overflow system (bypass) which allows online position
- Extends the maintenance interval of downstream Stormclean filter media, lowering life-cycle costs.
- Designed to achieve 50 % TSS removal for 75 µm particles (can achieve greater efficiency at a lower flow rate)
- Compact design – low footprint
- Patent-protected units that is easy to service, saving installation space and service time.

Features

- Official test report from PIA
- Broad size range DN 750 – 3000 with modular internal components for each diameter.
- Robust HDPE inner parts; could be supplied separately
- Compatible with third-party concrete/plastic/GRP/steel chambers and operates reliably across a wide range of flow rates

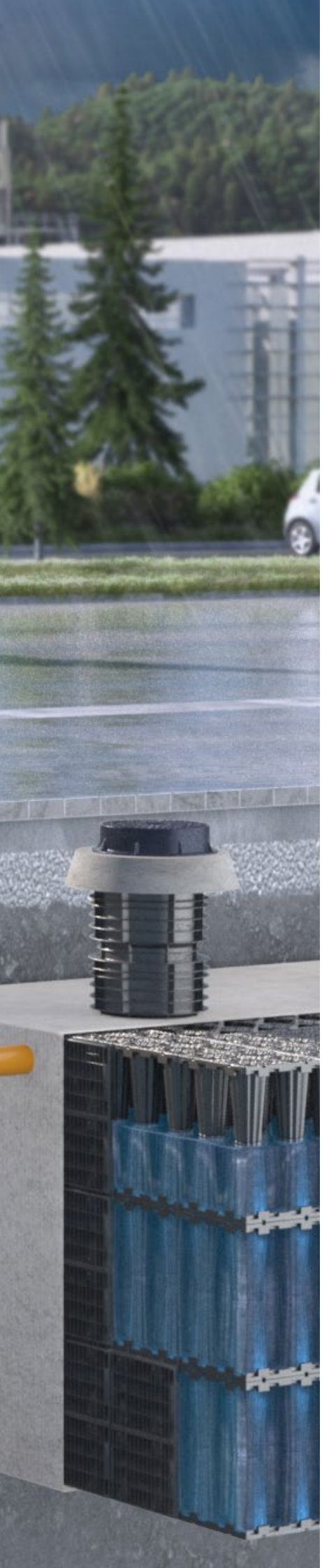
Order information

Chamber diameter	50% TSS elimination based on NJCAT	Max. hydraulic flow rate	Pipe connections	Oil / debris storage capacity	Sediment storage capacity	Total volume	Weight	Item number	
	[l/s]	[l/s]	[DN]	[l]	[l]	[l]	[kg]	NAV	SAP
1000	20,8	170	400	80	425	1150	107	12975.41	2270967
1200	29,9	170	400	130	515	1590	161	12976.41	2270968
1500	46,7	220	500	220	653	2390	282	12977.41	2270969
1800	67,3	390	600	450	1531	4350	425	12978.41	2270971
2200	100,6	600	800	630	974	5150	625	12979.41C	2270974

Dimensions

Item number		H1	H2	H	D1	D2	T tank	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12975.41	2270967	1510	1510	2250	1000	1246	740	1x DN 600
12976.41	2270968	1450	1450	2200	1200	1434	750	1x DN 600
12977.41	2270969	1420	1420	2290	1500	1759	870	1x DN 600
12978.41	2270971	1735	1735	2866	1800	2014	1131	1x DN 600
12979.41C	2270974	1495	1495	2758	2200	2455	1263	1x DN 600





Filtration and Adsorption Systems

Stormclean stormwater filter is a compact solution to advanced stormwater treatment needs. Due to its small footprint, it is an attractive alternative to large above-ground soil filters when space is at a premium. ACO Stormclean combines four crucial processes – sedimentation, filtration, adsorption, and precipitation – to ensure bound and dissolved pollutants are removed from stormwater.

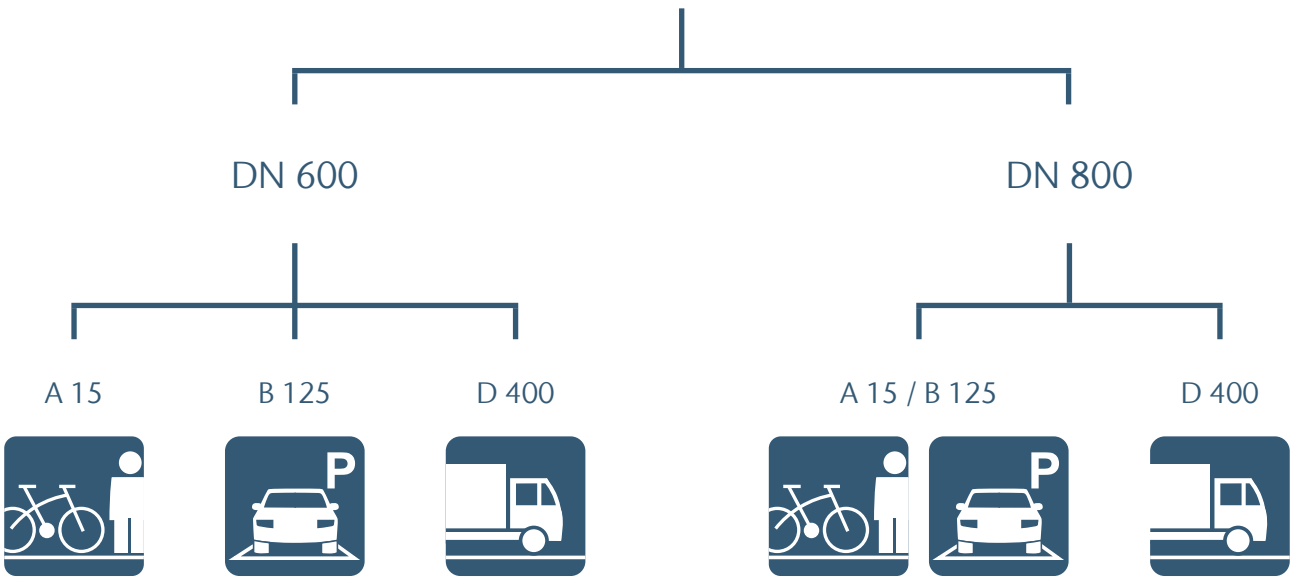
At the core of ACO Stormclean is ACO Filter Media Storm, a stormwater filter material developed with the EU WFD (Water Framework Directive) at its heart to meet national certification standards. A carefully engineered mixture of granule sizes allows the filter to remove small particle sizes without clogging. In addition, the choice of special granules capable of adsorbing key pollutants such as Zinc (Zn), Lead (Pb), Copper (Cu) and oil ensure dissolved pollutants are removed and retained by the filter. ACO Filter Material is suitable for use as a decentralised stormwater filter protecting surface waters and treatment before groundwater infiltration, protecting precious groundwater sources.

See the brochure for more information about ACO Stormclean

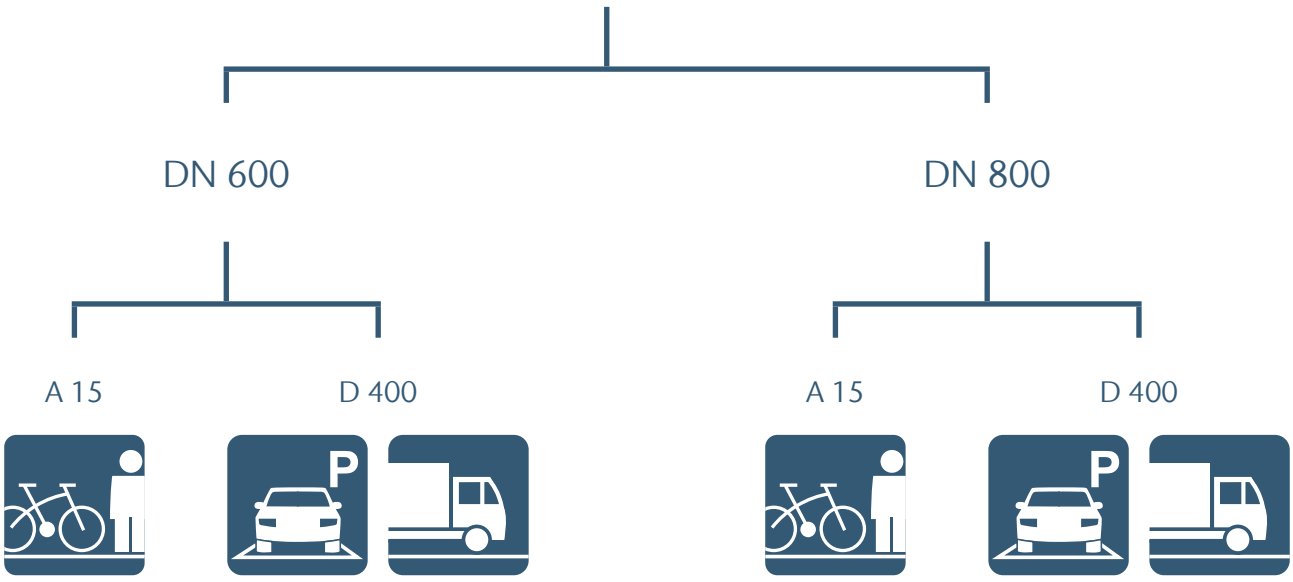
See the brochure for more information about ACO Filter Media Storm

Assembly concept

Vertical



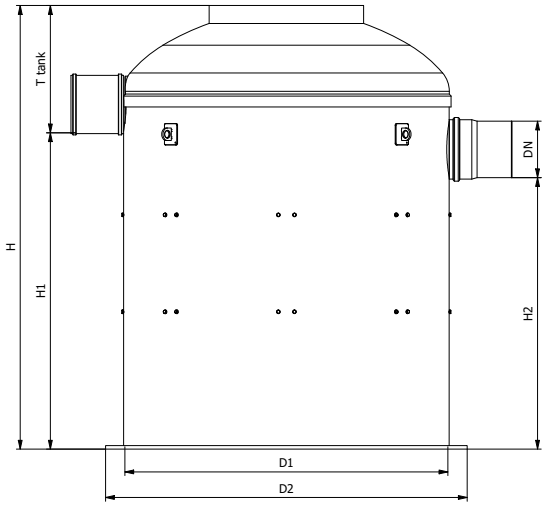
Horizontal



Stormclean G

When stormwater carries high concentrations of harmful dissolved pollutants, it is essential to remove those pollutants with an advanced treatment step before discharging, as untreated stormwater poses a threat to local water sources. ACO presents the ACO Stormclean stormwater filter as a compact solution to advanced stormwater treatment needs. Due to its small footprint, it is an attractive alternative to large above ground soil filters when space is at a premium. ACO Stormclean combines four crucial processes – sedimentation, filtration, adsorption and precipitation – to ensure bound and dissolved pollutants are removed from stormwater.





Benefits

- National certifications by DIBt (Germany) and VSA (Switzerland)
- Ultra-compact footprint and just 25 cm installation headloss cut excavation depth, save construction cost and fit tight urban plots
- Sediment-stability design keep treatment online during peak-flow events
- Loose media and fully demountable inner parts minimize service time
- Quick tank access limits traffic disruption and improves maintenance crew safety
- Broad size range allows standardisation across various project scales from small forecourts to multi-hectare industrial roofs
- Factory-fitted GRP chambers speed installation
- Engineered media resists de-icing salts

Features

- Third-party tested pollutant removal efficiencies for TSS, heavy metals and hydrocarbons (<94 % solids, <99 % oil)
- Integrated overflow/bypass within the treatment chamber
- Fully demountable internal components for thorough cleaning
- Adjustable inlet/outlet angles give design flexibility
- Choice of filter-media to target specific contaminants and requirements (e.g., heavy metals, pesticides and PFAS)
- Comprehensive third-party certificate supplied with every unit

Order information

Chamber diameter	Runoff area*	Max. tested filter media flow rate	Max. bypass flow rate	Filter media surface area	Filter media volume	Pipe connection	Weight	Total volume	Max. oil storage capacity	Max. sediment storage capacity	Item number	
[mm]	[m²]	[l/s]	[l/s]	[m²]	[m³]	[DN]	[kg]	[l]	[l]	[l]	NAV	SAP
1000	500	5	24	0,77	0,23	200	314	966	80	286	12968.MB2	2270939
1200	885	9	24	1,11	0,33	200	450	1405	117	409	12969.MB2	2270944
1500	1385	14	45	1,74	0,52	250	596	2351	434	451	12970.MB2C	2270952
1800	1900	19	75	2,51	0,75	300	856	3293	478	588	12971.MB2C	2270960

* Runoff area according to DIBt testing flow rate 2,5-25 l/s*ha

Dimensions

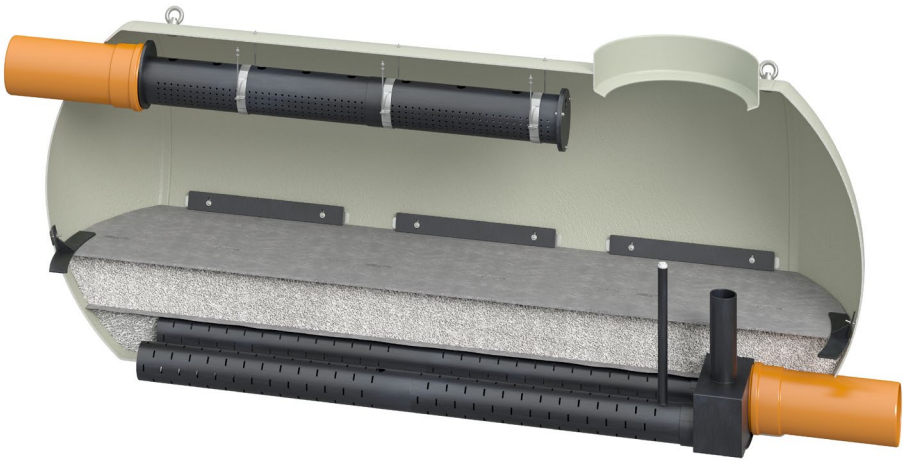
Item number		H	ØD1	ØD2	H1	H2	T tank	Top section**
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12968.MB2	2270939	2100	1000	1240	1565	1315	535	1x DN 600
12969.MB2	2270944	2125	1200	1400	1580	1330	545	1x DN 600
12970.MB2C	2270952	2284	1500	1720	1620	1375	664	1x DN 600
12971.MB2C	2270960	2275	1800	2040	1558	1308	717	1x DN 600

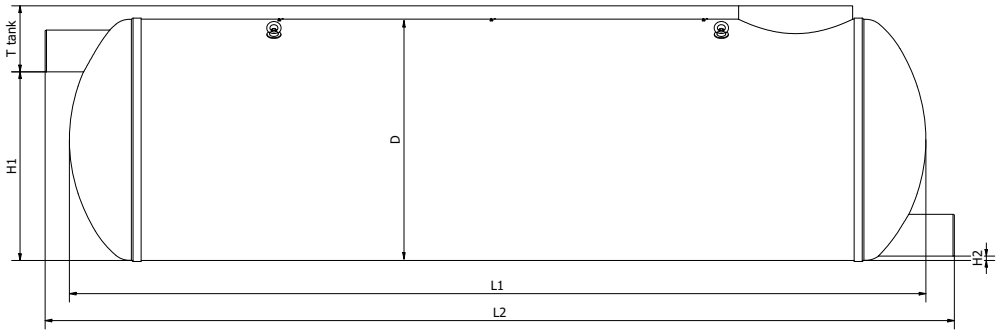
** This product is equipped by default with a top section suitable for a DN600 manhole cover. However, for improved access and easier maintenance, we recommend specifying the version with a DN800 manhole cover top section.

Stormclean G-H

There are areas where concentration of harmful dissolved pollutants exceeds allowed limits, and the installation of a sedimentation device is not enough for effective treatment. These areas are mainly industrial areas and areas with heavy traffic loads. Examples include industrial zones, logistics centres, train or bus stations, parking lots at commercial buildings, or busy road and highway infrastructure.

ACO presents the ACO Stormclean stormwater filter horizontal modular system solution to advanced stormwater treatment needs. Horizontal Stormclean offers the possibility of filtering large areas in one tank thanks to the GRP modular horizontal solution. The main advantage of all Stormclean products remains the same - the so-called plug-and-play system – the complete technology is integrated and ready for immediate operation. ACO Stormclean combines four crucial processes - sedimentation, filtration, adsorption, and precipitation - to ensure bound and dissolved pollutants are removed from stormwater.





Benefits

- Certified filter according to ÖNORM 2506-3 (Austria)
- A compact solution that enables higher flow rates according to the product's size.
- Loose media and fully demountable inner parts reduce service time, lowering life-cycle cost
- Built-in overflow system, allowing the horizontal Stormclean to be connected to larger surface areas and enables first-flush usage.
- Broad size range lets designers standardise on one technology
- Factory-fitted GRP chambers speed installation and match local contractor preferences
- Engineered media resists de-icing salts, ensuring performance even in harsh winter conditions.

Features

- Third-party tested pollutant removal efficiencies for TSS, heavy metals and hydrocarbons
- Integrated overflow/bypass within the treatment chamber
- Fully demountable internal components for thorough cleaning
- Adjustable inlet/outlet angles give design flexibility
- Choice of filter-media to target specific contaminants and requirements (e.g. heavy metals, pesticides, PFAS)
- Comprehensive third-party certificate supplied with every unit

Order information

Max. flow rate (related to the surface of the filter)	Max. over flow rate (bypass)	Inlet/outlet DN	Filter volume	Filter surface	Weight	Item number	
[l/s]	[l/s]		[l]	[m²]	[kg]	NAV	SAP
24	113	DN300	882	2.97	1287	12988.MB2	2270989
36	113	DN300	1321	4.45	2014	12989.MB2	2270993
47	113	DN300	1760	5.93	2741	12991.MB2	2270999
59	113	DN300	2199	7.40	3468	12992.MB2	2271003
71	113	DN300	2637	8.88	2717	12993.MB2	2271007
83	113	DN300	3076	10.35	3185	12994.MB2	2271012
95	113	DN300	3515	11.83	3654	12995.MB2	2271016
106	113	DN300	3954	13.31	4123	12996.MB2	2271020
118	113	DN300	4393	14.78	4592	12997.MB2	2271024

Dimensions

Item number		H1	H2	D	T tank	L1	L2	Top section
NAV	SAP	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
12988.MB2	2270989	1423	33	1800	497	2460	2824	1x DN 600
12989.MB2	2270993	1423	33	1800	497	3462	3866	1x DN 600
12991.MB2	2270999	1423	33	1800	497	4460	4824	1x DN 600
12992.MB2	2271003	1423	33	1800	497	5460	5824	1x DN 600
12993.MB2	2271007	1423	33	1800	497	6460	6858	1x DN 600
12994.MB2	2271012	1423	33	1800	497	7460	7824	1x DN 600
12995.MB2	2271016	1423	33	1800	497	8460	8824	1x DN 600
12996.MB2	2271020	1423	33	1800	497	9460	9824	1x DN 600
12997.MB2	2271024	1423	33	1800	497	10460	10824	1x DN 600

Filter media and refurbishment sets

At the core of ACO Stormclean is ACO Filter Media Storm, a stormwater filter material developed with the EU WFD (Water Framework Directive) at its heart to meet national certification schemes. A carefully engineered mixture of granule sizes allows the filter to remove small particle sizes without clogging. In addition, the choice of special granules selected for their ability to adsorb key pollutants such as Zinc (Zn), Lead (Pb), Copper (Cu) and oil ensure dissolved pollutants are removed and retained by the filter. ACO Filter Material is suitable for use as a decentralised stormwater filter protecting surface waters and treatment before groundwater infiltration, protecting precious groundwater sources.





Benefits

- Compact footprint – requires 10 × less area than soil-based infiltration, freeing valuable land for landscaping or development.
- Superior water quality – removes > 90 % of sediment, heavy metals and residual oil, helping sites meet strict discharge permits.
- Engineered media resists de-icing salts, ensuring performance even in harsh winter conditions.
- Depth-filtration design minimises blocking, stretching inspection and clean-out intervals.
- Independently verified by accredited institutes (e.g. DIBt or ÖNORM), providing confidence in performance.
- Low-density media (~ 650 kg/m³) is lighter to handle and cheaper to transport.

Features

- Engineered granular blend replaces native soil to provide onsite stormwater filtration.
- Optimised grain-size distribution captures fine sediment and dissolved pollutants while resisting blockage.
- High hydraulic capacity derived from distributed grain sizes accommodates large inflow rates.
- Long-term pollutant retention with integrated pH control safeguards downstream infrastructure.
- Versatile deployment in infiltration shafts, trenches, basins and specialised units such as Stormclean for residential, commercial and roadway applications.

Material Properties

Appearance	A mix of white, grey/blue, and red/brown granules of variable shape
Grain size	0,5 mm to 5 mm
Porosity	~37%
Bulk density*	~0,7 kg/L

* Loose fill

Sorption and Filtration Capacities*

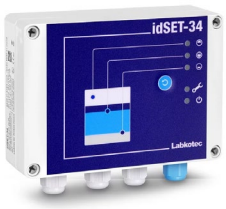
Zinc (Zn)	21,2 g/kg
Copper (Cu)	34,5 g/kg
TSS (d50 = 63µm) for 50 cm head loss	160 g/kg
Bulk density*	~0,7 kg/L

* Under ideal conditions. The presence of competing ions may reduce loading capacity.

Conditions for Application

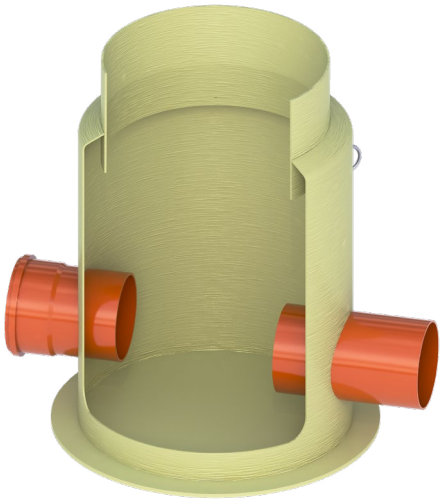
pH range	5 to 10
Minimum filter bed height	0,15 m
Typical filter bed height	0,3 m
Filtration velocity	5 to 30 m/h (optimum 10-12 m/h)
Recommended minimum contact time	3 minutes

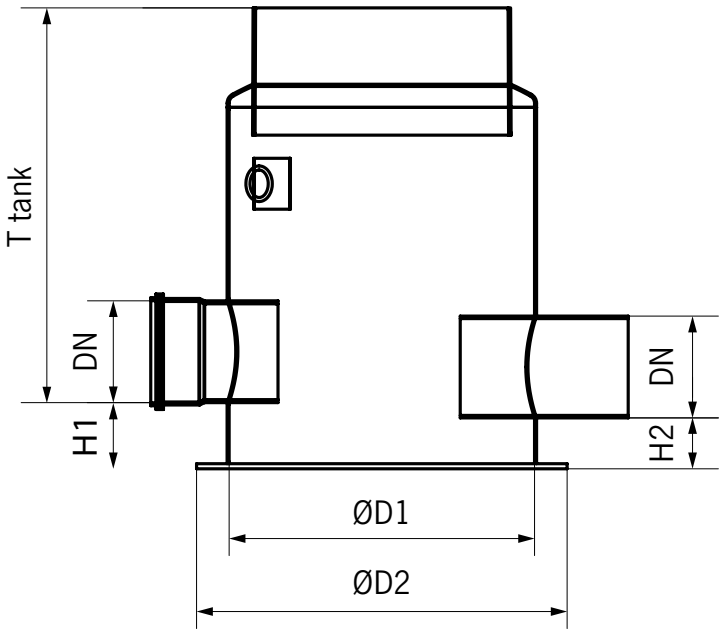
Accessories

	Product	Description	Model	Item number	
				NAV	SAP
	Alarm device	■ For oil separators, sludge traps, sedimentation devices, filtration and adsorption systems. Enables combined or separated control of oil, sludge and liquid level. □ S230V/50Hz □ IP 67 □ Cable connections: 5 m	Alarm device for oil and water accumulation	M03149	2274476
			Alarm device only for oil accumulation	418869	3029843
			Alarm device only for water accumulation	418870	3029844
			Alarm device for oil, water and sludge accumulation	418872	3029847
	Sampling Unit	■ Inteded for taking samples directly from Light Liquid Separators ■ Connection through integrated sampling point on the outlet inner part ■ Set includes manual pump for taking samples and other accessories needed for installation and mounting		411500	3011534
	ACO Belt 75 SS	■ Load strap: Polyester ■ Tensioner and hooks: Stainless steel ■ Package includes 2 pcs of anchors T10/150SS ■ Length 7,5 m ■ Suitable for GRP horizontal tanks		2565.225	2271033

Sampling shafts

ACO Sampling shafts give you the opportunity to add sampling point in the spots where required (for example in the downstream direction of the installed device or before the discharge into recipients) for easy sample collection. Thanks to its compact design the installation is easily performed with small footprint. ACO sampling shafts have compatible top section system with manhole covers.





Benefits

- Easy and user friendly access for taking samples
- Compact design – small footprint

Features

- Tank made of glass reinforced plastic
- Pipe connection using suitable push sockets or pipe connectors (no welded sockets)
- One-piece construction

Order information

Inlet/Outlet DN	Material of inlet/outlet pipe	Elevation difference Inlet/Outlet	Weight	Item number	
[mm]		[mm]	[kg]	NAV	SAP
110	PVC	30	40	12911.01	2270924
160	PVC	30	41	12912.01	2270925
200	PVC	30	42	12913.01	2270926
250	PVC	30	43	12914.01	2270927
315	PVC	30	44	12915.01	2270928
400	PVC	30	46	12916.01	2270929
500	PVC	30	57	12917.01	2270930
600	GRP	30	90	12942.01	3029840
800	GRP	30	105	12943.01	3029841
1000	GRP	30	165	12944.01	3029842
110	PVC	150	42	12935.01	3029813
160	PVC	150	43	12936.01	3029822
200	PVC	150	44	12937.01	2270931
250	PVC	150	45	12938.01	3029828
315	PVC	150	47	12939.01	3029829
400	PVC	150	49	12940.01	2270932
500	PVC	150	60	12941.01	2270933

Dimensions

Item number		H1	H2	ØD1	ØD2	T tank
NAV	SAP	[mm]	[mm]	[mm]	[kg]	
12911.01	2270924	415	385	600	728	287
12912.01	2270925	365	335	600	728	337
12913.01	2270926	325	295	600	728	377
12914.01	2270927	275	245	600	728	427
12915.01	2270928	210	180	600	728	492
12916.01	2270929	210	180	600	728	577
12917.01	2270930	123	93	600	728	664
12942.01	3029840	394	364	1000	1246	868
12943.01	3029841	194	164	1000	1246	1068
12944.01	3029842	629	599	1200	1434	1300
12935.01	3029813	500	350	600	728	287
12936.01	3029822	450	300	600	728	337
12937.01	2270931	410	260	600	728	377
12938.01	3029828	360	210	600	728	427
12939.01	3029829	295	145	600	728	492
12940.01	2270932	330	180	600	728	557
12941.01	2270933	210	60	600	728	677

Set of top section (extension shaft) for sampling shaft

This product is intended for use along with samplings shafts. It consists of PVC pipe with suitable cast iron cover on top. Length of the PVC pipe is adjusted (cut) on-site to meet the installation requirements.

Order information

Manhole cover DN	DN of the shaft	Extension length	Weight	Item number	
[mm]	[mm]	[mm]	[kg]	NAV	SAP
300	300	2400	50	418528	2270514

Flexible couplings for on-site connections

Connecting underground GRP tanks and separators to existing site pipework can be technically demanding. Variations in pipe materials (PVC, GRP, concrete, cast iron), standards, or even minor differences in outer diameters often complicate on-site installation—especially in international projects or remote locations.

To simplify the process and accommodate different conditions, ACO offers optional flexible rubber couplings. These couplings ensure quick, leak-free connections between different piping systems, reducing the need for on-site modifications, custom adaptors, or special tools.



Standard inlet and outlet connections on ACO products

ACO tanks and separators are delivered with factory-laminated pipe connections that respect the nominal diameter (DN) of the product. The type and material of the connection depend on the pipe diameter:

- DN ≤ 500 mm:
  Pipe connections are made using PVC KG pipes, factory-laminated to the GRP tank wall. Depending on the specific product and configuration, the connection may be male or female.
- DN > 500 mm:
  Pipe connections are made using GRP pipes with plain (male) ends. These are directly laminated to the tank and designed to handle higher flow rates.

Optional flexible rubber couplings

As an accessory, ACO offers flexible rubber couplings to provide installation flexibility and compensate for dimensional or material differences. Each coupling consists of a durable rubber sleeve with stainless steel tension bands, allowing secure and watertight joints.

The flexible couplings are suitable for:

- Transitions between different pipe materials
- Minor dimensional mismatches
- Installations lacking specific fittings on-site

Installation notes

- For male pipe ends (PVC or GRP): The flexible coupling can be mounted directly onto the pipe.
- For female pipe ends (PVC): Insert a PVC adapter pipe into the female PVC socket, then connect the flexible coupling to that pipe. PVC adapter pipes for use with female ends can be ordered using the following table.

Once the coupling is positioned, tighten the stainless steel tension bands evenly to ensure a reliable seal. Avoid over-tightening to prevent pipe damage.

You can find the order information for the available flexible couplings, along with any required PVC adapter pipes, in the table below. If you have any questions regarding flexible couplings or their installation, please contact ACO for assistance.

Order information
Flexible couplings

Description	Flexible coupling range		Width of the flexible coupling	Item number	
	Min. OD	Max. OD			
	[mm]	[mm]	[mm]	NAV	SAP
Flexible coupling for the DN 110	100	115	100	N/A	3038216
Flexible coupling for the DN 160	150	165	120	M02927	2215522
Flexible coupling for the DN 200	200	215	150	M00843	2273590
Flexible coupling for the DN 250	235	250	150	M02922	2274328
Flexible coupling for the DN 315	310	325	160	M02959	2274348
Flexible coupling for the DN 400	385	410	185	M02965	2274352
Flexible coupling for the DN 500	495	525	185	M03148	2274475
Flexible coupling for the DN 600	590	620	185	M03417	2274712
Flexible coupling for the DN 800	800	830	190	N/A	3038217
Flexible coupling for the DN 1000	1000	1030	190	M03352	2274650
Flexible coupling for the DN 1200	1200	1230	300	M02590	2274103

Order information
Additional PVC adapter pipes for products with PVC female connections

Description	Length	Item number	
	[mm]	NAV	SAP
PVC adapter pipe DN 110	500	M02080	2273935
PVC adapter pipe DN 160	500	M01465	2273735
PVC adapter pipe DN 200	1000	M02063	2273932
PVC adapter pipe DN 250	1000	M02064	2273933
PVC adapter pipe DN 315	1000	M02065	2273934
PVC adapter pipe DN 400	1000	M01855	2273869
PVC adapter pipe DN 500	1000	M01939	2273893

Sets of top sections (extension shafts) and manhole covers

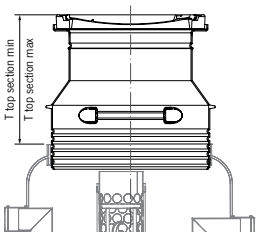
To simplify the ordering process, this catalogue includes item numbers that represent sets of additional items for GRP products. These sets may include an extension shaft, sealing, manhole cover, and, in some cases, a prefabricated concrete load distribution ring. By using these item numbers, you can select the appropriate extension shaft length, manhole cover (correct DN size and load class), and a prefabricated load distribution ring if required. Choosing the right set of accessories requires the knowledge of installation requirements and product needs (load class type, depth of installation, manhole cover DN and installation specifics).

Top section 1 – load class A 15 / DN 600

This set of top section (extension shaft) is intended for installation into load class A 15 according to EN 124 with manhole cover DN 600. Suitable either for Vertical or Horizontal GRP tanks.

Features

- Load class A 15 according to EN 124
- Frame from concrete, cover from BEGU
- Clear opening Ø 600 mm
- Extension shaft from PE-HD





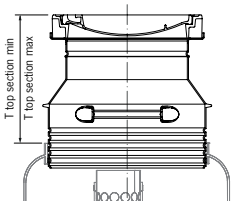
T top section (min-max)	Manhole cover	Weight	Item number BEGU cover	
[mm]	[mm]	[kg]	NAV	SAP
545-630	Ø 600	97	3301.34.11	2023550
545-1080	Ø 600	103	3301.34.12	2023551
545-1680	Ø 600	113	3301.34.13	2023552

Top section 2 – load class B 125 / DN 600

This set of top section (extension shaft) is intended for installation into load class B 125 according to EN 124 with manhole cover DN 600. Note that this set is suitable only for Vertical GRP products.

Features

- Load class B 125 according to EN 124
- Cast Iron or BEGU manhole cover
- Clear opening Ø 600 mm
- Extension shaft from PE-HD
- For GRP Vertical tanks only





T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover		Item number BEGU cover	
[mm]	[mm]	[kg]	NAV	SAP	NAV	SAP
585-665	Ø 600	115	3301.35.11	2023553	3301.55.11	2271066
585-1115	Ø 600	123	3301.35.12	2023554	3301.55.12	2271067
585-1715	Ø 600	134	3301.35.13	2023555	3301.55.13	2271068

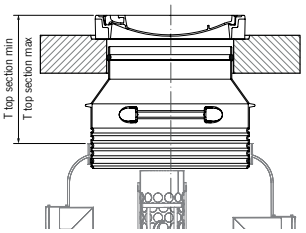
Note: You can calculate the invert level (depth of lower point of inlet pipe) with following formula: Invert level = T tank (GRP product dimension) + T top section (top section dimension)

Top section 3 – load class D 400 / DN 600

This set of top section (extension shaft) is intended for installation into load class D 400 according to EN 124 with manhole cover DN 600. Suitable either for Vertical or Horizontal GRP tanks.

Features

- Load class D 400 according to EN 124
- Cast Iron or BEGU manhole cover
- Clear opening Ø 600 mm
- Extension shaft from PE-HD
- Selectively with load distribution ring from concrete (for Vertical GRP tanks)





Sets with prefabricated distribution ring

Suitable for GRP Vertical tanks only, where prefabricated concrete load distribution ring is sufficient for load class D 400 installation type.

T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover		Item number BEGU cover	
[mm]	[mm]	[kg]	NAV	SAP	NAV	SAP
585-670	Ø 600	846	3301.36.08	2023556	3301.56.08	2271069
585-1120	Ø 600	854	3301.36.09	2023557	3301.56.09	2271070
585-1720	Ø 600	866	3301.36.10	2023558	3301.56.10	2271071

Sets without prefabricated distribution ring

Suitable for GRP Vertical or Horizontal tanks, where load distribution element is prepared on-site.

T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover		Item number BEGU cover	
[mm]	[mm]	[kg]	NAV	SAP	NAV	SAP
585-670	Ø 600	186	3301.37.08	2023559	3301.57.08	2271073
585-1120	Ø 600	194	3301.37.09	2023560	3301.57.09	2271074
585-1720	Ø 600	198	3301.37.10	2023561	3301.57.10	2271075
585-2160	Ø 600	202	411551	-	411552	3028199

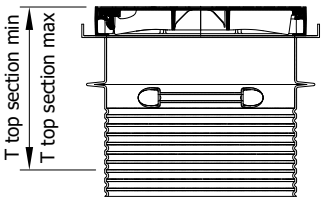
Note: You can calculate the invert level (depth of lower point of inlet pipe) with following formula: Invert level = T tank (GRP product dimension) + T top section (top section dimension)

Top section 4 – load class A 15 / B 125 / DN 800

This type of top section (extension shaft) is intended for installation into load class A 15 and B 125 according to EN 124 with manhole cover DN 800. When installing into Load class A 15 - suitable for Vertical or Horizontal products. When installing into load class B 125 - suitable only for GRP vertical products (GRP horizontal products have same installation procedure for B 125 and D400 load class with the need of concrete reinforcing elements and therefore different top section type - type 5). Available only with manhole cover rated for load class D 400.

Features

- Load class A 15 and B 125 according to EN 124
- Cast iron manhole cover
- Clear opening Ø 800 mm
- Extension shaft from PE-HD
- Available only with manhole cover rated for load class D 400





T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover	
[mm]	[mm]	[kg]	NAV	SAP
455-710*	Ø 800	261	419976	2270573
455-1700*	Ø 800	272	419975	2270572

* When using for load class B 125 for GRP vertical products, note that minimum T top section is 585 mm (based on installation instructions)

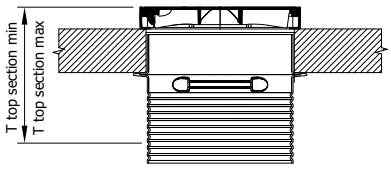
Note: You can calculate the invert level (depth of lower point of inlet pipe) with following formula: Invert level = T tank (GRP product dimension) + T top section (top section dimension)

Top section 5 – load class D 400 / DN 800

This set of top section (extension shaft) is intended for installation into load class D 400 according to EN 124 with manhole cover DN 800. Suitable either for Vertical or Horizontal GRP tanks.

Features

- Load D 400 according to EN 124
- Cast iron manhole cover
- Clear opening Ø 800 mm
- Extension shaft from PE-HD
- Selectively with load distribution ring from concrete (for Vertical GRP tanks)





Sets with prefabricated distribution ring

Suitable for GRP Vertical tanks only, where prefabricated concrete load distribution ring is sufficient for load class D 400 installation type.

T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover	
[mm]	[mm]	[kg]	NAV	SAP
585-745	Ø 800	1161	418951	2270550
585-1710	Ø 800	1194	418906	2016809

Sets without prefabricated distribution ring

Suitable for GRP Vertical or Horizontal tanks, where load distribution element is prepared on-site.

T top section (min-max)	Manhole cover	Weight	Item number Cast iron cover	
[mm]	[mm]	[kg]	NAV	SAP
585-745	Ø 800	261	418950	2016810
585-1710	Ø 800	272	418905	2016808

Note: You can calculate the invert level (depth of lower point of inlet pipe) with following formula: Invert level = T tank (GRP product dimension) + T top section (top section dimension)

Project References

SAUDI ARABIA – Ras Al Khair
King Salman International Maritime Complex for Maritime Industries & Service









CZECH REPUBLIC – Pribyslav
New Logistic Center ACO Industries



AUSTRIA – Vienna
Server Farm Schwechat







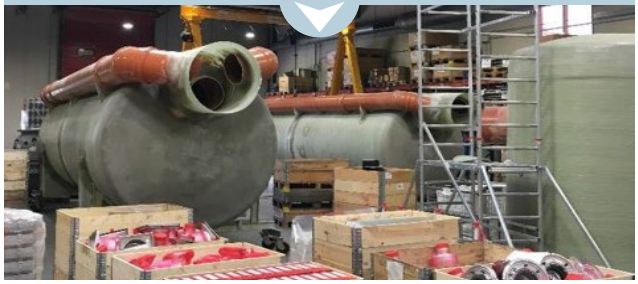




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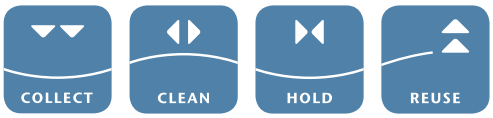


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