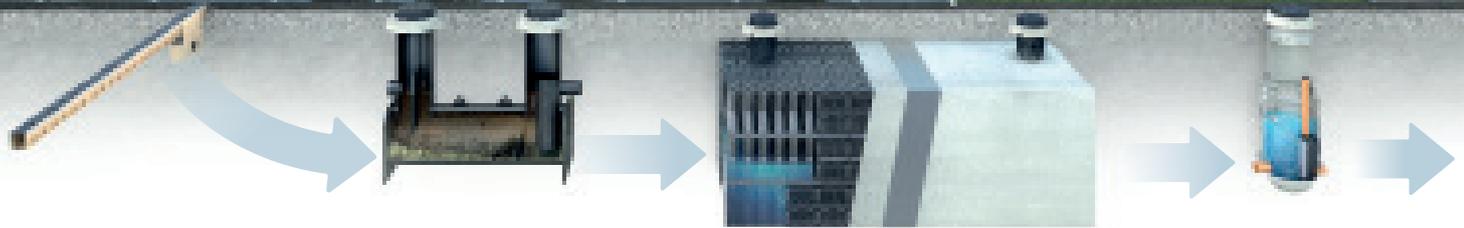




## General Product Overview

ACO East Africa

Drainage and water  
treatment solutions



**collect:**

Collect and convey

- Drainage channels
- Manholes
- Road gullies

**clean:**

Separate and treat

- Separators
- Sedimentation tanks
- Technical filters

**hold:**

Retain and infiltrate

- Rainwater retention basins
- Infiltration systems

**reuse:**

Release for reuse

- Lifting systems
- Water Treatment



ACO WaterCycle

ACO WaterCycle creates drainage solutions for the environmental conditions of tomorrow

# table of contents

<b>Introduction</b>	p. 2
<b>LINEAR CHANNEL- EXTERNAL DRAINAGE</b>	p. 4
ACO DRAIN Monoblock RD	p. 6
ACO DRAIN® Qmax Neo 300/600	p. 7
ACO DRAIN® Multidrain	p. 8
ACO Self Euroline	p. 10
ACO Sport	p. 11
ACO Composite Manhole Covers	p. 13
<b>BUILDING DRAINAGE</b>	p. 14
ACO Drainage in stainless steel	p. 16
ACO Pipe Tubes	p. 18
ACO Access Cover Manholes	p. 19
ACO Showerdrain M+	p. 20
ACO Easyflow Bathroom Gully System	p. 21
ACO Parkdeck	p. 22
ACO Roof Drain	p. 23
<b>WATER TREATMENT TECHNOLOGY</b>	p. 24
ACO Stormbrixx	p. 26
Oil Separator/Petrol Interceptor	p. 28
ACO Water Purification System	p. 29
ACO Wastewater Treatment Plant	p. 30
ACO Water Purification System	p. 31
Grease separators	p. 32
ACO Lipusmart	p. 33
Lifting systems	p. 34
<b>ACO Service</b>	p. 36
<b>askACO: Project Technical Support</b>	p. 39

# ACO. we care for water

ACO is a Water-Tech company dedicated to water protection. Building on our long and global experience in drainage systems designed to protect people from water, we increasingly see our mission also as 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.

ACO drainage systems increasingly use smart technologies to ensure that rainwater and wastewater are drained or temporarily stored. With our innovative separation and filtration technologies, we prevent water contamination from pollutants such as fats, oils, hydrocarbons, heavy metals, and microplastics.

Today, ACO takes a further step forward: we embrace the challenge of water reuse, thus ensuring a resource-saving cycle. For all its products and systems, ACO places great importance on durability, reusability, and a low CO2 footprint. The pursuit of sustaina-

bility is a continuous process that we strive to meet every day.

The ACO Group is a global family-owned company and 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 characterized by a high level of decentralized ownership and a strong closeness to regional markets.

[www.aco.com](http://www.aco.com)

[www.aco.ke](http://www.aco.ke)



**The owners**  
Iver and Hans-Julius Ahlmann



**ACO Group Headquarters**  
in Rendsburg/Büdelndorf



**5,500**

**1.15 billion**

**43**

Employees in more than 50 different countries (Europe, America, Asia, Australia, Africa)

Sales in euros in 2023

Production sites in 20 different countries



ACO Headquarters in East Africa  
Rivaan Centre, 5th floor  
Muguga Green, Nairobi



Linear Channel  
External Drainage



# ACO DRAIN® Monoblock RD

The monolithic drainage system for heavy loads



### Typical Applications

- Transverse and longitudinal drainage of highways and dual carriageways
- Airports
- Formula 1 tracks
- Container handling centers
- Industrial areas
- Truck parking areas
- Logistics yards
- Petrol Stations

### 0.5 m inspection element

Element with removable cover for inspection and connection at angle, T, or cross

### 0.5 m inspection element

For connection with inspection element

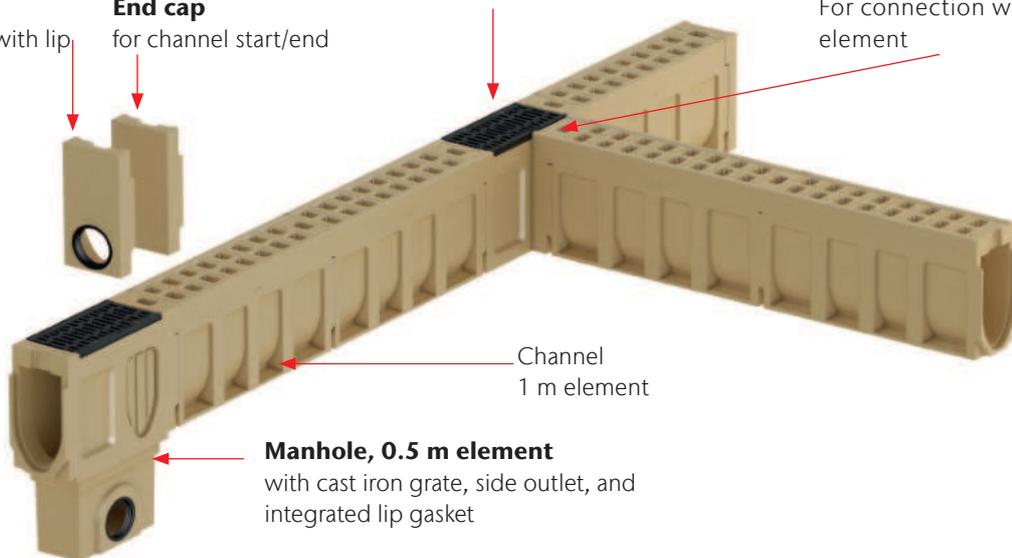
### RD 100 V version of the system

#### End cap

End cap with lip gasket

#### End cap

for channel start/end



Channel  
1 m element

### Manhole, 0.5 m element

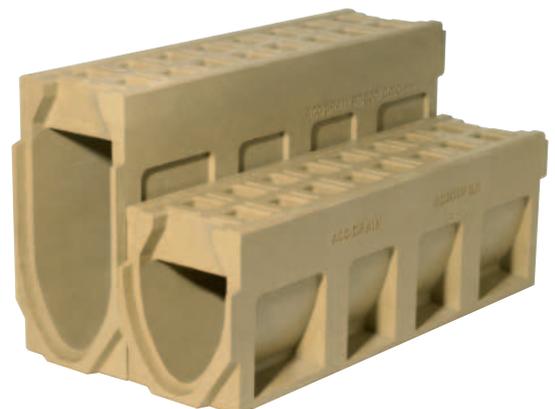
with cast iron grate, side outlet, and integrated lip gasket

ACO DRAIN® Monoblock RD is a channel system with a distinctive monolithic structure featuring an integrated grate in a single block. Designed for areas exposed to very heavy traffic, it guarantees stability and strength for linear drainage on highways and major roads with high traffic density.

The ideal application for these channels, however, is in container yards and airport terminals, which share the same character-

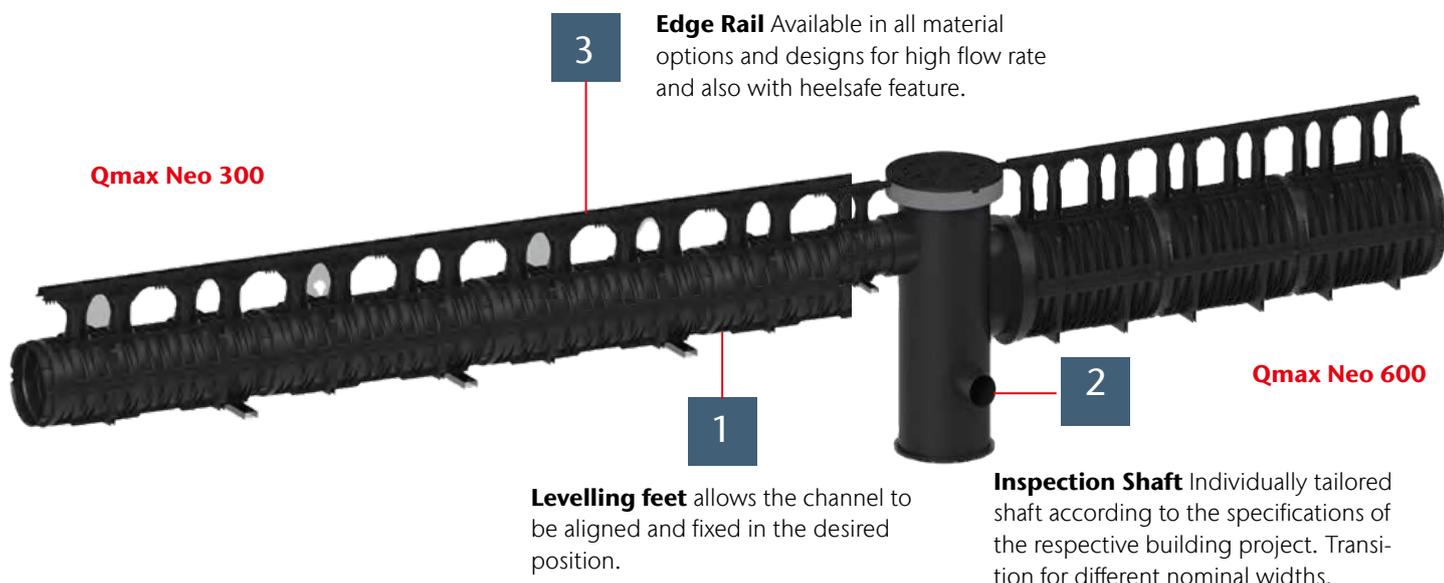
istic: highly dynamic heavy traffic. Similar scenarios include road environments with high-speed traffic, such as Formula 1 tracks, test tracks for road and sports cars, or areas with extremely heavy loads, such as highways.

Monoblock RD is available in different heights with clear widths of 100, 150, and 200 mm. It is certified for load classes D 400, E 600, and F 900 in accordance with UNI EN 1433.



# ACO DRAIN® Qmax Neo 300/600

The high-capacity slot channel



ACO Qmax is the combination of drainage and retention.

There are no limits related to the application field – everything is possible with ACO Qmax, from utilising it as a slotted channel in pedestrian areas to the drainage of large surface areas with heavy traffic. The plastic channels are easy and quick to assemble due to their low weight.

## Qmax Family product advantages

- Application variety
  - All surface finishes possible
  - Traffic loads from A 15 to F 900 certified
  - Large choice of materials for edge rail
- Design
  - Professional surface appearance due to discreet and narrow edge rail
  - Uniform and straight surface appearance even with different nominal widths underground
  - Drainage for the surface area and simultaneous retention with large storage volumes without additional sewer work
- Operating state
  - Sealed channel run
- Installation
  - High lay rates and performances without heavy lifting devices



**ACO Qmax is available in various sizes and lengths, providing an effective and cost-efficient drainage solution.**

## Typical applications

- Airport surfaces
- Port Surfaces
- Logistics areas
- Highways

# ACO DRAIN® Multidrain

Aesthetic appeal and effective drainage in a single system

ACO DRAIN® Multidrain is a polymer concrete linear drainage system offering numerous benefits for all its target users: designers, retailers, and construction companies. Its main features—five load classes, six nominal widths, and three frame versions (cast iron, galvanized steel, and stainless steel)—form the basis of the innovative ACO Multidrain concept.



Design with clean lines. The system is also ideal for transitions between two different surfaces. The slot frame, made of galvanized or stainless steel, is compatible with all standard flooring or stone slabs and connects the two surfaces almost seamlessly.

**Functionality and Maintenance**  
Cleaning and maintenance are very simple thanks to the system's inspection elements, which allow the use of low- or high-pressure washers. high-pressure washers.

## Typical applications

- Pool edges
- Façade drainage
- Shopping centers
- Pedestrian and cycle areas
- Public spaces
- Parking areas
- Urban landscaping



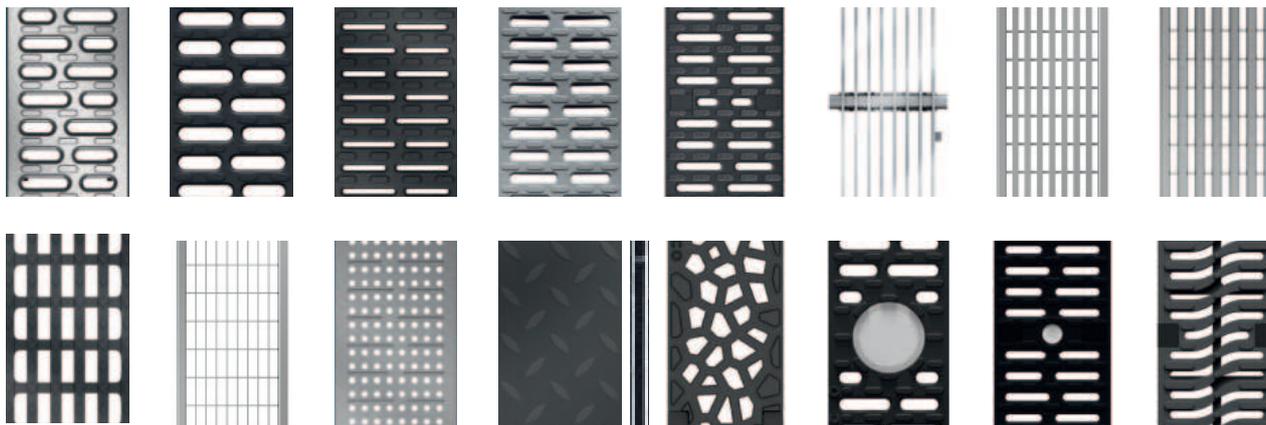
**Advantages**

- The V-shaped profile of the channel improves drainage performance while optimizing and enhancing its self-cleaning effect.
- The ribbed outer walls and balanced distribution of construction material provide high load-bearing capacity and stability.
- The slim section of the channel makes it lightweight, offering all the associated logistical advantages.
- ACO DRAIN® Multidrain meets the requirements of UNI EN 1433 and is fully certified by a third-party body.



**Wide range of cover grates**

The ACO DRAIN® Multidrain channel line offers a wide range of cover gratings in galvanized steel, stainless steel, cast iron, and polypropylene for load classes from A 15 to D 400, capable of meeting any requirements regarding aesthetics, functionality, and load capacity.



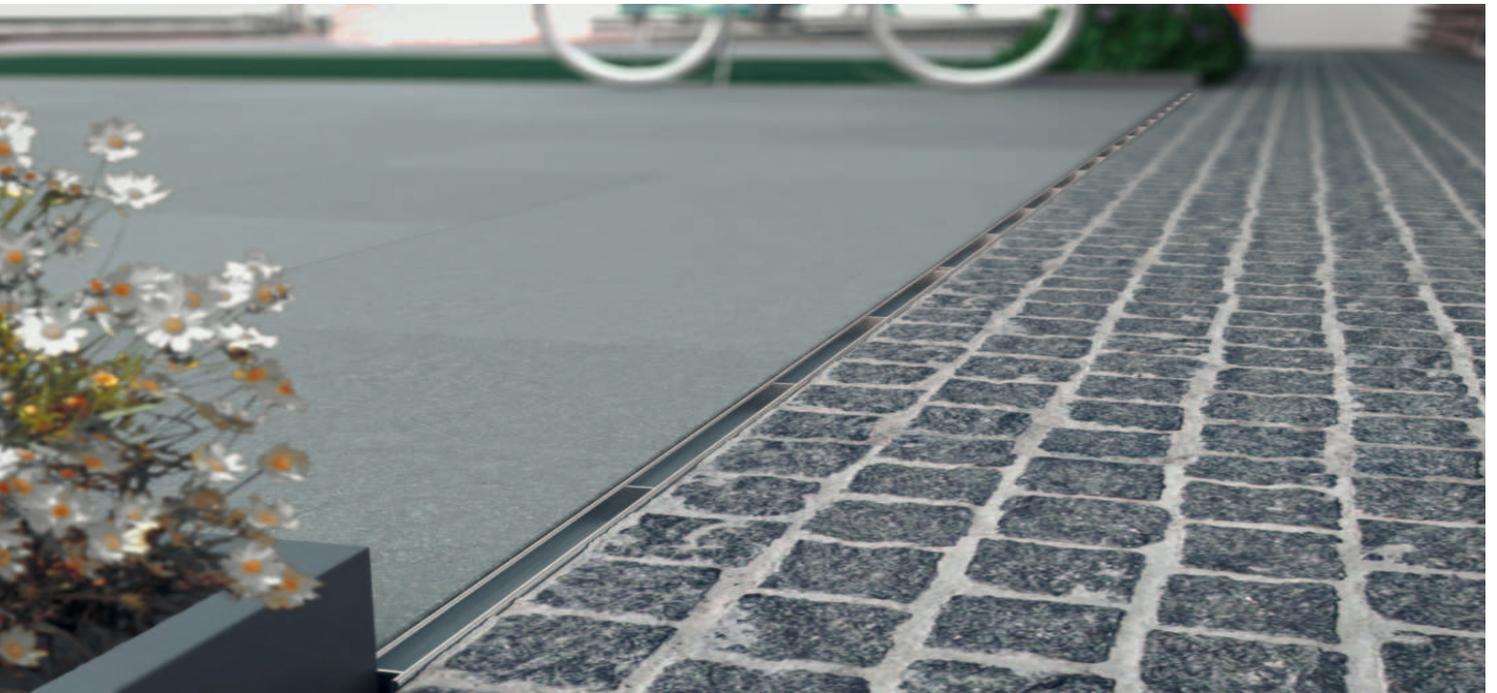
**Grating Configurator**

Our configurator allows you to choose the gratings and view them in different application settings.

<https://www.draindesign.aco/de>

# ACO Self<sup>®</sup> Euroline

The economical, simple, and versatile solution  
for residential and urban applications



ACO Self Euroline 100, H55



ACO Self Euroline 100, H97





ACO SELF® Euroline drainage channels, made of polymer concrete, are suitable for all types of surfaces and a wide range of needs, ensuring professional collection and evacuation of rainwater.

They perform more than just a draining function: available in multiple combinations, they combine

functionality and design at the highest level. Specifically developed for private applications, combining the highest quality materials with elegant design, ACO Self Euroline channels integrate harmoniously and stylishly into residential settings.

### Typical applications

- Private garage entrances
- Paved courtyards
- Paths and small roads
- Pedestrian areas
- Other areas subject to loads not exceeding class B 125



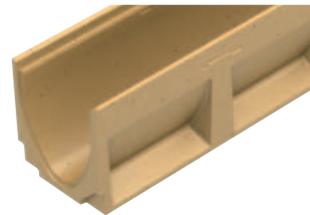
#### ACO Self Euroline 100

- 2 channel versions: standard or with pre-formed outlet
- 2 heights: H 55, H 97



#### ACO Self Euroline 150

- 2 channel versions: standard or with pre-formed outlet
- 2 heights: H 100 and H 150



#### ACO Self Euroline 200

- 2 channel versions: standard or with pre-formed outlet
- 2 heights: H 150 and H 250 mm

## Wide range of cover grates

The cover grates offer a wide range of customization for the drainage line, as they are available in various designs and multiple materials: galvanized steel, stainless steel, cast iron, and plastic.



Slot inlets and corresponding inspection elements in stainless steel are also available for Self Euroline channels, with load classes A15 and B125



# ACO SPORT

## Drainage systems and construction elements for sports facilities

The construction elements used in sports facilities must ensure the safety of the facilities and have characteristics that simplify maintenance operations as much as possible. The components of the ACO SPORT® system, designed to make competitions safer and preserve athletic tracks in optimal condition, fully meet these requirements.

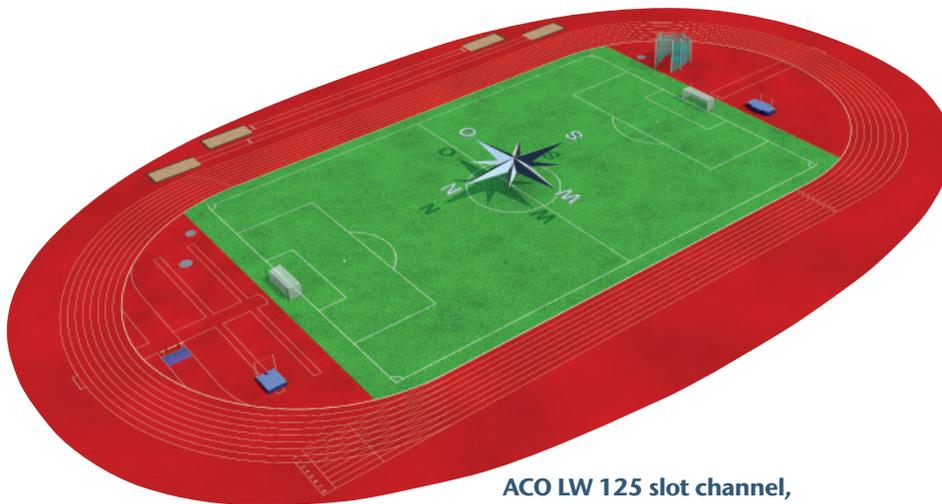
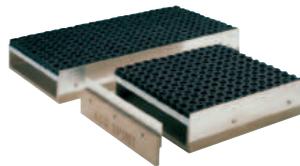
ACO SPORT® drainage systems are manufactured in compliance with DIN 18035 standards and international athletics regulations (IAAF).



**System 7000 curbs, made of polymer concrete with rubber protection, form a solid safety barrier for long jump tracks and athletics areas, as well as for sports fields.**

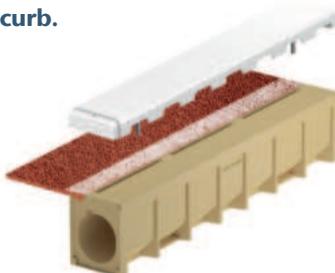


**System 7000 collectors with grille and rubber bearing.**



**Drainage pit and inspection element for LW 125 channel**

**ACO LW 125 slot channel, one side coverable, with a white plastic cover that serves as a track demarcation curb.**



**ACO LW 125 slot channel, coverable on both sides, with a white plastic cover that serves as a track demarcation curb.**



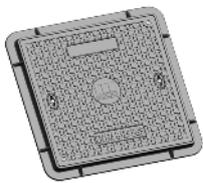
# ACO Composite Manhole Covers

## Drain Covers



The innovative **ACO Manhole Cover System** has been developed to meet today's urban infrastructure challenges. The intelligent structure of the elements allows the distribution of dynamic traffic load to ensure that the cover remains at the level of the road surface. The flat surface of the installation guarantees safety and comfort when passing.

The material is Sheet molding compound (SMC) resin, a fiberglass-based compression molding that is used in applications that require high strength. SMC is comprised of several materials including fiberglass, polymer resin, release agents and thickeners.



Composite Square /  
Rectangular Manhole  
Cover



Composite Round Manhole Cover

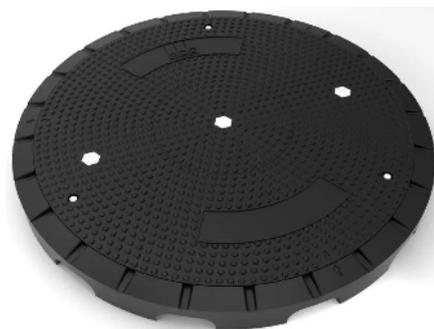
### Key Features

- Light, Medium and Heavy load classes (A15 – D400) for different applications
- Low maintenance and easy installation
- Conforms to BS EN124 standards
- Thermal stability and UV resistance
- High resistance to biological substances
- High chemical resistance to light oil and hydrocarbon
- Low risk of theft
- Available in round and square top sections

## ACO Composite Manhole Cover c/o 900mm- Petrol Stations

### Characteristics

- The lifting holes are three in number with waterproof aspect and are designed to ensure the cover is easy to lift.
- Matching lifting tools to make it easy to remove the cover.
- The control port has a Special design of 400mm diameter, making it is easier to check the petroleum quantity.
- Rubber sealing, at the side of cover, makes it shockproof, airtight & watertight.
- Product can be custom made with Customer Logo, Inscriptions and or even a customized design.



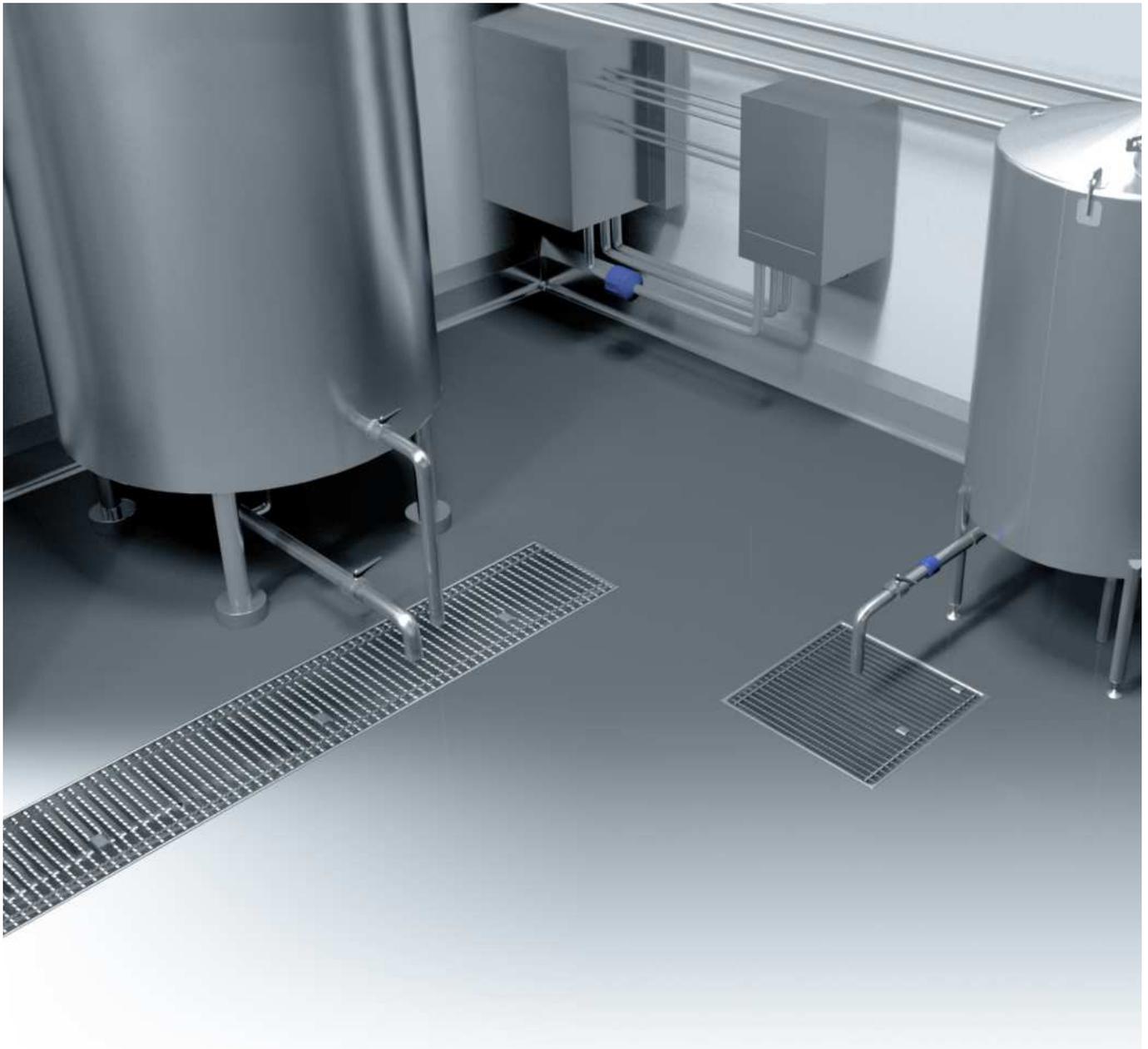


# Building Drainage



# ACO drainage in stainless steel **HygieneFirst**

The ideal material for applications where cleanliness and hygiene are the top priority



Thanks to its resistance to corrosion and chemicals, its workability, and its smooth, aesthetically appealing surface, stainless steel is universally valued as a hygienic material of the highest quality and

durability. It resists dust, preservatives, microorganisms, meat proteins, blood, grease, liquids, etc. Both proteins and bacteria do not adhere to its smooth surface and can be easily removed with

appropriate cleaning agents and disinfectants.



### Typical applications

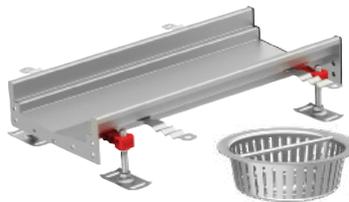
- Industrial kitchens in canteens, hospitals, nursing homes, and commercial buildings Catering companies
- Pubs, restaurants, fast-food outlets, cafés
- Slaughterhouses and meat processing industries, butcheries
- Food and beverage industries
- Pharmaceutical and cosmetic industries
- Swimming pools and sports facilities

## Stainless steel drainage channels



### Hygienic Box Channels

ACO hygienic box channels are ideal for all applications requiring both high hygiene standards and the ability to drain large volumes of water and other fluids. This range of products has been designed according to the EN 1253 standard.



### Modular 125 and Modular 200 Channels

Our modular range of channels, with standard widths of 125 and 200 mm, provides an extremely versatile system capable of draining large amounts of surface water. Accessories, such as corner elements and a wide selection of grates, make this system ideal for various applications. Using it with a sludge basket prevents solid particles or sludge from entering the pipes or clogging the drains.



### Slot 20 Channels

Our modular range of channels with standard slots of 20 and 60 mm offers an extremely versatile and easily installable system. Accessories, such as corner elements and a wide selection of grates, make this system ideal for a wide range of applications. Certified according to EN 1433 and equipped with CE marking.

## Stainless steel floor drains



### Hygienic Floor Gullies

ACO floor gullies comply with the principles of hygienic design. They are available in various sizes and meet different flow rates and construction requirements, including applications with low depth or where preventive fire protection measures are needed. ACO floor gullies are certified in accordance with the EN 1253 standard.



### ACO ROFO RO200 Gully Range

The ROFO Floor Trap is a durable and efficient drainage solution, manufactured from Stainless Steel 304 to resist acid corrosion and staining. It features a double water seal for odor-free performance, smooth surfaces for easy cleaning, and a large sludge box to capture coarse slurry.



### ACO Glass collector

ACO Glass Collector is a system specifically designed for beverage industries that use glass for bottling. It is a custom-made solution, designed and sized by ACO experts, to collect glass fragments that would otherwise end up in drains and pipes.



# ACO Pipe

## A functional and reliable system

ACO Pipe is a lightweight and durable push-fit pipe system, designed, manufactured, and tested for drainage applications involving pollutants, residues, stormwater, and industrial wastewater. Together with other ACO products, it contributes to creating a complete system and offers a sustainable drainage solution with exceptional benefits for clients. In particular, when combined with ACO stainless steel pits and channels, it provides an excellent building drainage solution. The push-fit system ensures simple and quick assembly for reliable installation, whether for gravity drainage or vacuum drainage.



### Typical applications

#### Food industry & commercial kitchens



#### Hospitals



#### Pharmaceutical production



#### Infrastructure



### Advantages

- Easy installation thanks to the push-fit system
- Wide range of elements and accessories
- Tested and certified for: pressure and vacuum, noise, fire, and tightness
- Service life exceeding 50 years
- High corrosion resistance
- Easy to clean

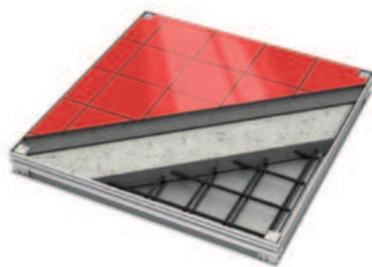




# ACO Access Cover Manholes

Solid or infill covers, for all applications

ACO access covers are made from high-quality materials. Our entire range is certified according to European standards and meets all load, safety, and functionality requirements. Manufactured using stainless steel, galvanized steel, aluminum alloys, and composites, they ensure high reliability and long-lasting durability.



## Access Cover UNIFACE

Recommended for building interiors where a high level of finish is required. Suitable for flooring up to 15 mm thick. Available in stainless steel, galvanized steel, and aluminum. Equipped with a gasket for water and odor tightness.

## Servokat GD Access Cov

Servo-assisted covers in stainless and galvanized steel, for load c B 125 and D 400. Standard sizes from 60 × 600 mm up to 1500 × mm.



- Stainless steel is recommended for applications in the food, beverage, chemical, and pharmaceutical industries.
- Manholes made of galvanized steel are typical for residential buildings, as well as for production and storage facilities.
- Aluminum manholes are primarily used in facilities such as hotels and hospitals.

### Available models

- Access Cover UNIFACE
- Access Cover PAVING
- Access Cover SOLID

### Materials

- Stainless steel AISI 304 and AISI 316
- Galvanized steel
- Aluminum Alloy

### Typical applications Servokat System

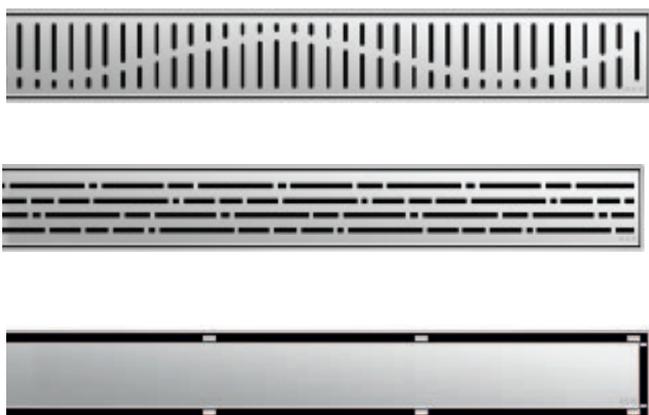
- Telecommunication installations
- Ports and airports
- Railway stations
- Tunnels
- Bridges
- Emergency exits
- Water and gas supply
- Control ducts
- Water treatment and construction works

# ACO ShowerDrain M+

## Linear drainage for designer bathrooms.

The **ACO ShowerDrain M+** is equipped with 360° rotatable gully body. You can also select between four grilles to suit the installation situation, providing great flexibility and easy installation right from the start.

The ACO ShowerDrain M+ can be adapted to installation heights. Round shapes and flat surfaces ensure both a harmonious design and easy cleaning. The surface is also particularly resistant to cleaning agents. The odour trap allows free pipe access and thus easy cleaning.



### Main features

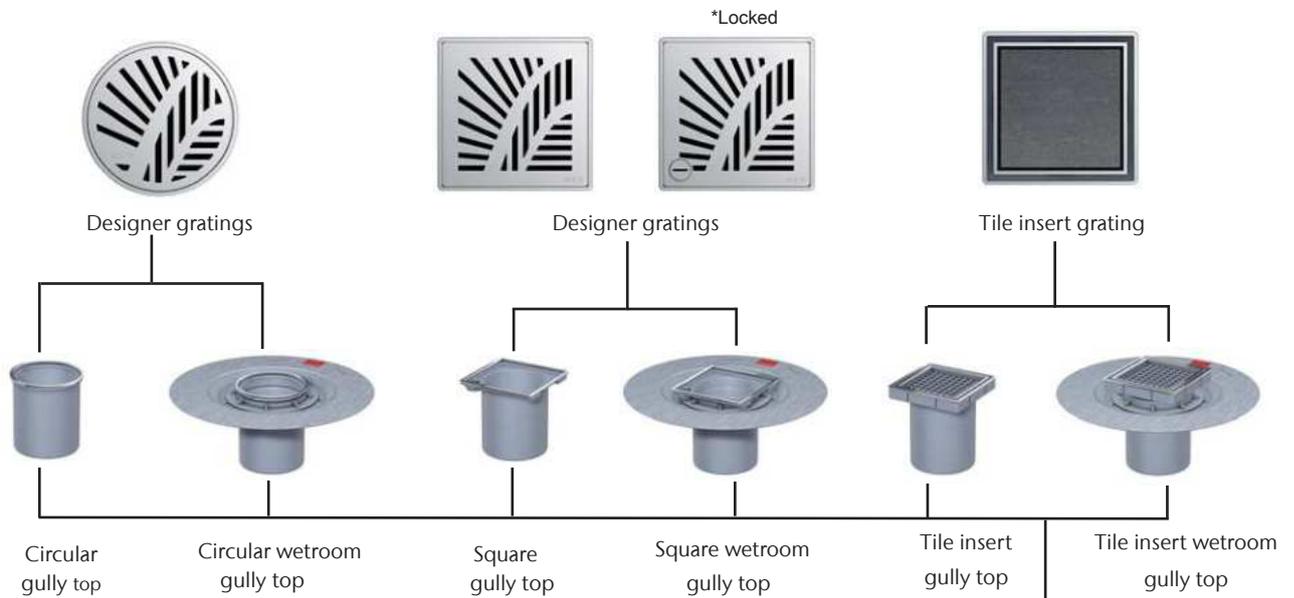
- Minimum installation height: 54 mm with inclination 1.5°
- Factory assembled sealing membrane
- Fulfills all sound insulation levels (SSt I-III to VDI 4100)
- Superior finish due to electro-polished channels and gratings(optional)
- Flexible for any installation situation
- Gully body can be rotated through 360°
- Integrated seal
- Flow Rate: 0.4 l/s with 10 mm build-up, 0.5 l/s with 20 mm build-up



# ACO Easyflow Bathroom Gully System

Linear drainage for Modern bathrooms Design.

## System Overview



The modular construction of **ACO Easyflow bathroom** drainage gullies provides fully flexible drainage solutions to modern bathroom design.

## Designer Grating

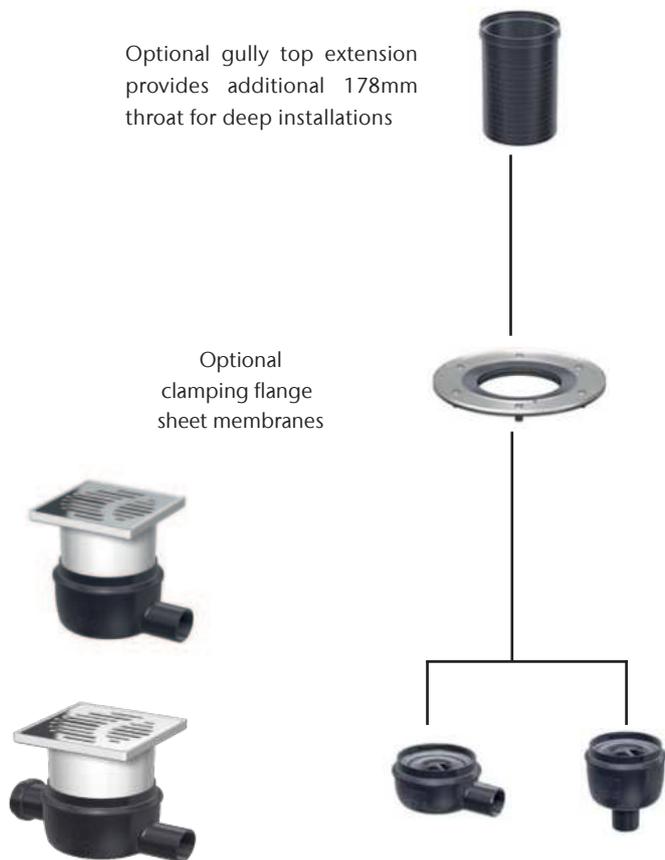
- Electro-polished stainless steel gratings
- Barefoot friendly
- Tile insert grating for up to 11.5mm tile, including tile adhesive
- All gratings to Load Class K3 to BS EN 1253

**Gully Tops** All gully tops are manufactured from ABS and are easily trimmed to length to suit installation and supplied with stainless steel bezel. Circular or square gully tops available with fully sealed polypropylene fleece for quick and convenient integration with brush or roller applied wetroom tanking systems.

**Gully Body** Tough, corrosion-resistant polypropylene construction ensures reliable, long life. The gully body is supplied complete with a removable foul air trap for easy cleaning and maintenance. 50mm water trap seal conforms to BS EN 1253. Up to 2 l/s flow rate.

Optional gully top extension provides additional 178mm throat for deep installations

Optional clamping flange sheet membranes



# ACO Parkdeck

## Cast iron point drains for parking lots

ACO point drains offer a solution for all load classes. The trend toward increasingly larger and heavier vehicles poses new challenges for drainage components. Cast iron has exceptional compressive strength and can easily withstand extreme stresses.

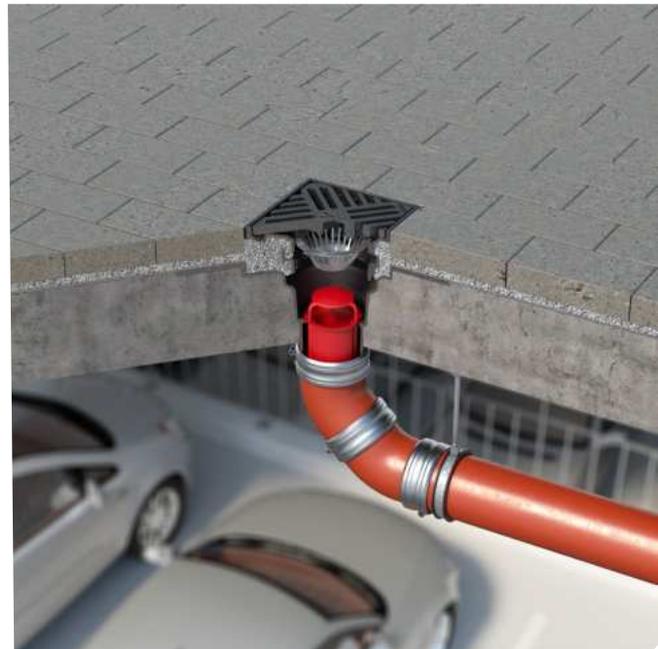


### Product advantages

- Robust cast iron body, construction class A1 – non-flammable
- High corrosion resistance for long service life
- Load class: D400/E600
- Compact shape, hole diameter of only 160 mm
- Safe fire protection class R30 – R120
- Basket Optional
- Hinged Opening 120°
- Locking system with allen bolt



Through deck installation with 110mm vertical outlet complete with locked grating, galvanised steel dirt bucket (optional).



Shallow deck installation with 110mm horizontal outlet with weep-hole drainage facility. Complete with locked grating and galvanised steel dirt bucket (optional).

# ACO Roof Drain

## Gravity drainage for flat and green roofs

ACO offers functional solutions, which are especially coordinated for use on flat roofs and ensure optimum removal of rainwater. ACO offers products made of cast iron and stainless steel. We also have special solutions for green roofs, copings and for emergency drainage. ACO helps you to design the correct roof drainage and to perform the hydraulic calculations with its latest, standardised design software and its extensive practical knowledge.



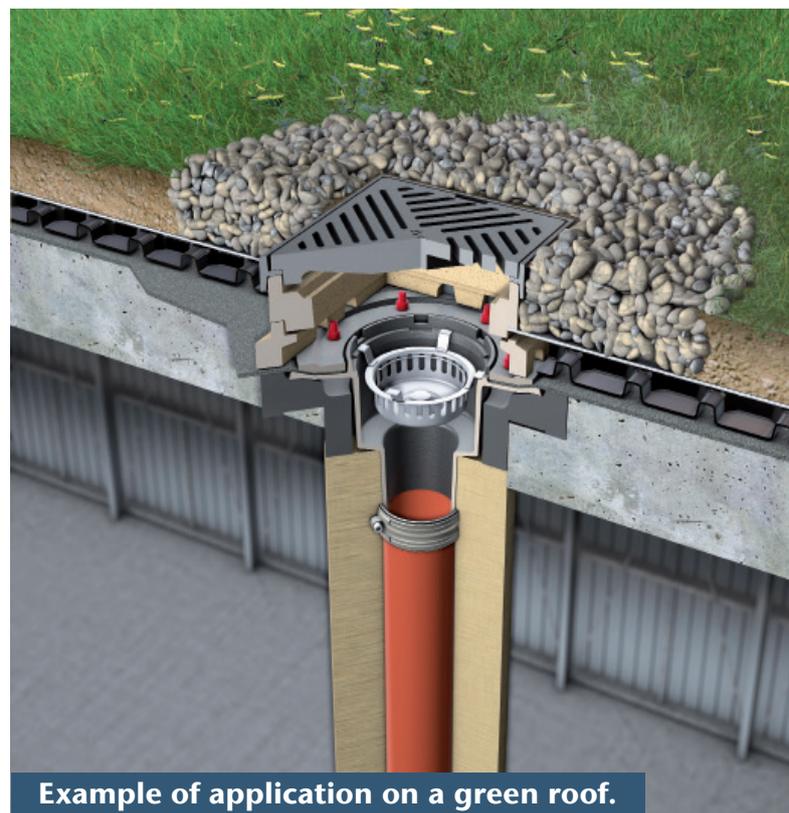
### Product benefits

- Guaranteed fire protection
  - Fire protection classes: R30- R120
  - No additional fire load
- Permanent resistance
  - Maintenance-friendly
  - 100% UV resistant
- Flexibility in sealing
  - PVC/PE/PP/Bitumen
- Variable installation
  - On-site height adjustment by means of cast iron adjustment ring
  - Can be utilised as emergency drainage
- Few components, compact design

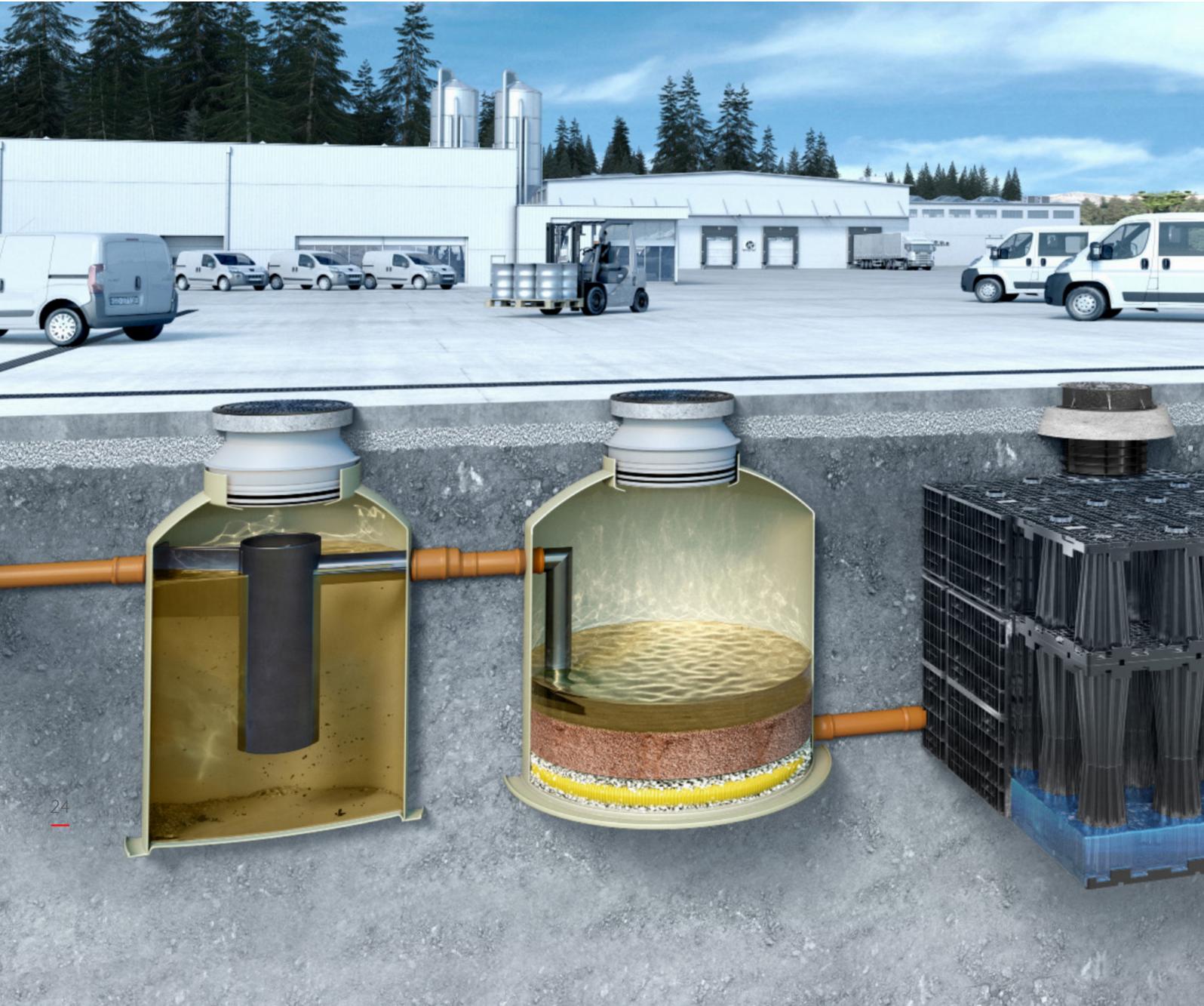
Cast iron drains.



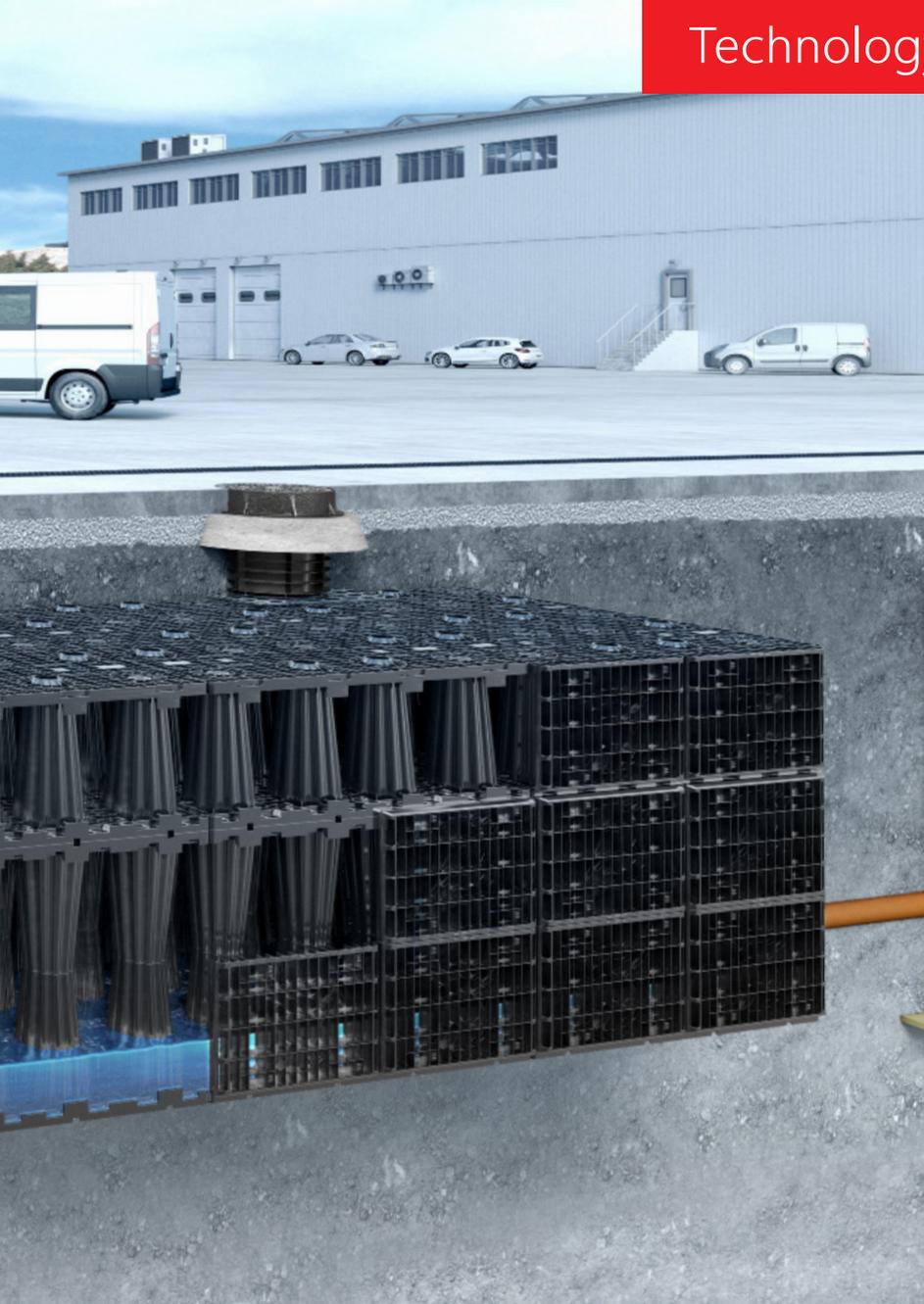
Stainless steel drains



Example of application on a green roof.



# Water Treatment Technology



# ACO Stormbrixx

Modular stormwater infiltration system for effective groundwater recharge.

**ACO Stormbrixx** is a modular infiltration system made of synthetic materials, designed to allow both the storage of significant volumes of stormwater and the infiltration of the water itself.

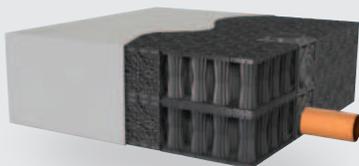
The system is based on modules arranged in an interconnected pattern using the intelligent Snap Lock assembly system, which provides excellent structural rigidity. The multifunction inspection module ensures easy accessibility for inspection and maintenance of the entire system. The modules are stackable, resulting in reduced transportation costs and lower CO<sub>2</sub> emissions compared to traditional systems, as well as halving the space required for storage, both in warehouses and on construction sites.

### Key Benefits:

- Exceptional stability proven in numerous projects worldwide
- Patented installation system ensuring stability and resistance to shifting, even during construction
- Uniform load distribution across a wide structure
- System modularity, allowing configuration according to available depth and surface area
- Fully inspectable system
- Ease of maintenance and cleaning

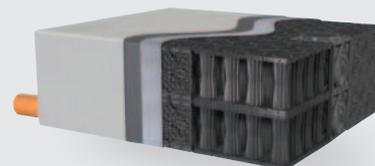


DIBt beantragt  
(AZ III 55-1.42.1  
-21/19)



**ACO Stormbrixx**  
For rainwater infiltration

ACO Stormbrixx with geotextile cover for temporary storage and subsequent infiltration of rainwater.



**ACO Stormbrixx**  
For rainwater storage/retention

ACO Stormbrixx with geotextile cover and sealing membrane for rainwater retention and controlled subsequent release.





## ACO Stormbrixx SD 900

**Standard Duty:** Light-duty version, suitable for occasional passage of service and emergency vehicles

### Typical applications

Installation depth in the absence of frost: at least 80 cm (DIN 1054), without affecting groundwater.

- Green areas, without vehicle traffic
- Green areas, crossed by mowers and lawnmowers.
- Pedestrian areas.
- Driveways and parking areas for vehicles up to 9 tons, or occasionally crossed by emergency vehicles



Stormbrixx SD

## ACO Stormbrixx HD 600 / 900

**Heavy Duty:** Driveable version, suitable for heavy vehicle traffic

### Typical applications

Installation depth in the absence of frost: at least 80 cm (DIN 1054), without impacting groundwater.

- Green and pedestrian areas
- Driveways and parking areas occasionally crossed by special vehicles (SLW60)
- Parking areas and auxiliary circulation structures not subject to heavy traffic (mostly stationary traffic, connecting parking areas)
- Suitable for installation in groundwater
- For unusually high loads or water volumes, please contact the ACO technical office
- **Stormbrixx HD 900:** Its unique geometry makes this system particularly suitable for storing large volumes.
- The HD 900 version allows the creation of basins up to 2.742 meters high.



Stormbrixx HD

# Oil Separator/Petrol Interceptor

## Water purification from contaminants

At service stations, automatic car washes, mechanical workshops, and wastewater drainage systems, potentially flammable or explosive substances can accumulate, which must therefore be isolated using separation systems. Environmental laws and regulations require the highest levels of operational safety for systems that handle liquids posing a threat to water quality. ACO offers state-of-the-art liquid separators that are cost-effective, with low long-term operating costs thanks to an easy-to-maintain coalescence unit or a deposit-free separation system based on centrifugal force.



**ACO Oleocido P** hydrocarbon separators are made of Polyethylene and are equipped with a sludge and a coalescing filter. This means that they are designed to have a discharge with a hydrocarbon or light liquid content of less than 5mg/l.

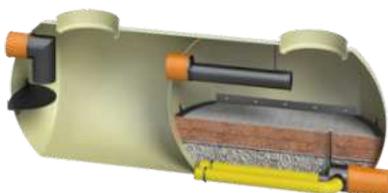
The bypass version allows you to achieve speeds 5 times higher than those without bypass. This solution guarantees a processing of 20% of the incoming volume. Available from minimal size N53 TO N565 with bypass.

**Oleopator G** is a below-ground, EN 858 Class I light-liquid separator (oil/petrol interceptor) constructed from glass reinforced plastic (GRP), designed for durable, corrosion-resistant service without heavy machinery during installation. It features internal parts made from high density polyethylene (PEHD), a coalescence insert (filter) plus float that can be removed for cleaning without fully emptying the separator, and a removable cage to facilitate maintenance, cleaning, and waste disposal. For enhanced monitoring, there's provision for an integrated sampling system and optional alarm devices.



Available from minimal size NS 3 TO NS 200.

### Technical filters for Rain Water Treatment.



**The ACO Stormclean TF** technical filter is equipped with a high-performance filtering substrate that allows the absorption of dissolved heavy metals and the retention of suspended substances such as hydrocarbons. The system is sized based on the drained area, following a 1:250 ratio.

According to this ratio, for example, for 1,000 m<sup>2</sup> of yard, only 4 m<sup>2</sup> of filtering surface is required. Made of glass-reinforced resin material, it is lightweight and easy to handle.

# ACO Water Purification System

## Rainwater harvesting

### RainSave Water Treatment

Rainwater, collected, filtered and stored in a suitable way, is an alternative source of high quality water that makes it possible to replace drinking water for some activities. Rainwater recovery must be regarded as an environmental and economic solution. We should not waste drinking water with its cost for uses that are not necessary. To store good quality rainwater, it must be filtered and the particles, leaves, small animals, etc. removed.



**Rainwater collection tanks and cisterns**

### Advantages

- Horizontal design made of fiberglass reinforced plastic (GRP)
- With separate compartments for sludge separation and water accumulation
- Easy installation and handling
- Includes a fitting for the installation of a submersible pump for irrigation
- A UV water treatment system or sodium hypochlorite can be installed later for rainwater reuse for irrigation

### Typical Applications

- Parking
- Logistics
- Warehouses
- Highrise Buildings
- Hospitals, Hotels, etc.

### RainPure CL- Treatment by addition of sodium hypochlorite



**RainPure CL** The water deposited in the rainwater storage tank coming from the roofs is pumped into a second tank (\*). During the pumping process the waters on line (1 mg/l) are slightly chlorinated.

- 1 8 m<sup>3</sup>/h pump 1"1/4
- 2 Sodium hypochlorite dosing pump
- 3 120 mesh ring filter - 1"1/2 with pres-
- 4 Surface buffer tank 1000 or 2200 liters (\*) Bottom flange DN 40 PN10 - DN
- 5 Mains water inlet 1" via a solenoid valve
- 6 Irrigation pump (not included)

# ACO Wastewater Treatment Plant

## Residential and commercial solutions

Wastewater derived from human activities in households such as bath, laundry, dish washing, garbage disposal, toilets etc is called as Domestic Wastewater which usually contains relatively small amounts of contaminants but even small amount of pollutants can make a big impact on environment.

Hence, a properly installed and maintained residential sewage treatment system for treating and disposing of household wastewater will minimize the impact on ground water and surface water.

**NECOR**  
Moving bed bio reactor



Compact domestic waste water treatment plant using sludge activated with a culture fixed on a fluidised bed.

**SBREM**  
Sequential batch reactor



Sequential domestic wastewater treatment plant with removal of nitrogenous pollution.

**ROX**  
Extended Aeration



Treatment plant using activated sludge with extended aeration of domestic wastewater.

**INSITU STP**  
Sewage Treatment Plant



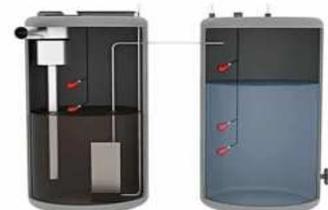
ACO will supply all technologies with in-situ solution. All necessary electro-mechanical components will be supplied for in-situ WWTP.

**ROXPLUS**  
Membrane bio reactor



The ROXPLUS regeneration station is a set of systems for wastewater treatment similar to a domestic system, from which quality water is obtained for reuse by means of membrane technology.

**GREM**  
Greywater recycling system station



The recycling station GREM is a series of systems for treating greywater coming from showers, baths and basins, obtaining water with quality for use utilising membrane technology.

# ACO Water Purification System

## Ultrafiltration (UF) and Reverse Osmosis (RO) systems

Ultrafiltration (UF) and Reverse Osmosis (RO) systems are advanced membrane-based water treatment technologies designed to remove suspended solids, microorganisms, dissolved salts, and other impurities from water. UF serves as an effective pre-treatment by eliminating particulates and pathogens, while RO provides high-purity water by filtering out dissolved contaminants at the molecular level.



### Advantages

- High purification efficiency
- Compact and modular design
- Low operational and maintenance costs
- Automated control for consistent performance

### Typical Applications

- Pharmaceuticals
- Hotels
- Food & beverage, power generation
- Chemical processing
- Municipal water supply
- Hospital and laboratory water systems
- Wastewater recycling
- Residential
- Farms (such as flower,herbal,other greenhouses e.t.c)



# Grease Separators

## Cutting-edge solutions for fat management

Grease separators must be adaptable and versatile, and available in various sizes and materials to meet the numerous and diverse needs of industries and commercial establishments. ACO has developed a comprehensive product line, which includes grease separators for both above-ground and underground installation. Expertise, cutting-edge engineering, and experience ensure complete, high-quality products capable of meeting all international standards in separation technology.



ACO offers specific solutions for every application.

**Above-ground grease separators** made of polyethylene or stainless steel.

**Underground grease separators** made of polyethylene or reinforced concrete. The Lipumax-P series includes cost-effective solutions and various product options.

### Typical applications

- Meat processing
- Commercial kitchens
- Restaurants
- Rotisseries and fry shops
- Highway service areas
- Catering services

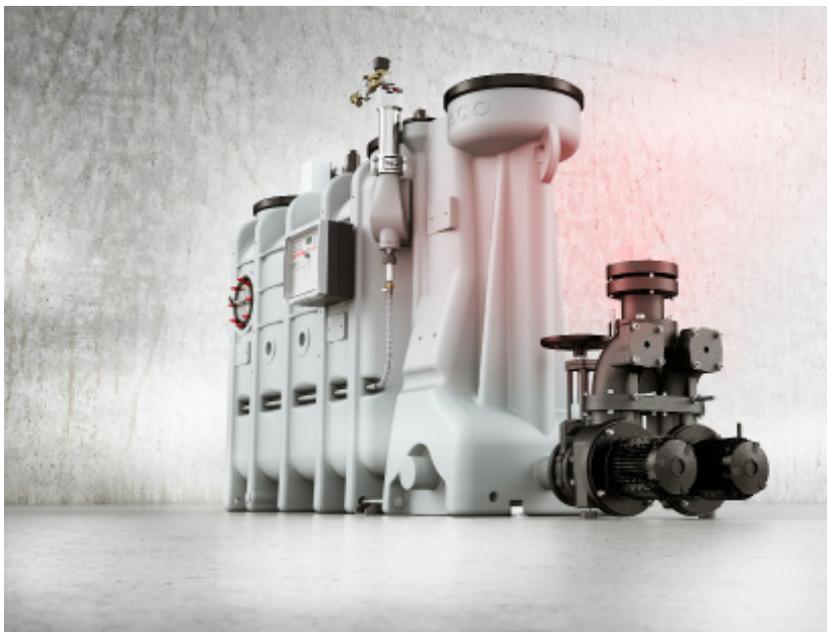
# ACO LipuSmart: the 4-in-1 solution

Grease separator with integrated lifting system and remote management app

- Grease separator
- Sampling unit
- Lifting system
- Main control unit for the entire system

## Smart

- Because the backflow protection is integrated
- Because only a single ventilation duct is required
- Because a single control unit manages the entire system



In terms of performance, LipuSmart takes the lead and extends its technological advantage thanks to numerous optional features:

- Measurement of grease layer thickness
- High-pressure automatic internal cleaning
- Signal unit with GSM module
- Disposal pump
- Inspection window
- Filling device



## Intelligent control unit

LipuSmart is equipped with a control unit for the entire system, capable of integrating the individual control units of the grease separator, the lifting system, and the various components into a single unified system.

- Digital protocol system for the grease separator
- Settings saved on an SD card
- Bluetooth interface (included) or Modbus interface (optional)
- Signal unit with GSM module (accessory) for automatic data transmission
- Clear menu structure
- Parameterization and configuration via app
- Graphical display of the grease separator disposal pump



## ACO LipuSmart app

The system can be easily configured, monitored, and serviced via the ACO LipuSmart app for iOS and Android. Checklists guide you step by step, and control settings can be saved.

<http://aco.me/lipusmartapp>

# Lifting Systems

Anyone using a bathroom, shower, or washing machine in the basement faces a common problem: these rooms are generally located below flood level (street level). According to the principle of communicating vessels, in such cases, backflow can occur. The direct connection between the building and the public sewer system, under certain conditions, can allow wastewater to enter the building through inadequately protected discharge points, such as floor drains, toilets, etc.

A wastewater lifting system, whose pressurized discharge pipe is directed beyond the backflow line, provides optimal protection against backflow. ACO lifting systems can handle height differences of up to 20 m, depending on the model chosen. They are available in sizes suitable for single-family and multi-family buildings, as well as for commercial and industrial buildings. The pumps are designed for greywater or blackwater and can also be used downstream of large nominal grease separators.



Muli-Star



Muli-Pro



The Muli-Star and Muli-Pro floor-mounted lifting systems are designed to lift blackwater from basement or semi-basement rooms such as utility rooms, cloak-rooms, showers, or bathrooms.

## Muli-mini system



- Floor-mounted lifting system for grey water with polyethylene tank
- To be installed downstream of a floor grease separator (up to NG 4)
- Total usable volume between 55 and 140 liters
- Flexible connection thanks to different inlet heights
- 340 mm maintenance-accessible manhole
- High chemical resistance of all components
- Tool-free disassembly
- Optimized for installation in small spaces (fits through a 700 mm door)
- Lightweight



### Muli-Max F / Powerlift P – Buried wastewater pumping systems

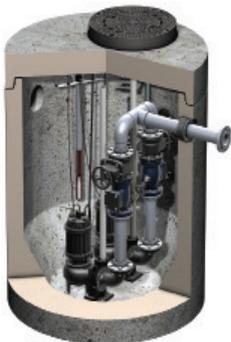
These pumping stations are frequently used where it is not structurally possible to install floor-mounted (outdoor) wastewater lifting systems. They are particularly suitable for the drainage of large external surfaces. Due to their high usable volume, they are also an excellent solution for installation downstream of large grease separators with high nominal sizes.

In commercial units with a large number of employees, even fecal wastewater often needs to be transported. The pump tanks are made of polyethylene and are characterized by high stability, good resistance, and maximum anti-buoyancy protection.

ACO pumping stations are modular: the load class, control system, type of level measurement, pump type, and various accessories can be freely selected. Complete pumping stations ensure optimal drainage with pressure pumps for domestic wastewater.



### INSITU Application



The ACO pumping station designed for commercial buildings and large rainwater areas located below the backflow level.

ACO will supply all the internal components for the insitu application.





## ACO Service

From maintenance and repair to system modernization: with ACO, you get everything from a single point of contact.

The high-quality service provided by ACO support professionals ensures maximum operational reliability with clear cost transparency through standardized flat-rate services.



### Maintenance

- Maintenance in compliance
- Effective maintenance management
- Maintenance that preserves value

The permanently reliable operation of a system can only be ensured through proper maintenance at regular intervals.

#### Grease separation systems: EN 1825-2

- Maintenance interval: at least annually
- Emptying and cleaning operation: at least every two months

#### Light liquid separation systems: EN 858-2

- Maintenance interval: at least every six months

#### Lifting installations/pumping stations: EN 12056

- Maintenance interval:
  - Quarterly for systems in public/commercial settings
  - Every six months for systems in apartment buildings
  - Annually for systems in single-family houses

## Periodic and extraordinary maintenance

The service offered includes scheduled interventions (from 2 to 6 depending on the site's needs) in return for the payment of an annual fee.

It is supplemented by extraordinary activities, which can be guaranteed on weekdays within 48 hours of the call, or can be linked to 24/7 availability, providing greater protection for particularly critical production activities, for possible emergency interventions to be carried out within 6 hours of the call, including evenings/nights and holidays.

## First start-up

- Verification of correct installation and proper functioning of the system
- Leak test
- Issuance of the work report

All separation systems must undergo testing before commissioning and, subsequently, general inspections scheduled at regular intervals not exceeding 5 years. The initial start-up is intended to verify that the system is in proper condition and can be used:

- It is correctly installed electrically and hydraulically and can be operated properly
- It is appropriately sized
- It is fully functional

The results of the general inspection are presented clearly and understandably by ACO service professionals in a detailed report.



## Drainage System Assessment(DSA)

ACO is available to manage and carry out The ACO Drainage System Assessment (ACO DSA) comprises a complex evaluation of the existing drainage system and surrounding environment including production and service technologies and its impact on potential risks within food processing plants. This evaluation also covers risks arising from drainage integration, and floor and wall quality.

The opinions of our expert team, the views of the client, local experience and industry best practice are considered when identifying current and potential risks.



# Technical project support

Together, we tackle every project successfully!

Every project is different, with its own needs and challenges. In addition to our products, we offer our know-how and service to develop tailor-made solutions together – from design to post-sales support. ACO is your first point of contact at every stage of the project.



## train:

### **Training and information**

Through specific documentation and training and development sessions on our solutions, we share the expertise of the entire ACO Group with distributors, designers, architects, installers, and, in general, with anyone who emphasizes quality.

## design:

### **Design consultancy**

Contracts and the design of drainage lines or treatment systems involve many variables. Our team of consultants helps clients find the right answers by identifying the safest, most functional, and cost-effective technical solutions. They also ensure that every aspect of the project meets the highest standards.



**The invitation we extend to you:  
askACO**

ACO provides you with all the services and support needed to help you properly configure drainage and water treatment systems and to prevent their future deterioration. Our extensive experience and deep expertise translate into the ability to always offer the best solutions to our clients.

**support:**

**Technical and commercial support**

We provide our clients with a high-quality, professional technical and commercial support service, offering precise and timely responses regarding products, orders, and deliveries. The ACO team is also available for on-site inspections and during the installation of its drainage and water treatment systems, to provide guidance and useful advice.

**care:**

**Maintenance support**

We provide valuable advice by defining procedures and indicating the most appropriate methods to keep the drainage system in optimal condition.

# ACO East Africa References

## Food and Beverages



Coca Cola, Ethiopia, Kenya and Uganda.



Diageo Group, Tanzania, Kenya and Uganda



Heineken, Ethiopia

## Hotel, Hospital, and Residential



Park inn Hotel, Kenya



Hilton Curio Hotel, Kenya



Village Market and Trademark Hotel, Kenya

## Urban Infrastructure and Airport



Kabbale Airport, Uganda



Berbera Port, Somaliland



Maputo Port, Mozambique

## Shopping Malls



Sarit Center, Kenya



Broadwalk Mall, Kenya



Arena Mall, Uganda

## Waste Water Treatment and Water Purification



Five Star Paradise, Kenya

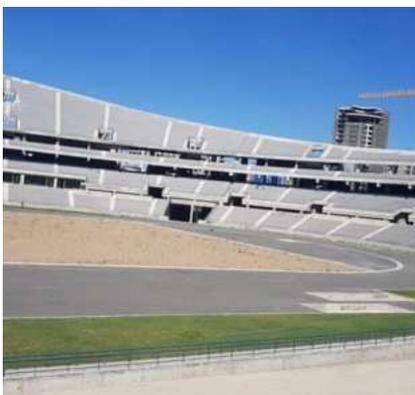


King Faisal Hospital, Rwanda



Hariss International, Uganda

## Sports Stadium and Petrol Station



Semera Stadium, Ethiopia



Assosa Stadium



Total Energies, Kenya

Each of our products  
supports the ACO WaterCycle



- 
- Drainage channels
  - Separation systems for wastewater and stormwater
  - Storage, attenuation, and infiltration tanks
  - Stainless steel pipes
  - Lifting systems
- 

ACO Drainage Systems Limited.

Rivaan Centre, 5th floor, Muguga Green  
Nairobi, Kenya  
Tel. +254 (0) 11 000 3001  
info@aco.co.ke  
[www.aco.ke](http://www.aco.ke)