Industrial and Commercial Projects under pressure

Global climate change is also causing more frequent extreme weather events, such as droughts and heavy rainfall. Combined with rapid urbanization expected to double by 2050 it puts urban sewages under massive pressure. Therefore, industrial and commercial projects need to rapidly rethink and increase their capacity for sustainable water management – collecting, cleaning and reusing scarce resources in order to reduce and control risks for people's health and lives and for the safety and security of their property.

How ACO can help?

ACO offers next generation surface water management solutions which control the water flow from collecting, to cleaning, holding and to its timely release back into nature to restore the natural water cycle. Our cutting edge sustainable system solutions are practical, cost-effective and help people to manage the water safety for people and the environment.

What ACO customers say?

Ivelina Pavlova
Director BG Manufacturers

The Investor:

"The rainwater from the roof was flooding not only our parking, but also the neighboring property. ACO Design and Service team quickly found the best solution"

arch. Ivo Pantaleev
Baumax Sofia project

The Architect:

"When designing supermarkets, I always trust on ACO for the surface water management, because of their complete solutions and dedicated support."

Mityu Genev
Designer of BH Air Logistics

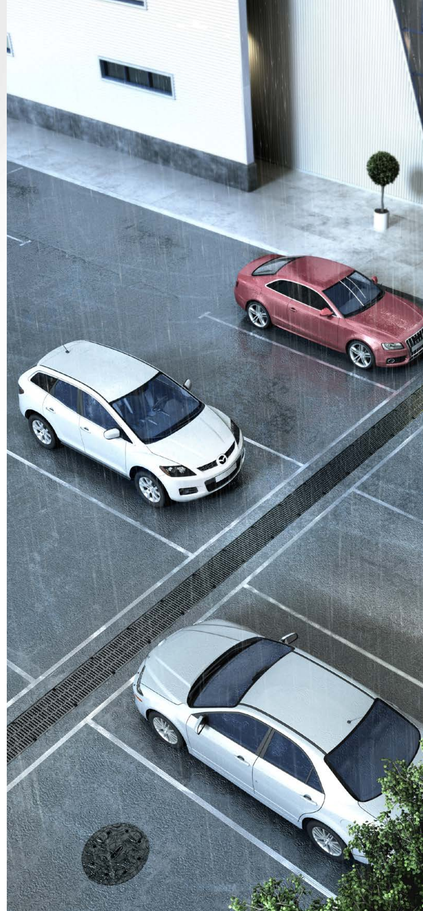
The Design Engineer:

"Designing the logistic base of BH Air came with two major challenges – the area had no existing sewage system and the project demanded the highest load class of drainage. Together with the engineers from ACO we designed a complete solution for safety and durability.

ACO. The future of drainage. **www.aco.pl**

Surface Water Management for
Industrial and Commercial Projects

ACO. The future of drainage.



collect clean hold release

collect: Gather and capture

What a well-designed system should have?

- Hydraulic calculation of the area
- Load class according to the area of application
- Guaranteed safety
- Compliance to EN 1433

When do you need to collect water?

Always when the surface is covered:

- Asphalt
- Pavement
- Concrete, etc.

The surface water is collected from the surface as quickly and as completely as possible by the drainage system to guarantee protection, safety and comfort for the people, buildings and traffic routes in the immediate vicinity.
ACO offers a comprehensive range of drainage channels, designed for optimal performance according to the specific requirements of the project.

ACO Combipoint
point drainage

ACO Qmax
drainage channel with big storage capacity

ACO KerbDrain
kerbs with integrated drainage channels

ACO Monoblock
monolithic drainage channels

collect **clean** hold release

clean: Pre-treat and process

What a well-designed system should have?

- Hydraulic calculation of treatment
- Compliance to EN 858
- Easy and safe manintenance

When do you need to clean water?

Always in areas with potential oil spill or heavy metal particles in the surface waters:

- Parkings and traffic areas
- Petrol Station and Car-wash
- Buildings with metal roofs

Surface waters from parkings, petrol station, car wash or other traffic areas contain oil products, which create potential danger if collected in the sewage system. On the other hand, if petrol substances are released into nature, this presents a danger to soil, underground waters and the environment. The collected surface water is treated in order to prevent oil products or heavy metal particles from entering the sewage system or being released into nature. ACO offers a range of oil and heavy metal separators, made of concrete, plastic or steel, designed to fulfill functional requirements of the project.

ACO Oleopator P
oil separator

Oleopator-C-FST
oil separator

ACO Coalisator L
oil separator

ACO Oleosmart
filterless oil separator

collect clean **hold** **release**

hold and release: Retain, contain, discharge and reuse

What a well-designed system should have?

- Hydraulic calculation of the area
- Static stability of the system
- Easy maintenance and supervision

When do you need to hold and release water?

Always in case of limited outflow or of water reuse:

- No or limited sewage system
- Attenuation and flow control
- Reuse of stored water

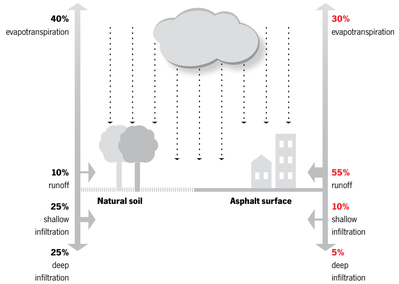
Previously an occasional hazard, the risk floods undoubtedly increases in future in line with the predicted greater frequency of heavy rain storms. This is because sewers are only designed to cope with average rainfall volumes for economic and technical reasons. Mixed water sewers can therefore very quickly fill up completely during major cloud bursts and cause damages and discomfort on the road and in buildings. The innovative attenuation systems from ACO ensure that water volumes stay within the drainage system where they can be properly controlled. This part of the surface water management enhances protection and safety for extreme situations and enables reuse of water resources.

ACO Stormbrixx
attenuation system

ACO Stormbrixx
infiltration system

ACO Qflow
flow control

Why sustainable Surface Water Management is key today?



As a result of rapid urbanization the natural water cycle is drastically disturbed:

- In nature 50% of rainfall infiltrates into the ground and some 10% remains on the surface.
- In highly urbanized areas 55% of all rain remains on the surface and only 15% penetrates into the ground as covered surfaces and buildings prevent water penetration
- Water resources are depleting and with decreasing quality, which impacts humans, fish and wildlife alike.

ACO solutions excellence is additionally underpinned by ACO Services:

train:
Information and further education

design:
Planning and optimisation

support:
Onsite support and assistance

care:
Servicing and monitoring

Our vision

ACO is the world leader in drainage technology

We see our markets trough the eyes of our customers. We like to keep in close contact with them to impress them with the best products and services.

Our mission

ACO creates solutions for tomorrow's enviromental conditions

Global climate change is causing more freqent extremeweather events such as droughts and havy rainfall. We develop innovative system solutions to weather these events.

Our strenght

ACO ceates a passion for top performance

We support those that act courageously. We enjoy working together creatively across all cultural barriers. In our philosophy, setbacks are an opportunity to become even better.