



ACO Pumping Stations

Powerlift G, Powerlift G-H

for clean, hold and reuse applications



ACO Powerlift G

Powerlift G is a standardized, modular, and compact pumping station designed to prioritize short delivery times, easy installation, reliable operation, accessible practical design, and a long lifespan.

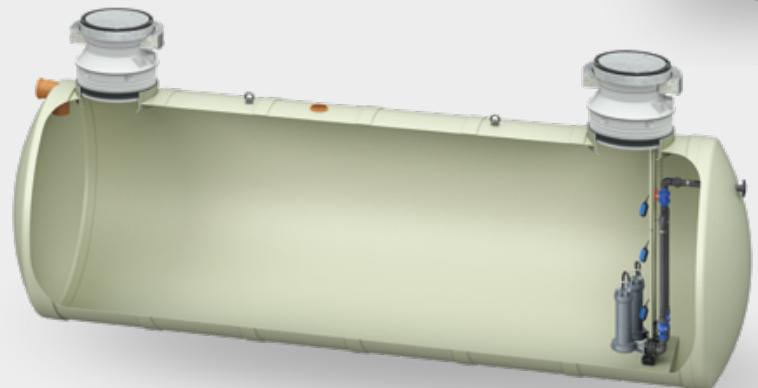


Multicontrol Duo



Stormwater system chain

The stormwater system chain serves more than merely transporting water to higher elevations and over longer distances; it also facilitates water reuse applications such as toilet flushing. With the modularity of GRP, it becomes feasible to ensure adequate water accumulation, release, and reuse management, resulting in an all-in-one, compact solution that is both easy to install and cost-efficient.





Synergy with ACO stormwater solutions and other applications

Powerlift G plays a pivotal role in the ACO stormwater program, offering an integral component of a comprehensive solution for the entire stormwater management chain.

The ACO WaterCycle



Pumping station

The pumping station consists of all preinstalled equipment, including durable GRP tanks and covers, pumps, pedestals, lifting elements, pressure pipes, control systems and other optional accessories. ACO offers modular customized pumping stations assembled from standardized parts in a short time, or fully customized solutions tailored to specific project requirements.

Powerlift G configurator

To respond quickly and efficiently to inquiries and offer handling, the internal ACO configurator tool easily customises standard pumping stations in just few minutes.

GRP tank

The GRP tank is designed to withstand various conditions, including high groundwater levels, and supports load class covers up to DN 400.

Note: Pictures are for illustration purpose only.

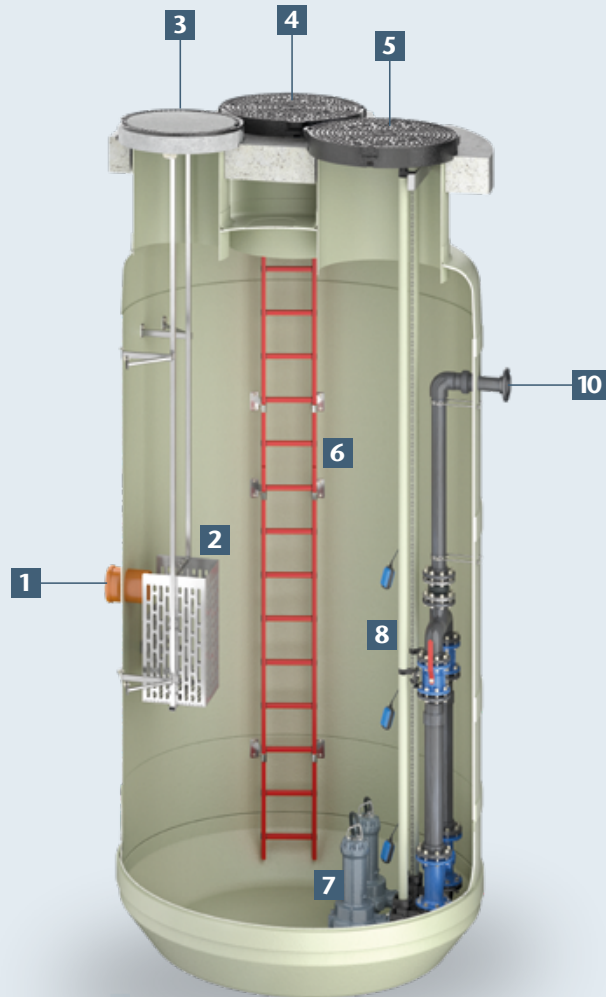
Scan the QR code to read more online
about ACO Surface Water Management



Pumps

Product overview

- 1** Inlet
- 2** Screen basket
- 3** Screen basket load cover
- 4** Ladder load cover
- 5** Pump lifting device load cover
- 6** Ladder
- 7** Pump
- 8** Guiding bar
- 9** PVC pressure pipe
- 10** Outlet



The **ACO Stormwater system chain** creates drainage solutions for the environmental conditions of tomorrow.

Pumping station

The pumping station is equipped with dual pumps (1+1) and is designed to handle nominal flow rates with only one pump. In normal situations, the pumps alternate, offering highly reliable operations in the case of failure or maintenance required on the other pump. In extreme flow situations, the pumps work simultaneously. Other pump configurations with different operational programmes and performance sizing are available on demand.

Depending on projects requirements, pump selection can be adapted:

- **Economy lines** emphasis durability and cost effectiveness. Brands included here are: Zenit, Caprari, Lowara, HCP, etc.)
- **Premium lines** are unrivalled in quality and include almost any brand and type of pump on demand.

Standard configurations

Robust prefabricated GRP tanks standardly in three diameters D1 (*)

Diameter D1 [mm]	Total height H [mm]	Pressure pipe [PVC as standard]
1500	Max. 7000	DN 50, DN 80, DN 100
1800	Max. 7000	DN 50, DN 80, DN 100
2200	Max. 8000	DN 50, DN 80, DN 100

(*) Other diameters, materials and setups are available on demand.

All pumping stations are equipped with a ventilation pipe.



Control system

Our control systems are highly reliable and offer service planning and remote operations (GSM; ...). Water storage, controlled release or re-use applications can also be provided.



Water levels can be monitored by:

- Float switches
- Hydropneumatic pressure bell sensors
- Electronic pressure probes 4-20 mA

Control panels include:

- ACO Multicontrol Duo
- ACO SMART control unit (in development)
- Customised control panels on demand

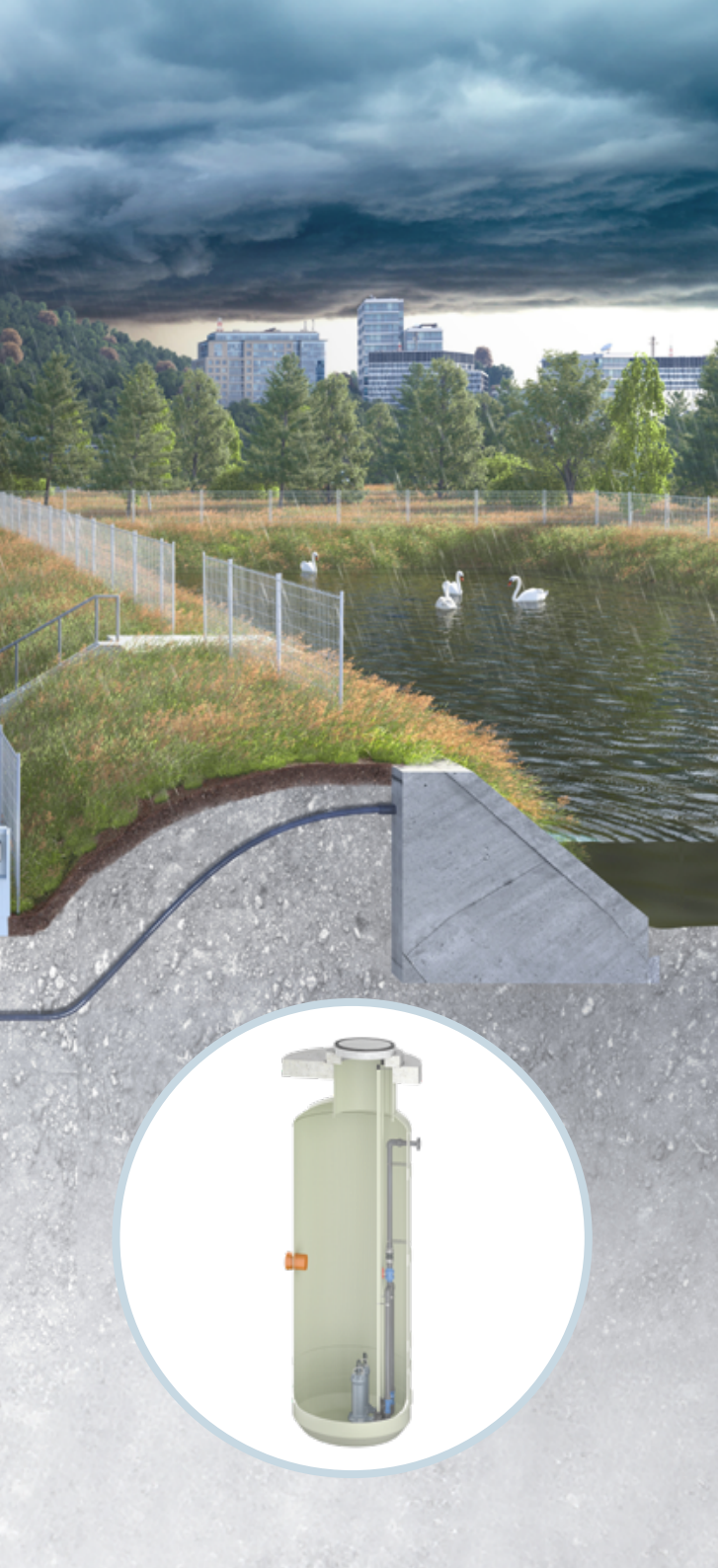
Optional accessories

- Ladder
- Screen basket
- Pressure pipe material (PE, stainless steel)
- Other accessories on demand

Service

ACO Industries Tábor provides **warranty** and **post-warranty services** for pumps and all pumping station equipment.

On site service is provided by a local ACO partner, which helps to develop unique service strategies and business development.





Pumped waters

- Waste water
- Storm water

Suitable applications

Powerlift G is intended for use with other ACO products (as a part of the **ACO WaterCycle**), or separately for **specific cases** according to customer, including when:

1

Gravity discharge is not possible and water must be pumped to a different geodetical height;

2

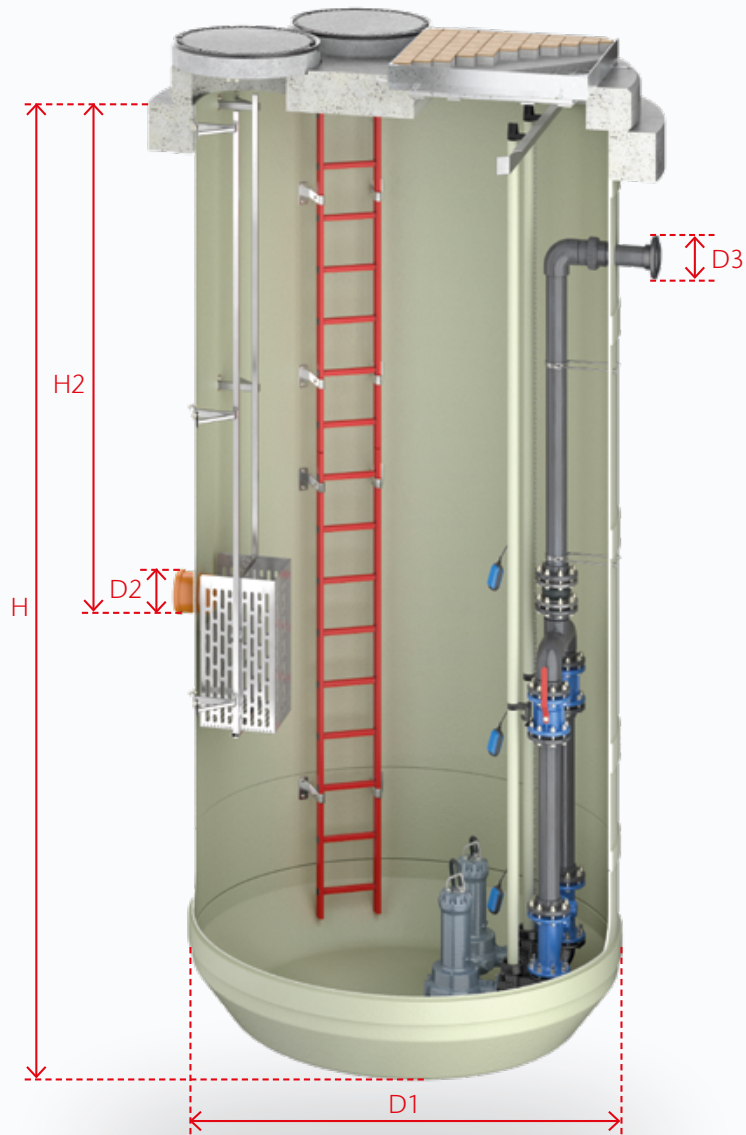
Backflow protection is needed;

3

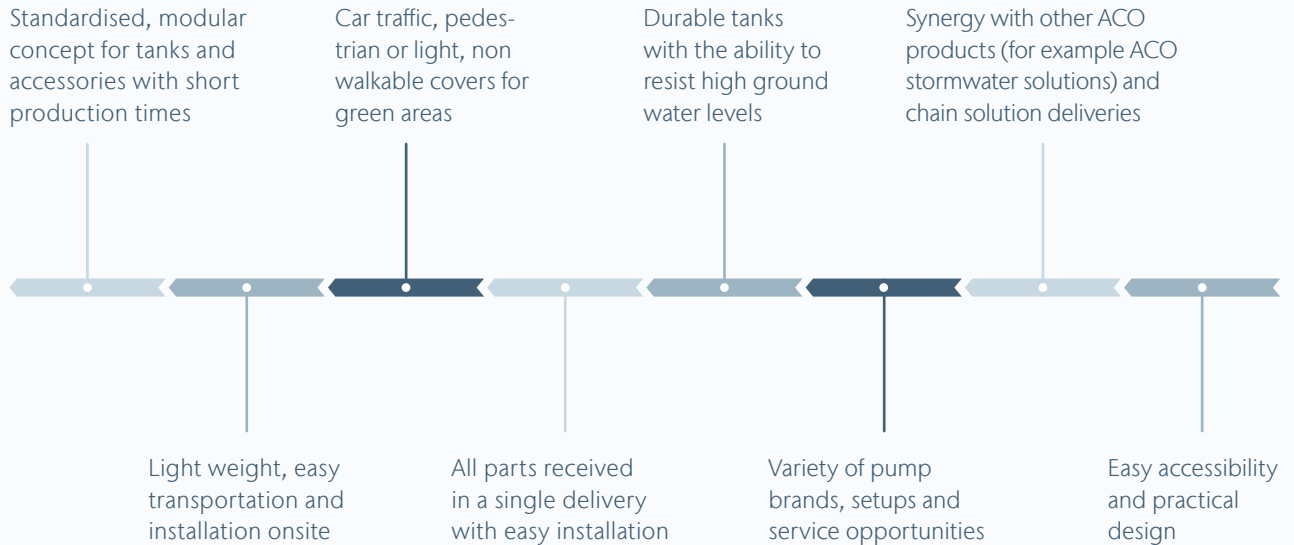
Combination of purposes is needed (such as accumulation or re-use)



Design criteria



Product benefits



Design criteria

Type of water	Waste water, stormwater, drainage water, others	
Pump parameters	Flow rate Q (l/s)	Pumping head H(m)
Ground level of pumping station	H (m)	
Inlet pipe	Height H2 (mm)	Diameter D2 (mm)
Outlet pipe	Height H3 (mm)	Diameter D3 (mm)
Cover	Light full cover / pedestrian cover / load covers up to D 400	
Ground water level	H4 (mm)	
Optional accessories	Screen basket, ladder, others	

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



GRP features & benefits

Resin



Glass fibres



+



GRP material is produced by winding and spraying



ACO use GRP (glass reinforced plastics)

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

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.



Residential area

Leisure area

Commercial area



Infrastructure

Industrial area



ACO. we care for water



Every ACO product supports
the ACO WaterCycle

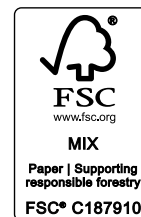


-
- ACO stormwater management
 - ACO pumping stations
 - ACO oil separators
 - ACO grease separators
 - ACO hydrodynamic separators
 - ACO stormwater filters
 - ACO sedimentation tanks
-

ACO Industries Tábor s.r.o.

Průmyslová 1158
391 01 Sezimovo Ústí
Czech Republic

www.swm.aco



Edition 01/2024 – Subject to alterations

