



ABOVEGROUND TANKS

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100% reusable PE material



Resistant to Nordic climate



Good chemical resistance



Safe to maintain



Resistant to mechanical damage



The PE material's guaranteed lifetime is 50 years



Dear customer!

Welcome to our aboveground tank catalogue!

Here you will find information on what size aboveground tank to choose and how to install it.

Our aboveground tank development process focuses mainly on long-term durability, ease of installation and safety of use.

STRONG aboveground tanks are made of strong double-wall PE (polyethylene) and they are used in various applications of industry, water treatment plants and agriculture.

STRONG tanks are intended for collecting and storing utility, waste and storm water, as well as various chemicals.

Detailed information about all our products is available on our homepage www.iwsgroup.ee.



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PRODUCT RANGE



VERTICAL TANKS

Made of PE (polyethylene). The tank cylinder has double walls and is smooth on inside and outside.

ID 500, 600, 700, 800, 1000, 1200, 1400, 1600, 2000, 2400 mm

The tank's parameters are chosen according to needs:

- capacity (diameter and height);
- inflow and outflow connections;
- monitoring and maintenance covers;
- railings, ladders and service platforms;
- thermal isolation.



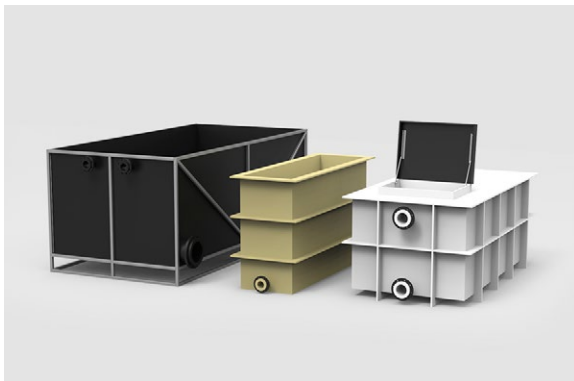
HORIZONTAL TANKS

Made of PE (polyethylene). The tank cylinder has double walls and is smooth on inside and outside.

ID 500, 600, 700, 800, 1000, 1200, 1400, 1600, 2000, 2400 mm

The tank's parameters are chosen according to needs:

- capacity (diameter and height);
- inflow and outflow connections;
- monitoring and maintenance covers;
- railings, ladders and service platforms;
- thermal isolation.



RECTANGULAR TANKS

Made of PE (polyethylene) or PP (polypropylene). The tank is made with single-wall sheets and is smooth.

The tank's parameters are chosen according to needs:

- capacity (length, width and height);
- wall thickness and design;
- inflow and outflow connections;
- monitoring and maintenance covers;
- railings;
- thermal isolation.



SCRUBBERS

Made of PE (polyethylene). The tank cylinder has double walls and is smooth on inside and outside.

ID 500, 600, 700, 800, 1000, 1200, 1400, 1600, 2000, 2400 mm

The scrubber's parameters are chosen according to needs:

- capacity (diameter and height);
- inflow and outflow connections;
- monitoring and maintenance covers.

TECHNICAL CHARACTERISTICS

STRONG tanks are made of PE-HD (high-density polyethylene). Nowadays, PE is a common material used for manufacturing pumping stations, tanks, wells and pressure pipes, because it is particularly durable in Nordic climate.

PE is a very wear-resistant and elastic material. PE is chemically inert in normal use, meaning that a tank made of PE will not rot, rust or corrode due to chemical

or electrical reactions and nothing will emit or dissolve from them into the environment.

Tank cylinders are made of spiral pipe with a double wall, ensuring total leak protection.



100% reusable PE material



Resistant to Nordic climate



Good chemical resistance



Safe to maintain



Resistant to mechanical damage



The PE material's guaranteed lifetime is 50 years

PHYSICAL PROPERTIES

PROPERTY	UNIT	VALUE	STANDARD
Density	kg/m ³	>930	ISO 1183
Elastic modulus	N/mm ²	800–900	ISO 527
Thermal expansion rate	mm/m °C	0.18	
Ring stiffness	kN/m ²	2–16	ISO 9969
Thermal conductivity	W/m °C	0.40	
Temperature resistance	°C	max +45	long-term
Temperature resistance	°C	max +80	short-term

CHEMICAL PROPERTIES

STRONG tanks are intended for collecting and storing utility, waste and storm water, as well as various chemicals.

Polyethylene is a material resistant to most chemicals.

TANKS FOR HAZARDOUS LIQUIDS

National requirements apply to tanks for hazardous liquids. The requirements covering the design, manufacture, inspection, documentation and installation of tanks.

Hazardous liquids are considered to be explosive, flammable, highly flammable, extremely flammable, toxic or very toxic liquids.



In case of hazardous liquids and chemically active substances, additional checks for the material's suitability are needed.

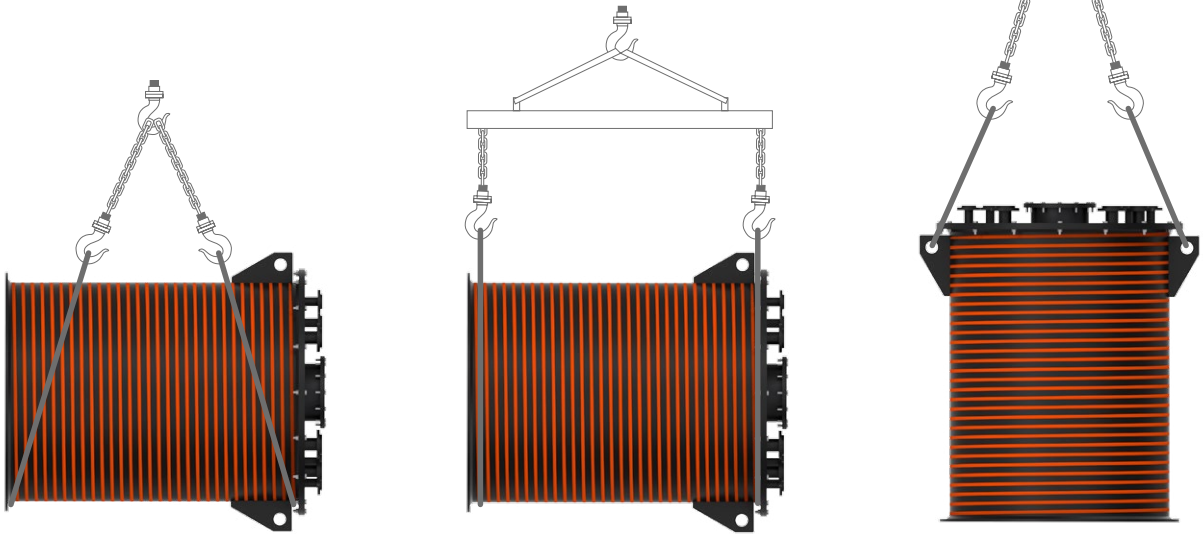


INSTALLATION

TANK LIFTING

To lift the tanks, use the eyebolts on the tank and straps. Always use two lift points. Use a spreader if necessary. Make sure the straps do not damage the tank's protruding parts.

Do not attach steel cables or chains around the tank to lift it. When lifting a tank onto its base, use all its lifting eyes and hanging guide ropes.



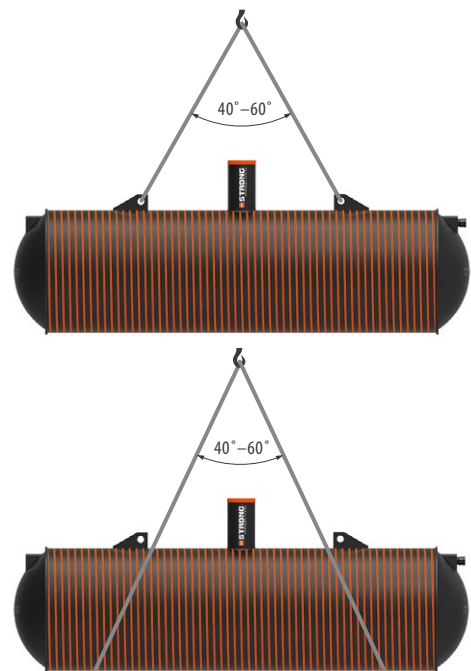
Lifting vertical tanks

TANK INSTALLATION

A tank must be installed on a flat surface. The base and its structure must be strong enough to carry the tank fully filled, without the base breaking or the tank sinking. A tank's anchoring to the base or to a base slab will be designed as needed.



A tank's sideways deviation from the vertical must not be corrected with wedges between the base and the tank's bottom. The base slab must be smooth and without bumps.



Lifting horizontal tanks

MAINTENANCE

If there are no faults, we recommend performing visual inspections after every 3 months.

1. If the tank has closing devices, inspect their functioning. Close and open the valves once.
2. Wash the tank's inner surfaces with a pressurised water jet and clean its

bottom of sediments. Depending on the tank's purpose and use, it may require regular cleaning at shorter or longer intervals.

3. Faulty elements must be repaired or replaced!

As a rule, the tank's cylinder and internal structures do not need any further maintenance.



Repairs of hazardous liquid tanks must take place pursuant to national requirements and must be duly documented.

SAFETY

1. The employer of the tank's maintenance personnel must instruct the maintenance employees about hazards caused by toxic exhaust gases and must provide them with necessary protective equipment.
2. Before entering a tank, the tank must be ventilated!

3. Only one person at a time may stand on the tank's service ladder and the person must not carry along any items that are not lightweight and easy to use.
4. It is strictly prohibited to perform any works inside a tank alone!

5. Close all inflows into the tank for the duration of maintenance works!
6. Before commissioning the tank, properly qualified personnel must verify that all applicable safety regulations are fulfilled.
7. If safety requirements are ignored, no damage claims will be accepted.

WARRANTY

Innovative Water Systems undertakes the responsibility for the equipment's properties and for elimination of shortcomings becoming apparent during the equipment's use. The warranty terms stem from the legislation of the Republic of Estonia, and the warranty is first and foremost based on the manufacturers' warranties as long as they do not conflict with the laws of the Republic of Estonia. The warranty includes shortcomings of the equipment's or its individual elements' manufacture, materials or design.

1. General terms of warranty

- 1.1. The warranty is valid for 2 years i.e. 24 months in case of the product's purposeful use.
- 1.2. The warranty period starts from the product's handover date.

2. Warranty's validity terms

- 2.1. The prerequisite is the regulations in force and the installation and operation manuals required to be followed

upon installation, use and maintenance of the equipment. The warranty will be valid if the equipment has been maintained regularly and used according to the manufacturer's instructions.

- 2.2. The warranty does not include damage caused to third parties because of a faulty product; it also does not include loss of revenue or any other similar loss.
- 2.3. In case of a fault becoming apparent, the equipment shall be repaired, not replaced as a whole.

3. The warranty does not include:

- 3.1. training for installation, maintenance and use of the equipment;
- 3.2. repairs of transport damage and other mechanical damage (caused by vandalism, lightning, fire, etc.).

The warranty does not cover shortcomings caused by insufficient maintenance, incorrect installation and repairs, or normal wear. The warranty is also void if the equipment has been reconstructed.



INNOVATIVE WATER SYSTEMS

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