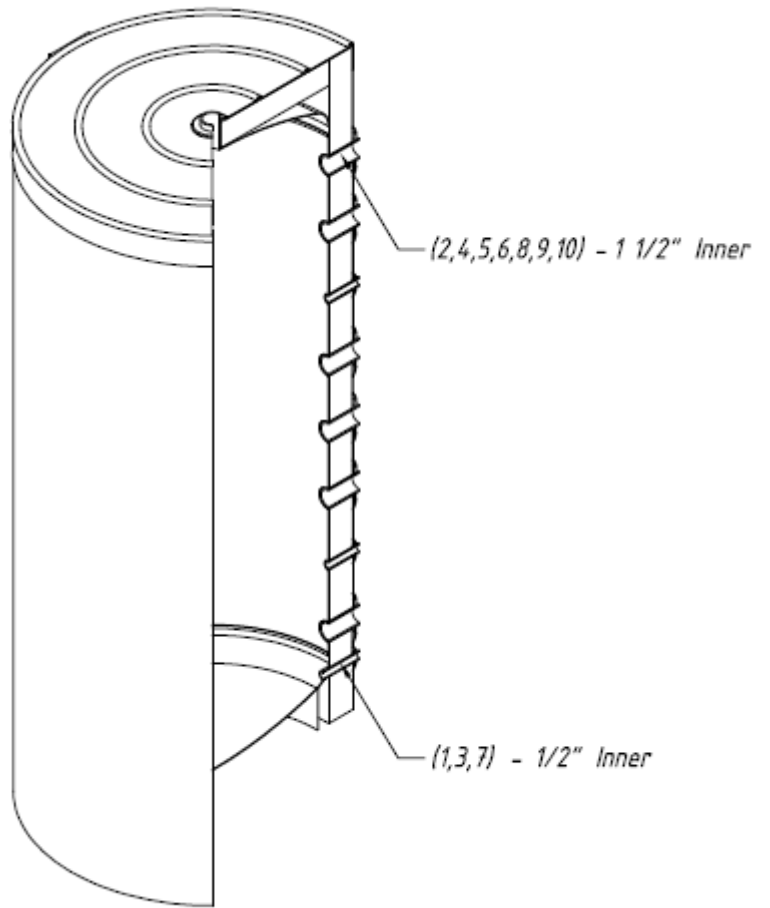
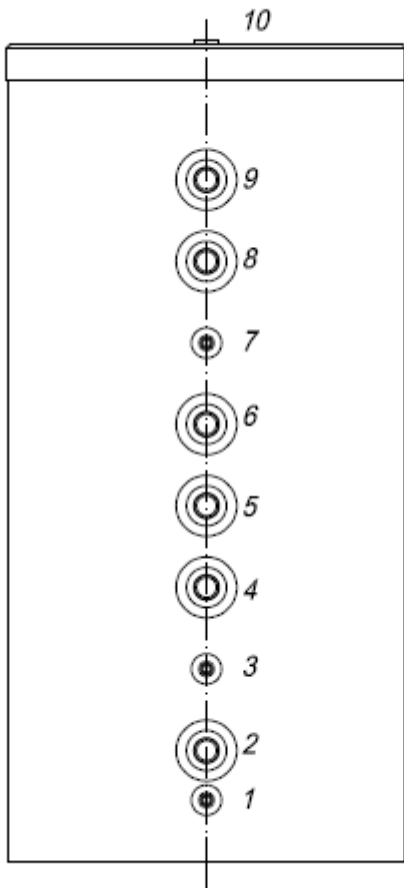




**Data sheet for the
ZKP-Series tank – 200, 300, 500, 750, 1000,
1200, 1500, 2000, 3000, 5000 liters
For heating systems**

ZKP-Series tank diagram



Description of ZKP-Series tank

Application: Accumulation and storage of heated heat transfer fluid for the heating system.

Material: Carbon steel. **Description:** The tank is designed for accumulating heat from various sources and building multivalent heating systems (i.e. if you need the combined operation of multiple heat sources, for example, you want to integrate the operation of a solid fuel boiler and an electric boiler, or a gas boiler and a wood boiler, or a heat pump and a solid fuel boiler and an electric boiler, etc.). The SMART-TANK **ZKP-Series** improves the flexibility of the heating system and serves as a hydraulic separator for the system circuits. It combines well with the following heat sources:

Solid fuel boiler

Biomass boiler

Pellet boiler

Fireplace with a water jacket

Heat pump

Gas boiler

Tank insulation:

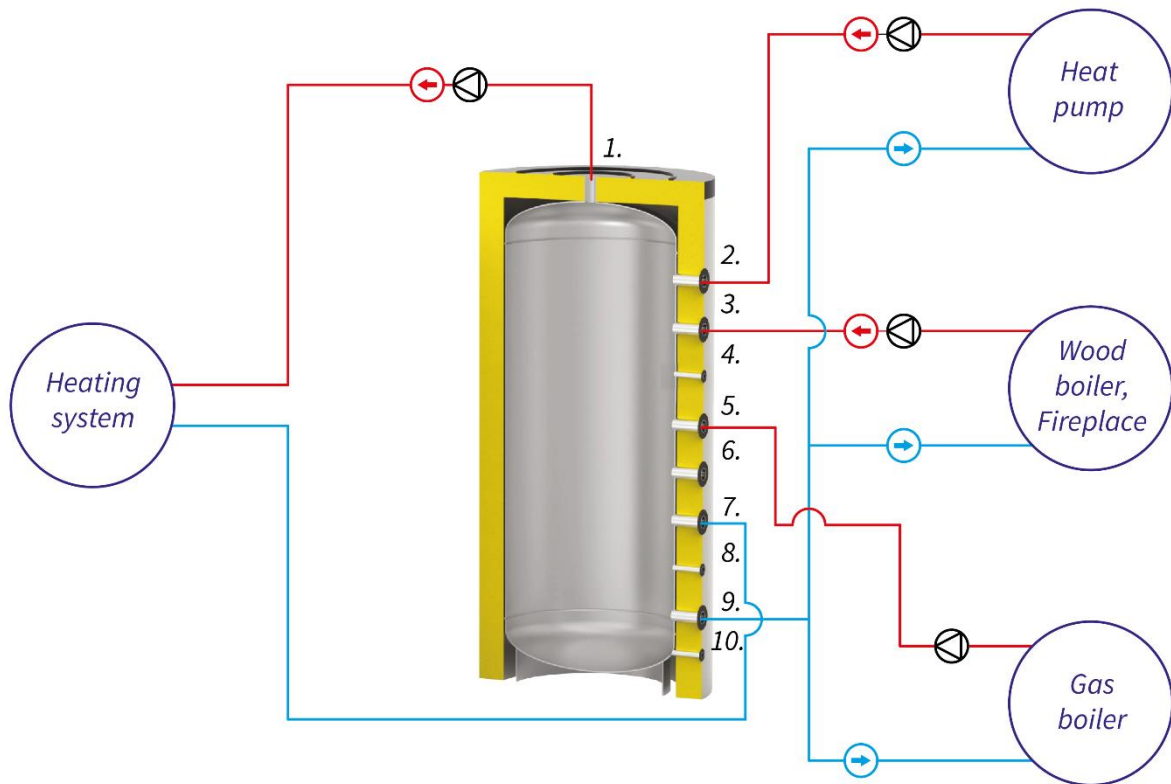
Electric boiler the tank is insulated using NOFIRE technology with a 70 mm thick polyester material, which is 100% recyclable (an environmentally friendly material). The material has a high coefficient of thermal resistance and a high fire resistance class B-s2d0 in accordance with European requirements EN 13501. Tanks with a standard volume of up to 1000 liters are protected by a plastic covering on the outer side. Tanks with a volume exceeding 1000 liters are protected by either a plastic or fabric covering. Please check the insulation color options with the seller.

Optional available:

Customization of the tank according to the customer's drawings (placement of connection pipes, flanges, connection diameters, type, and thickness of insulation), which is calculated on an individual basis.

Process functional diagram of the ZKP-Series tank

SMART-TANK
keeping the best - moving forward



1.|2.|3.|5.|6.|7.|9. - 1 1/2" Inner
4.|8.|10. - 1/2" Inner

Specifications

Tank Specifications	Un. of meas.	ZK/ZKP/PZK 300	ZK/ZKP/PZK 500	ZK/ZKP/PZK 750	ZK/ZKP/PZK 1000	ZK/ZKP/PZK 1200	ZK/ZKP/PZK 1500	ZK/ZKP/PZK 2000	ZK/ZKP/PZK 3000	ZK/ZKP/PZK 5000
Tank volume	l	295	485	703	995	1200	1525	2030	3540	4910
Tank height	mm	1600	1605	1630	2205	2080	2370	2100	2315	3170
Tank diameter without insulation	mm	500	650	790	790	950	950	1220	1500	1500
Tank diameter with insulation:	mm									
Removable polyester insulation		630	780	920	920	1070	1070	1350	1630	1630
Weight	kg	65	87	103	131	174	200	246	450	615
Package dimensions: D*W*H	mm	700*800*1800	800*900*1800	930*1030*1800	930*1030*2350	1130*1050*2100	1130*1050*2500	1400*1500*2200	1800*1900*2450	1850*3200*2000
Diameter of heating element installation port (internal thread)	"	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Recommended maximum capacity of the electric heating element	kW	3--30	3--45	3--45	3--45	3--45	3--45	3--45	3--45	3--45
Maximum tank temperature	C	95	95	95	95	95	95	95	95	95
Maximum tank pressure	bar	3--6	3--6	3--6	3--6	3--6	3--6	3--6	3--6	3--6

Customized tanks with an operation pressure up to 10 bar can be manufactured.

1.Description:

1.1 The **ZKP-Series** tank is designed for use in heating systems! **It is not allowed to use it in hot water supply systems.**

1.2 The thermal storage capacity is designed for a working temperature with the use of water and water-glycol, as well as alcohol solutions, ranging from +2 to +95 degrees Celsius.

1.3 All models of this series have the following design features:

A) The tanks are made of strong high-quality steel and are designed for long-term use.

B) The bottom support of the tank is designed as a ring support, which allows even distribution of the tank's weight on the floor surface and ensures stability.

C) All tanks are equipped with inlet and outlet connectors made of seamless heavy-duty pipes.

2.Arrangement, installation and operation:

2.1 The installation of the tank should begin with familiarization with the technical passport and the installation and operation instructions for tanks (read at <http://smart-tank.pl/en/>).

2.2 The location for installing the tank should be chosen so that:

in case of leakage in the tank, the water can flow into the floor trap and thus be removed from the premises without consequences;

to protect it from impacts, industrial vibrations, and atmospheric precipitation (it is installed indoors only). Any impact or mechanical force can damage the thermal insulation material and compromise the tank's sealing, leading to its failure! When starting the installation, it is essential to ensure free access to the tank for connection, servicing, or dismantling.

2.3 The tank installation should be carried out by qualified specialists and individuals with certificates or licenses for performing heating system installation work! Confirmation of installation is required in the warranty certificate.

2.4. Before starting the operation, rinse with water!

The tank must be grounded. For this purpose, one or several plates are welded to the bottom part of the tank on its supporting section for fastening it to the pan, which can also be used for connecting the tank to the ground. The grounding resistance should not exceed 4 Ohms. The customer is responsible for providing access to the grounding terminal.

The heating system must be equipped with an expansion tank with a capacity of 10% of the total system volume. It is prohibited to install shut-off valves (valves, check valves, etc.) between the expansion tank and the thermal storage tank.

The magnesium anode should be replaced at least once every 6 months, if present.

2.5. The Buyer shall inspect the goods for quality, completeness, and quantity of items in the package within two calendar days from the receipt of the goods but no later than 14 (fourteen) calendar days from the transfer of the goods.

2.6. The tank must not be put into operation without filling it with technical fluid (water, antifreeze, etc.).

2.7. The tank must not be operated without a functional safety valve. The condition of the safety valve must be checked every 14 days by turning the head (spindle) left or right so that the liquid flows from the lateral outlet. Then return the spindle to its original position. If no liquid flows when turning the spindle, the valve is defective. If continuous leakage of liquid is observed after turning and returning the spindle to its original position, the valve plunger is contaminated. Rinse the valve several times by opening the outlet with the spindle. To avoid uncontrolled water drainage, a hose should be installed for draining the liquid into the sewer. It is prohibited to install shut-off valves (valves, check valves, etc.) between the safety valve (pressure relief valve) and the thermal storage tank. The company is not responsible for the poor performance of the safety valve caused by incorrect installation of the valve and errors in the system, such as the absence of a reduction valve in the cold water supply system.

2.8. The leakage of liquid from the safety valve must not be obstructed - do not block the safety valve outlet. If liquid continuously seeps from the valve, it means that the pressure in the system is too high, or the safety valve is defective. The outlet of the drain valve must be directed downwards. It is recommended to place a funnel for draining the liquid under the valve. A drain hose can be installed and directed into the sewer to remove the liquid that occurs when the safety valve is opened. The hose must withstand a temperature of +95 degrees Celsius, have an internal diameter of 9 mm, a maximum length of 1.2 m, and a sloping drain plane (min. 3%), in a room where the temperature does not drop below 0 degrees Celsius. The hose should be protected from mechanical damage, and its outlet must be visible (for checking the valve's operation).

2.9. The tank must not be placed in close proximity to an open flame or come into contact with the boiler's insulation. The installing organization, when setting up the heating system with the tank, must ensure compliance with fire safety norms during operation.

2.10. All technical servicing and installation work should be performed in accordance with the current safety regulations.

3. Tank selection:

3.1 The selection of the tank is made individually based on the parameters of the heating system or according to the project documentation.

3.2 The manufacturer reserves the right to make technical changes in accordance with the design documentation.

4. Warranty:

4.1 The manufacturer guarantees the compliance of the SMART-TANK **ZKP-Series** accumulator tanks with safety requirements, provided that the consumer adheres to the rules of transportation, storage, installation, and operation. The warranty period is 2 years from the date of sale by the manufacturer, and with the purchase of an extended warranty, it extends up to 7 years. The warranty period for the exterior paint coating is 6 months, provided that the storage and transportation rules are followed.

The product is to be registered by mailing the required information to the manufacturer's address service.heatex@gmail.com, the List of required documents is provided in Installation and Operating Manual in case the product is not registered, the warranty period is 1(one) year from the date of sale.

4.2 Procedure for Fulfilling Warranty Obligations. If warranty claims are justified, the service department of SMART-TANK decides how the identified defects can be rectified – either through repair or replacement of the faulty device. The warranty period specified in the warranty certificate remains unchanged. In the case of replacing a faulty device with a new one, the warranty period is not extended, and a note about the replacement is made in the warranty certificate.

4.3 The warranty does not cover defects arising due to the consumer's fault resulting from non-compliance with the installation and operation rules, technical passport requirements, or in the presence of mechanical damage.

4.4. For malfunctions discovered during the warranty period, the consumer should contact the manufacturer/importer. Free repair of malfunctions caused by the manufacturer's fault will be carried out within the timeframe specified in the applicable legislation, from the date of confirmation by the manufacturer/importer that the case is covered by the warranty.

ATTENTION – Do not dismantle the tank before obtaining permission from the manufacturer's plant in case of a warranty claim.

4.5. To submit a warranty claim to the importer/seller's service center, the following information must be provided: invoice number and product serial number (found on the information label), purchase date, description of the malfunction with attached photos and videos, precise installation address, and contact phone number.

4.6. The fulfillment of warranty repairs for the tank requires the user to provide a valid sales receipt, invoice, and fully completed warranty certificate with the seller's and installing organization's stamps, without any corrections. The warranty certificate must be kept throughout the entire period of equipment operation.

4.7. It is prohibited to install the tank without a functioning safety valve and expansion tank. To maintain the warranty, confirmation of the purchase of the corresponding safety valve and the safety valve's warranty certificate is required.

4.8. The installation and commissioning of the tank, which is subject to warranty coverage, must be carried out by a qualified specialist following the rules established by the legislation, as well as the installation and operation instructions (available at <http://smart-tank.pl/en/>).

4.9. Protect the tank from direct sunlight exposure.

4.10. The tank should be installed in areas not exposed to weather conditions (rain, snow, etc.).

4.11. Do not use plastic pipes not suitable for operation at a temperature of 100 degrees Celsius and a pressure of 1.0 MPa for connecting the tank.

4.12. Install the tank in a way that provides free access for technical maintenance.

4.13. The manufacturer is not responsible for any inconvenience or expenses related to structural changes to the building/rooms required due to the installation location's conditions (e.g., narrow doors or corridors) – requests for expense coverage will be declined by the manufacturer. If the water heater installation must be done in an unusual location (e.g., an attic, rooms with water-sensitive flooring, warehouses, etc.), the room must be protected from possible water leaks, and

consideration should be given to installing devices designed to collect and drain the water to avoid damage.

4.14. Any mechanical damages to the tank lead to a loss of warranty.

4.15. The warranty does not apply if:

- The heating system using the tank was filled with a solution other than distilled water or a specially prepared solution for heating systems with an appropriate quality certificate (for tanks intended for heating systems).

- The heating system was not grounded (grounding is necessary to prevent the influence of parasitic currents on the metal, which can lead to corrosion).

- The tank was used in heating systems with the presence of air in the network (for tanks intended for heating systems).

- The tank was used in a heating system without the appropriate safety group for pressure relief.

- A shut-off valve was installed between the safety valve and the heat accumulator.

- A shut-off valve was installed between the expansion tank and the heat accumulator.

- The tank was used in domestic hot water systems (for hot water supply).

- In the case of using the tank in aggressive environments.

- In the case of poor installation.

- In the case of the absence of an expansion tank for a closed system of the required volume (10% of the system volume).

- Damages caused by improper transportation.

- Intentional damages or damages resulting from negligence.

- Mechanical damages or damages resulting from atmospheric conditions (e.g., freezing) and actions resulting from exceeding the allowable working pressure indicated in the technical passport.

- Accidents caused by the installation or operation of faulty or damaged safety valves.

- Damages resulting from improper use.

- Damages resulting from non-compliance with the rules contained in the technical passport and the Installation and Operation Instructions for tanks (available at <http://smart-tank.pl/en/>).

- Damages resulting from fire, flooding, lightning strikes, voltage surges in the electrical network, or other similar incidents.

- Accidents caused by the use of non-original spare parts, such as heating elements, magnesium anode, titanium anode, thermostat, thermometer, gaskets, etc.

- Cases of electrochemical corrosion.
- Damages resulting from the lack of replacement of the magnesium anode within the specified intervals in the technical passport (if it is included in the tank's design).

4.16. The manufacturer determines the method of repairing the tank.

4.17. The following are not included in the free repair: adjustments to the tank, replacement of the magnesium anode, replacement of seals, or any other naturally worn-out parts during operation.

4.18. These manufacturer's warranty conditions are the only ones accepted. No other warranties are accepted unless provided in writing by the manufacturer.

4.19. For matters not addressed in these conditions, the provisions of the Civil Code apply.

5. Storage conditions:

Store the product prior to commissioning in a heated room at a temperature not below 20°C and relative humidity not more than 65%.

Standard product configuration:

1. Tank - 1 pc.
2. Thermal insulation - 1 pc.
3. Upper decorative cover with a seal (plastic up to 1000 l, fabric - 1200 l and more) - 1 pc.
4. Product Certificate - 1 pc.

Sale date _____

Signature of Seller _____

Name and address of the trading organization

Seal.

Name and address of the mounting organization

Seal.

Technical Department contact phones:

Manufacturer:

HEATEX Sp. z o.o

Address:

Poland 64-610 Rogoźno ul. Fabryczna 7 Województwo Wielkopolskie

Website: <http://smart-tank.pl/en/>

Please, send your questions to: service.heatex@gmail.com

For buyers from the Republic of Poland, EU, CIS countries, and non-CIS countries:

+48 668-769-708 (Poland, English, Russian speaking)