SMART-TANK

keeping the best - moving forward

PRODUCT CATALOGUE 2025

EN

Company Profile

Smart-HP is a joint venture, limited liability company using European capital and technology. The company's core business is the production of hot and cold storage tanks and indirect heating boilers made of porcelain-enamelled steel as well as stainless steel intended for use in heating, air-conditioning and hot water supply systems. The company consists of three factories with a total area of over 12,000 m^2.The company's top priority is to introduce pro-ecological solutions with environmentally friendly products to the market, as well as to ensure that their production is emission-free. We also attach great importance to the quality of our products and their subsequent recycling at the end of their service life. All of our products are demountable, which allows the separation of metal from insulation and packaging, which provides convenient and inexpensive reprocessing.

Our products are sold in the European Union, Asia and 13 other countries.

SMART-TANK
keeping the best - moving forward

R-HP Series

Enameled indirect heating tank designed for hot water supply installation systems with one heat exchanger.
Scope of use: heating and storage of hot water supply.
Tank capacity: 200-300L.

Advantages:

-The largest magnesium anode in its class - made in Germany.
-Inspection flange available.
-Hot water supply recirculation.
-Premium German enamel coating with increased resistance to soft water.
-Possibility of installing a titanium anode.

Tank Specifications	Un.of meas.	R-HP 200	R-HP 300
Tank volume with heat exchanger	l	211	280/270
Tank height	mm	1250	1600
Tank diameter without insulation	mm	505	505
Tank diameter with insulation:			
Polyurethane foam of 40 mm	mm	595	595
Total weight	kg	65	84\94
Package dimensions	mm	595*1250	595*1600
Diameter of the upper socket of the DHW outlet connection (external thread)	"	1 or 3/4	1 or 3/4
Diameter of the connection for mounting the heating element (internal thread)	"	1 1/2	1 1/2
Capacity and performance			
Recommended maximum capacity of the electric heating element	kW	2--6	2–6
Heat exchanger			
Heat exchanger area	sq.m	2,2	2,2/3
Heat exchanger capacity	kW	5-11	5-11/15
Pressure and Temperature			
Maximum heat exchanger temperature	C	95	95
Maximum tank temperature	C	80	80
Maximum heat exchanger pressure	bar	6	6
Maximum tank pressure	bar	6	6
Tank corrosion protection			
Magnesium anode size	mm	2x500*33	2x500*33
Active titanium anode control unit		G2/Gn	G2/Gn
Active titanium anode length	mm	400/200	600/200

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

R Series

Enameled indirect heating tank designed for hot water supply installation systems with one heat exchanger.
Scope of use: heating and storage of hot water supply.
Tank capacity: 150-2000L.

Advantages:

-Best-in-class thermal insulation.
-Removable thermal insulation.
-The largest magnesium anode in its class - made in Germany.
-Inspection flange available.
-Possibility of heating element installation.
-Hot water supply recirculation.
-Premium German enamel coating with increased resistance to soft water.
-Possibility of installing a titanium anode.

Tank Specifications	Un.of meas.	R 150	R 200	R 300	R 400	R 500	R 750	R 1000	R 1500	R 2000
Tank volume with heat exchanger	l	157	211	280	390	480	690	920	1525	1980
Tank height	mm	980	1250	1600	1410	1680	1630	2200	2370	2600
Tank diameter without insulation	mm	505	505	505	655	655	795	795	950	1050
Tank diameter with insulation:										
Removable polyurethane foam of 37-40 mm	mm	595	595	595	730	730	-	-	-	-
Weight with plain steel heat exchanger	kg	55	65	84	112	117	178	198	273	319
Package dimensions: D*W*H	mm	700*800*1230	700*800*1500	700*800*1800	800*900*1700	800*900*1800	930*1030*1800	930*1030*2350	1130*1050*2500	1300*1400*2800
Diameter of upper hot water supply pipe connection (external thread)	"	1	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4
Diameter of heating element installation pipe (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
Capacity and performance										
Recommended maximum capacity of the electric heating element	kW	3--6	3--6	3–6	6--9	6–9	6--15	6–15	6–15	6--15
Tank heating time from 8 to 50 degrees by a heating element with a capacity of 3/6 kW	min	146/73	195/98	293/146	390/196	488/245	732/368	976/488	1465/976	1952/976
from a boiler with a capacity of 18 kW	min	24	32	49	65	81	122	163	245	326
24 kW	min		24	37	49	61	92	122	183	244
32 kW	min			27	37	46	69	92	138	184
40 kW	min			24	29	37	55	73	110	146
Tank performance in the first hour of operation at maximum capacity on heat exchanger and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	603	769	1117	1505	1595	1805	2259	3644	4149
Heat exchanger										
Heat exchanger area	sq.m	0,8	1	1,5	2	2	2	2,4	3,8	3,8
Heat exchanger capacity	kW	19,2	24	36	48	48	48	57,6	91,2	91,2
Pressure and Temperatures										
Heat exchanger volume	Liters	4,2	5,3	7,9	10,6	10,6	10,6	12,7	20,1	20,1
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95	95
Maximum tank temperature	C	80	80	80	80	80	80	80	80	80
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	6	6	6	6	6	6	6	6	6
Tank corrosion protection										
Magnesium anode size	mm	500*33	500*33+450*22	2x500*33	2x500*33	2x500*33+450*22	2x500*33+450*22	3x500*33	4x500*33	4x500*33
Active titanium anode control unit		G2/Gn	G2/Gn	G2/Gn	G2/Gn	G2/Gn	H/Hn	H/Hn	H/Hn	H/Hn
Active titanium anode length	mm	400/200	600/200	600/200	600/200	600/200	2*(200/200)	2*(200/200)	2*(150/400)	2*(200/400)

R-2 Series

Enameled indirect heating tank designed for hot water supply installation systems with two heat exchangers.
Scope of use: heating and storage of hot water supply.
Tank capacity: 200-2000L.

Advantages:

-Best-in-class thermal insulation.
-Removable thermal insulation.
-The largest magnesium anode in its class - made in Germany.
-Inspection flange available.
-Possibility of heating element installation.
-Hot water supply recirculation.
-Premium German enamel coating with increased resistance to soft water.
-Possibility of installing a titanium anode.
-Optional possibility of tank design modification according to customer drawing.

Tank Specifications	Un. of meas.	R-2 200	R-2 300	R-2 400	R-2 500	R-2 750	R-2 1000	R-2 1500	R-2 2000
Tank volume with heat exchanger	l	211	280	390	480	690	920	1525	1980
Tank height	mm	1250	1600	1410	1680	1630	2200	2370	2600
Tank diameter without insulation	mm	505	505	655	655	795	795	950	1050
Tank diameter with insulation:									
Removable polyurethane foam of 37-40 mm	mm	595	595	730	730	-	-	-	-
Weight with plain steel heat exchanger	kg	65	84	112	117	178	198	273	319
Package dimensions: D"W"H	mm	700*800*1500	700*800*1800	800*900*1700	800*900*1800	930*1030*1800	930*1030*2350	1130*1050*2500	1300*1400*2800
Diameter of upper hot water supply pipe connection (external thread)	"	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4
Diameter of heating element installation pipe (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
Capacity and performance									
Recommended maximum capacity of the electric heating element	kW	3--6	3--6	6--9	6--9	6--15	6--15	6--15	6–15
Tank heating time from 8 to 50 degrees by a heating element with a capacity of 3/6 kW	min	195/98	293/146	390/196	488/245	732/366	976/488	1465/976	1952/976
from a boiler with a capacity of 18 kW	min	32	49	65	81	122	163	245	326
24 kW	min	24	37	49	61	92	122	183	244
32 kW	min		27	37	46	69	92	138	184
40 kW	min		24	29	37	55	73	110	146
Tank performance in the first hour of operation at maximum capacity on lower heat exchanger and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	769	1117	1505	1595	1805	2259	3644	4149
Tank performance in the first hour of operation at maximum capacity on lower and upper heat exchangers and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	1215	1674	2063	2153	2475	2928	5764	6269
Lower heat exchanger									
Heat exchanger area	sq.m	1	1,5	2	2	2	2,4	3,8	3,8
Heat exchanger capacity	W	24	36	48	48	48	57,6	91,2	91,2
Heat exchanger volume	liters	5,3	7,9	10,6	10,6	10,6	12,7	20,1	20,1
Upper heat exchanger									
Heat exchanger area	sq.m	0,8	1	1	1	1,2	1,2	3,8	3,8
Heat exchanger capacity	kW	19,2	24	24	24	28,8	28,8	91,2	91,2
Heat exchanger volume	liters	4,2	5,3	5,3	5,3	6,4	6,4	20,1	20,1
Pressure and Temperatures									
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95,0	95,0
Maximum tank temperature	C	80	80	80	80	80	80	80,0	80,0
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6,0	6,0
Maximum tank pressure	bar	6	6	6	6	6	6	6,0	6,0
Tank corrosion protection									
Magnesium anode size	mm	500*33+450*22	2x500*33	2x500*33+450*22	3x500*33	3x500*33	4x500*33	5x500*33+450*22	5x500*33+450*22
Active titanium anode control unit		G2/Gn	G2/Gn	G2/Gn	G2/Gn	H/Hn	H/Hn	H/Hn	H/Hn
Active titanium anode length	mm	600/200	600/200	600/200	600/200	2*(200/200)	2*(200/200)	2*(150/400)	2*(200/400)

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

SN Series

(AISI 304 stainless steel)

Indirect heating tank made of stainless steel,
designed for hot water supply installation systems
with one heat exchanger.
Scope of use: heating and storage of hot water supply.
Tank capacity: 150-2000L.

Advantages:

-Best-in-class thermal insulation.
-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d).
-Removable thermal insulation.
-Possibility of installing a heating element.
-Hot water supply recirculation.
-Possibility of installing an active titanium anode (maintenance-free, replacement-free and service-free active anode that protects the water heater against the harmful effectsof chlorides and sulphates).
-Optional possibility of tank design modification according to customer drawing.

Tank Specifications	Un. of meas.	SN 150	SN 200	SN 300	SN 500	SN 750	SN 1000	SN 1200	SN 1500	SN 2000
Tank volume with heat exchanger	l	150	200	295	485	763	995	1200	1525	2030
Tank height	mm	1100	1400	1700	1800	1850	2300	2200	2450	3200
Tank diameter without insulation	mm	500	500	500	650	790	790	950	950	950
Tank diameter with insulation:										
Removable polyester insulation	mm	700	700	700	850	990	990	1150	1150	1150
Weight with heat exchanger	kg	49	56	69	92	108	136	179	206	256
Package dimensions: D*W*H	mm	700*700*1250	700*700*1550	700*700*1850	850*850*1950	990*990*2000	990*990*2450	1150*1150*2350	1150*1150*2600	1150*1150*3350
Diameter of upper hot water supply pipe connection (external thread)	"	1	1	1	1	1	1	1	1	1
Diameter of heating element installation pipe (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
Capacity and performance										
Recommended maximum capacity of the electric heating element	kW	3--6	3–6	3--6	6--9	6--15	6--15	6–15	6--15	6–15
Tank heating time from 8 up to 50 degrees from a heating element with a capacity of 3/6 kW	min	146/73	195/98	293/146	488/244	732/366	977/488	1172/586	1465/732	1954/976
from a boiler with a capacity of										
18 kW	min	24	32	49	81	122	163	195,6	244,5	326
24 kW	min		24	37	61	92	122	146,4	183	244
32 kW	min			27	46	69	92	110,4	138	184
40 kW	min			24	37	55	73	87,6	109,5	146
Tank performance in the first hour of operation at maximum capacity on heat exchanger and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	603	769	1117	1595	1805	2259	3306	3644	6399
Heat exchanger										
Heat exchanger area	sq.m	1	2	3	3	4	4	5	6	8
Heat exchanger capacity	kW	24	48	72	72	96	96	120	144	192
Heat exchanger friction loss:										
At a flow rate of 0.5 m3/h	bar	0,003	0,006	0,009	0,009	0,013	0,013	0,016	0,019	0,026
At a flow rate of 2.2 m3/h	bar	0,047	0,093	0,140	0,140	0,189	0,189	0,236	0,283	0,378
At a flow rate of 3.8 m3/h	bar	0,142	0,279	0,407	0,407	0,566	0,566	0,708	0,850	1,133
At a flow rate of 5.4 m3/h	bar	0,259	0,511	0,745	0,745	1,037	1,037	1,296	1,555	2,074
At a flow rate of 7.1 m3/h	bar	0,369	0,727	1,060	1,060	1,475	1,475	1,844	2,213	2,950
At a flow rate of 8.7 m3/h	bar	0,612	1,207	1,760	1,760	2,448	2,448	3,060	3,672	4,896
Pressure and Temperatures										
Heat exchanger volume	liters	5,3	10,6	15,8	15,8	21,2	21,2	26,4	31,7	42,3
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95	95
Maximum tank temperature	C	80	80	80	80	80	80	80	80	80
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	6	6	6	6	6	6	6	6	6
Tank corrosion protection										
Magnesium anode size	mm	450*22	450*22	900*22	900*22	900*22	1350*22	1350*22	1800*22	1800*22
Active titanium anode control unit		Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x
Length of active titanium anode (holder/active part)	mm	100/200	100/400	300/400	300/400	1* (100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/600) poz. 1*(100/800) pion.

SN-2 Series

(AISI 304 stainless steel)

Indirect heating tank made of stainless steel, designed for hot water supply installation systems with one heat exchanger.
Scope of use: heating and storage of hot water supply.
Tank capacity: 200-2000L.

Advantages:

-Best-in-class thermal insulation.
-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d0).
-Removable thermal insulation.
-Possibility of installing a heating element.
-Hot water supply recirculation.
-Possibility of installing an active titanium anode (maintenance-free, replacement-free and service-free active anode that protects the water heater against the harmful effects of chlorides and sulphates).
-Optional possibility of tank design modification according to customer drawing.

Tank Specifications	Un. of meas.	SN-2 200	SN-2 300	SN-2 500	SN-2 750	SN-2 1000	SN-2 1200	SN-2 1500	SN-2 2000
Tank volume with heat exchanger	l	200	295	485	763	995	1200	1525	2030
Tank height	mm	1400	1700	1800	1850	2300	2200	2450	3200
Tank diameter without insulation	mm	500	500	650	790	790	950	950	950
Tank diameter with insulation:									
Removable polyester insulation	mm	700	700	850	990	990	1150	1150	1150
Weight with heat exchanger	kg	65	75	99	117	153	192	225	275
Package dimensions: D*W*H	mm	700*700*1550	700*700*1850	850*850*1950	990*990*2000	990*990*2450	1150*1150*2350	1150*1150*2600	1150*1150*3350
Diameter of upper hot water supply pipe connection (external thread)	"	1	1	1	1	1	1	1	1
Diameter of heating element installation pipe (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
Capacity and performance									
Recommended maximum capacity of the electric heating element	kW	3--6	3--6	6--9	6--15	6--15	6--15	6--15	6--15
Tank heating time from 8 up to 50 degrees from a heating element with a capacity of 3/6 kW	min	195/98	293/146	488/244	732/366	977/488	1172/586	1465/732	1954/976
from a boiler with a capacity of									
18 kW	min	32	49	81	122	163	196	245	326
24 kW	min	24	37	61	92	122	146	183	244
32 kW	min		27	46	69	92	110	138	184
40 kW	min		24	37	55	73	88	110	146
Tank performance in the first hour of operation at maximum capacity on lower heat exchanger and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	769	1117	1595	1805	2259	3312	3644	6405
Tank performance in the first hour of operation at maximum capacity on lower and upper heat exchangers and tank heating to 50 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation	l/hour	1215	1674	2153	2475	2928	4670	5764	6269
Lower heat exchanger									
Heat exchanger area	sq.m	1,5	2	3	3	3	4	4	5
Heat exchanger capacity	kW	36	48	72	72	72	96	96	120
Heat exchanger friction loss:									
At a flow rate of 0.5 m3/h	bar	0,005	0,006	0,009	0,009	0,009	0,013	0,013	0,018
At a flow rate of 2.2 m3/h	bar	0,071	0,093	0,140	0,140	0,140	0,189	0,189	0,270
At a flow rate of 3.8 m3/h	bar	0,212	0,279	0,407	0,407	0,407	0,566	0,566	0,811
At a flow rate of 5.4 m3/h	bar	0,389	0,511	0,745	0,745	0,745	1,037	1,037	1,485
Heat exchanger volume	liters	7,95	10,53	15,9	15,9	15,9	21,2	21,2	26,46
Upper heat exchanger									
Heat exchanger area	sq.m	1	1,5	1	2	2,5	2	4	5
Heat exchanger capacity	kW	24	36	24	48	60	48	96	120
Heat exchanger friction loss									
At a flow rate of 0.5 m3/h	bar	0,003	0,005	0,003	0,006	0,008	0,006	0,013	0,012
At a flow rate of 2.2 m3/h	bar	0,047	0,071	0,047	0,093	0,118	0,093	0,189	0,179
At a flow rate of 3.8 m3/h	bar	0,142	0,212	0,142	0,279	0,354	0,279	1,037	0,532
Heat exchanger volume	liters	5,3	7,95	5,3	10,53	13,33	10,53	21,2	26,46
Pressure and Temperatures									
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95
Maximum tank temperature	C	80	80	80	80	80	80	80	80
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	6	6	6	6	6	6	6	6
Tank corrosion protection									
Magnesium anode size	mm	450*22	900*22	900*22	900*22	1350*22	1350*22	1800*22	1800*22
Active titanium anode control unit		Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x	Hn-x
Active titanium anode length	mm	100/400	300/400	300/400	1*(100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/400) poz. 1*(200/400) pion.	1*(100/600) poz. 1*(100/800) pion.

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

SN-HP Series

(AISI 304 stainless steel)

Indirect heating tank of stainless steel for hot water supply for thermal pumps and high-capacity boilers.
Scope of use: heating and storage of hot water supply.
Tank capacity: 300-2000L.

Advantages:

-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d0 for the series SN-HP).
-Removable thermal insulation.
-Possibility of installing a heating element.
-Hot water supply recirculation.
-Possibility of installing an active titanium anode (maintenance-free, replacement-free and service-free active anode that protects the water heater against the harmful effects of chlorides and sulphates).
-Optional possibility of tank design modification according to customer drawing.

Tank Specifications	Un. of meas.	SN-HP 150	SN-HP 200	SN-HP 300	SN-HP 500	SN-HP 750	SN-HP 1000	SN-HP 1200	SN-HP 1500	SN-HP 2000
Tank volume with heat exchanger	l	148	195	275	485	763	995	1200	1525	2030
Tank height	mm	1100	1400	1700	1800	1850	2300	2200	2450	3200
Tank diameter without insulation	mm	500	500	500	650	790	790	950	950	950
Tank diameter with insulation:										
Removable polyester insulation	mm	700	700	700	850	990	990	1150	1150	1150
Weight with corrugated steel heat exchanger	kg	65	72	82	107	125	158	199	235	284
Package dimensions: D*W*H	mm	700*700*1250	700*700*1550	700*700*1850	850*850*1850	990*990*2000	990*990*2450	1150*1150*2350	1150*1150*2600	1150*1150*3350
Diameter of upper hot water supply pipe connection (external thread)	"	1	1	1	1	1	1	1	1	1
Diameter of heating element installation pipe (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
Capacity and performance										
Recommended maximum capacity of the electric heating element	kW	3--6	3--6	3--6	6--9	6--15	6--15	6--15	6--15	6--15
Tank heating time from 8 up to 50 degrees from a heating element with a capacity of 3/6 kW	min	293/146	293/146	293/146	488/244	732/366	977/488	1172/586	1465/732	1954/976
Tank performance in the first hour of operation at maximum capacity on heat exchanger and tank heating to 80 degrees, with 45 degrees tank outflow**	l/hour	2080	2320	2690	3106	4049	5066	6275	7660	8165
- provided that recirculation is in operation										
For gas, wood and electric boilers										
Heat exchanger										
Heat exchanger area	sq.m	2	3	4	5	6	8	9	10	11
Heat exchanger capacity (for gas, wood and electric boilers)	kW	48	72	96	120	144	192	216	240	264
Heat exchanger friction loss:										
At a flow rate of 2.2 m3/h	bar	0,093	0,14	0,189	0,236	0,283	0,378	0,425	0,472	0,513
At a flow rate of 3.8 m3/h	bar	0,279	0,407	0,566	0,708	0,839	1,133	1,274	1,416	1,538
At a flow rate of 5.4 m3/h	bar	0,511	0,745	1,037	1,296	1,536	2,074	2,333	2,592	2,816
At a flow rate of 7.1 m3/h	bar	0,727	1,060	1,475	1,844	2,185	2,950	3,319	3,688	4,006
At a flow rate of 8.7 m3/h	bar	1,207	1,760	2,448	3,060	3,626	4,896	5,508	6,120	6,648
Pressure and Temperatures										
Heat exchanger volume	liters	10,6	15,8	21,2	26,4	31,7	42,3	47,7	53	58,3
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95	95
Maximum tank temperature	bar	80	80	80	80	80	80	80	80	80
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	6	6	6	6	6	6	6	6	6
Tank corrosion protection										
Magnesium anode size	mm	500*33+450*22	2x500*33	2x500*33+450*22	3x500*33	3x500*33	4x500*33	5x500*33+450*22	5x500*33+450*22	5x500*33+450*22
Maximum heat pump capacity for tank operation (1 kW = 0.25m2)		8	12	16	20	24	32	36	40	44
Hot water supply performance from the heat pump in the first hour of discharge	l/hour	363	517	705	1023	1408	1855	2167	2600	3210

ZK/ZKP Series

A heat accumulator (heat storage or buffer tank).
Tank material: carbon steel.
Scope of use: storing heat carrier/technical water.
Tank capacity: 300-5000L.

Advantages:

-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d0).
-Removable thermal insulation.
-Possibility of installing heating elements (1 1/2" internal thread, total power up to 45kW).
-Drain pipe.
-The tank is made of clean, cold-rolled steel, so the heating system will remain free from impurities and deposits on heat exchangers for a long time.
-Based on this tank, multi-variant heating systems can be created.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B, C insulation type.
-Maximum pressure up to 6 bars (optionally up to 10 bars).
-Reinforced wooden packaging, for horizontal and vertical transportation (up to 1000L.).
-Stylish exterior design of the tank insulation made of ABS material with decorative plugs.

Number of connection pipes and their location

ZK Series
-9 pcs. - 1 1/2"
(1 pcs. at the top, 8 pcs. on the side)
- 4 pcs. - 1 1/2"
1 1/2" side connections at 90°
(4 pcs. x 4 pcs. + 1 pcs. at the top).

ZKP Series
-7 pcs. - 1 1/2"
(1 pcs. at the top, 8 pcs. on the side)
-3 pcs. - 1 1/2"
Side stub-tubes are led out to one side

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

Tank Specifications	Un. of meas.	ZK/ZKP 300	ZK/ZKP 500	ZK/ZKP 750	ZK/ZKP 1000	ZK/ZKP 1200	ZK/ZKP 1500	ZK/ZKP 2000	ZK/ZKP 3000	ZK/ZKP 5000
Tank volume	l	281	507	763	966	1200	1525	2030	3540	4910
Tank height	mm	1700	1800	1850	2300	2200	2450	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		700	850	990	990	1150	1150	1420	1700	1700
Weight	kg	65	87	101	131	174	200	246	450	615
Package dimensions: D*W*H	mm	700*700*1850	850*850*1950	990*990*2000	990*990*2450	1150*1150*2350	1150*1150*2600	1420*1420*2250	1700*1700*2465	1700*1700*3320
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

ZKP mini Series

A wall tank for heat pumps

Heat accumulator/buffer.
Tank material: carbon steel.
Scope of use: storing heat carrier/technical water.
Tank capacity: 60-150L.

Advantages:

-In-wall installation.
-Best-in-class insulation.
-The tank is made of clean, cold-rolled steel, so the heating system will remain free from impurities and deposits on heat exchangers for a long time.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B insulation type.
-Maximum pressure up to 6 bars (optionally up to 10 bars).
-Stylish exterior design of the tank insulation made of ABS material with decorative plugs.

Tank Specifications	Un. of meas.	ZKP mini 60	ZKP mini 80	ZKP mini 100	ZKP mini 150
Tank volume	l	64	83	107	157
Tank height	mm	550	670	800	1000
Tank diameter without insulation	mm	460	460	460	505
Tank diameter with insulation:					
Polyester insulation	mm	535	535	535	590
Total weight	kg	17,5	21	26	40
Diameter of the connection for mounting the heating element (internal thread)	"	1 1/2	1 1/2	1 1/2	1 1/2
Max. tank temperature	C	95	95	95	95
Max. tank pressure	bar	3--6	3--6	3--6	3--6

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

FRESH 200 Series

Heat accumulator with hot water supply coil.
This tank is a full-fledged boiler that heats both the house and warm water.
Scope of use: storing heat carrier/technical water.
Tank material: carbon steel.
Heat exchanger material: AISI 304 stainless steel.
Tank capacity: 245L.

Advantages:

-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d0).
-Removable thermal insulation.
-Possibility of installing heating elements (1 1/2" internal thread, total power ranging from 3 to 18 kW).
-Drain pipe.
-The tank is made of clean, cold-rolled steel, so the heating system will remain free from impurities and deposits on heat exchangers for a long time.
-Based on this tank, multi-variant heating systems can be created.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B, C insulation type.
-Maximum pressure up to 3 bars (optionally up to 10 bars). The maximum pressure for the hot water supply exchanger equals 6 bars.
-Reinforced wooden packaging, for horizontal and vertical transportation.
-Stylish exterior design of the tank insulation made of ABS material with decorative plugs.
-Efficiency: up to 2000L./hour of hot water supply (applying the adequate energy).
-Heat exchanger efficiency for a flow of 105 kW.

Tank Specifications	Un. of meas.	
Tank volume	l	245
Tank height	mm	960
Tank diameter without insulation	mm	650
Tank diameter with insulation	mm	780
Heat exchanger area	kW	105
Tank diameter with insulation	l/hour	2000
Maximum tank pressure	bar	3
Maximum heat exchanger pressure	bar	6
Connection diameter	“	1
Heat exchanger connection diameter	“	1
Maximum temperature	C	95
Possibility of heating element installation	Pcs.	2 (available)
DHW heat exchanger friction loss at 2.2m3/h	bar	0,0885

SMART-TANK
keeping the best - moving forward

HWT Series

Heat accumulator with hot water supply coil.
3 in 1 (heat accumulator, hydraulic separator, fresh hot water tank).
Scope of use: storing heat carrier/technical water.
Tank material: carbon steel.
Heat exchanger material: AISI 304 stainless steel.
Tank capacity: 300-3000L.

Advantages:

-Best-in-class thermal insulation made of polyester fleece (fire-resistance class B-s2d0).
-Removable thermal insulation.
-Possibility of installing heating elements (1 1/2" internal thread, total power up to 15kW).
-Drain pipe.
-The tank is made of clean, cold-rolled steel, so the heating system will remain freefrom impurities and deposits on heat exchangers for a long time.
-Based on this tank, multi-variant heating systems can be created.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B, C insulation type.
-Maximum pressure up to 6 bars (optionally up to 10 bars).
-The maximum pressure for the hot water supply exchanger equals 6 bars.
-Reinforced wooden packaging, for horizontal and vertical transportation (up to 1000L).
-Stylish exterior design of the tank insulation made of ABS material with decorative plugs.
-Efficiency: up to 2000L/hour of hot water supply (applying the adequate energy).
-Heat exchanger efficiency for a flow of 105 kW.

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

Tank Specifications	Un. of meas.	HWT 200	HWT 300	HWT 500	HWT 750	HWT 1000	HWT 1200	HWT1500	HWT 2000	HWT 3000
Tank volume with heat exchanger	l	195	295	485	690	990	1200	1525	2030	3540
Tank height	mm	1400	1700	1800	1850	2300	2200	2450	2100	2400
Tank diameter without insulation	mm	500	500	650	790	790	950	950	1220	1500
Tank diameter with insulation:										
Removable polyester insulation	mm	700	700	850	990	990	1150	1150	1420	1700
Weight with heat exchanger	kg	65	76	98	114	155	195	225	267	475
Package dimensions: D*W*H	mm	700*700*1550	700*700*1850	850*850*1950	990*990*2000	990*990*2450	1150*1150*2250	1150*1150*2600	1420*1420*2250	1700*1700*2550
Heat exchanger pipe connection diameter (external thread)	"	1	1	1	1	1	1	1	1	1
Diameter of heating element installation pipe (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
Capacity and performance										
Recommended maximum capacity of the electric heating element	kW	3--6	3--6	6--9	6--15	6--15	6--15	6--15	6–15	6–15
Tank heating time from 8 to 50 degrees by a heating element with a capacity of 3/6 kW	min	195/98	293/146	488/244	732/366	977/488	1172/586	1465/732	1954/976	2931/1465
from a boiler with a capacity of										
18 kW	min	33	49	81	122	163	196	245	326	489
24 kW	min	25	37	61	92	122	146	183	244	366
32 kW	min	18	27	46	69	92	110	138	184	276
40 kW	min	16	24	37	55	73	88	110	146	219
Maximum tank performance for hot water supply in the first hour of operation with capacity applied to the tank and heating to 80 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation										
18 kW	l/hour	605	713	898	1121	1413	1618	1943	2448	3958
24 kW	l/hour	746	853	1038	1261	1553	1758	2083	2588	4098
32 kW	l/hour	900	1039	1224	1447	1739	1944	2269	2774	4284
40 kW	l/hour	1120	1225	1410	1633	1925	2130	2455	2960	4470
60 kW	l/hour	1580	1690	1875	2098	2390	2595	2920	3425	4935
Heat exchanger										
Heat exchanger area	sq.m	3,2	3,2	3,8	3,8	3,8	3,8	3,8	3,8	3,8
Heat exchanger volume	liters	17,0	17,0	20,1	20,1	20,1	20,1	20,1	20,1	20,1
Heat exchanger friction loss:										
At a flow rate of 0.5 m3/h	bar	0,005	0,005	0,006	0,006	0,008	0,008	0,008	0,008	0,008
At a flow rate of 2.2 m3/h	bar	0,070	0,070	0,093	0,093	0,112	0,112	0,112	0,112	0,112
At a flow rate of 3.8 m3/h	bar	0,210	0,210	0,279	0,279	0,335	0,335	0,335	0,335	0,335
At a flow rate of 5.4 m3/h	bar	0,384	0,384	0,511	0,511	0,614	0,614	0,614	0,614	0,614
Pressures and Temperatures										
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95	95
Maximum tank temperature	C	95	95	95	95	95	95	95	95	95
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	3--6	3--6	3--6	3--6	3--6	3–6	3--6	3--6	3--6

SMART-TANK
keeping the best - moving forward

HWT-2 Series

Heat accumulator with hot water supply coil.
3 in 1 + a solar collector installing option
(heat accumulator, hydraulic separator, hot water supply flow through coil).
Scope of use: storing heat carrier/technical water.
Tank material: carbon steel.
Heat exchanger material: AISI 304 stainless steel.
Tank capacity: 300-3000L.

Advantages:

-Best-in-class thermal insulation made of polyester fleece
(fire-resistance class B-s2d0).
-Removable thermal insulation.
-Possibility of installing heating elements
(1 1/2" internal thread, total power up to 15kW).
-Drain pipe.
-The tank is made of clean, cold-rolled steel, so the heating system will remain free from impurities and deposits on heat exchangers for a long time.
-Based on this tank, multi-variant heating systems can be created.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B, C insulation type.
-Maximum pressure up to 6 bars (optionally up to 10 bars).
-The maximum pressure for the hot water supply exchanger equals 6 bars.
-Reinforced wooden packaging, for horizontal and vertical transportation
(up to1000L), two layers of protective film.
-Stylish exterior design of the tank insulation made of ABS material with decorative plugs.
-Efficiency: up to 2000L./hour of hot water supply (applying the adequate energy).
-Heat exchanger efficiency for a flow of 105 kW.

SMART-TANK
keeping the best - moving forward

www.smart-tank.pl

Tank Specifications	Un. of meas.	HWT-2 300	HWT-2 500	HWT-2 750	HWT-2 1000	HWT-2 1200	HWT-2 1500	HWT-2 2000	HWT-2 3000
Tank volume with heat exchanger	l	295	485	690	990	1200	1525	2030	3540
Tank height	mm	1700	1800	1850	2300	2200	2450	2100	2400
Tank diameter without insulation	mm	500	650	790	790	950	950	1220	1500
Tank diameter with insulation:									
Removable polyester insulation	mm	700	850	990	990	1150	1150	1420	1700
Weight with corrugated steel heat exchanger	kg	78	102	119	147	192	220	265	480
Package dimensions: D*W*H	mm	700*700*1850	850*850*1950	990*990*2000	990*990*2450	1150*1150*2150	1150*1150*2600	1420*1420*2250	1700*1700*2550
Heat exchanger pipe connection diameter (external thread)	"	1	1	1	1	1	1	1	1
Diameter of heating element installation pipe (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
Capacity and performance									
Recommended maximum capacity of the electric heating element	kW	3--6	6--9	6--15	6--15	6–15	6--15	6--15	6--15
Tank heating time from 8 to 50 degrees by a heating element with a capacity of 3/6 kW	min	293/146	488/244	732/366	977/488	1172/586	1465/732	1954/976	2931/1465
from a boiler with a capacity of									
18 kW	min	49	81	122	163	196	245	326	489
24 kW	min	37	61	92	122	146	183	244	366
32 kW	min	27	46	69	92	110	138	184	276
40 kW	min	24	37	55	73	88	110	146	219
Upper heat exchanger									
Heat exchanger area	sq.m	3,2	3,8	3,8	3,8	3,8	3,8	3,8	3,8
Heat exchanger friction loss									
At a flow rate of 0.5 m3/h	bar	0,003	0,004	0,004	0,004	0,004	0,004	0,004	0,004
At a flow rate of 2.2 m3/h	bar	0,047	0,059	0,059	0,059	0,059	0,059	0,059	0,059
At a flow rate of 3.8 m3/h	bar	0,140	0,210	0,210	0,210	0,210	0,210	0,210	0,210
Maximum tank performance for hot water supply in the first hour of operation with capacity applied to the tank and heating to 80 degrees, with 45 degrees tank outflow** - provided that recirculation is in operation									
18 kW	l/hour	713	898	1121	1413	1618	1943	2448	3958
24 kW	l/hour	853	1038	1261	1553	1758	2083	2588	4098
32 kW	l/hour	1039	1224	1447	1739	1944	2269	2774	4284
40 kW	l/hour	1225	1410	1633	1925	2130	2455	2960	4470
60 kW	l/hour	1690	1875	2098	2390	2595	2920	3425	4935
Upper heat exchanger volume	Liter	17,0	20,1	20,1	20,1	20,1	20,1	20,1	20,1
Lower heat exchanger									
Heat exchanger area	sq.m	0,57	1,2	2	2	3	3,8	3,8	3,8
Heat exchanger capacity	kW	14	29	48	48	72	91	91	91
Heat exchanger friction loss									
At a flow rate of 0.5 m3/h	bar	0,002	0,004	0,006	0,006	0,009	0,012	0,012	0,012
At a flow rate of 2.2 m3/h	bar	0,027	0,056	0,093	0,093	0,140	0,177	0,177	0,177
At a flow rate of 3.8 m3/h	bar	0,080	0,168	0,279	0,279	0,419	0,531	0,531	0,531
At a flow rate of 5.4 m3/h	bar	0,146	0,307	0,511	0,511	0,767	0,971	0,971	0,971
Heating performance	l/hour	318	669	1115	1115	1673	2119	2119	2119
Lower heat exchanger volume	liters	3,0	6,4	10,6	10,6	15,9	20,1	20,1	20,1
Pressures and Temperatures									
Maximum heat exchanger temperature	C	95	95	95	95	95	95	95	95
Maximum tank temperature	C	95	95	95	95	95	95	95	95
Maximum heat exchanger pressure	bar	6	6	6	6	6	6	6	6
Maximum tank pressure	bar	3--6	3--6	3--6	3--6	3--6	3–6	3--6	3--6

TC Series (Carbon steel)

SS TC (AISI 304 stainless steel)

Cold accumulator/heat accumulator/buffer.
Tank material: carbon steel/stainless steel.
Scope of use: storing heat carrier/technical water/hot water supply.
Tank capacity: 300-5000L.

Advantages:

-Best-in-class foamed rubber thermal insulation.
-Possibility of connection diameters modification (flanges and threads) at the customers request.
-Drain pipe.
-The tank is made of clean, cold-rolled steel, so the heating system and hot water supply system will remain free from impurities and deposits on heat exchangers for a long time.
-Based on this tank, multi-variant heating/chilling systems can be created.
-Optional possibility of tank design modification according to customer drawing and selection of ErP class A, B, C insulation type.
-Maximum pressure up to 6 bars (optionally up to 10 bars).
-Ring beam supports allow for a robust stability and distribution of the tank weight on the floor surface.

Tank Specifications	Un. of meas.	TC/SS TC 300	TC/SS TC 500	TC/SS TC 750	TC/SS TC 1000	TC/SS TC 1200	TC/SS TC 1500	TC/SS TC 2000	TC/SS TC 3000	TC/SS TC 5000
Tank volume	l	295	480	703	995	1200	1525	2030	3540/3500	4910/4900
Tank height	mm	1565	1565	1590	2165	1980	2330	2070	2315/2210	3170/3010
Tank diameter without insulation	mm	500	650	790	790	950	950	1220	1500/1600	1500/1600
Tank diameter with insulation:										
Foam rubber insulation	mm	540	690	830	830	990	990	1260	1540/1640	1540/1640
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 flange connections		DN50	DN50	DN100	DN100	DN100	DN100	DN100	DN100	DN100
Diameter of thread connections	"	1/2 internal	1/2 internal	1/2 internal	1/2 internal	1/2 internal	1/2 internal	1/2 internal	1/2 internal	1/2 internal
Minimum operating temperature [*]	C	(-40) -10	(-40) -10	(-40) -10	(-40) -10	(-40) -10	(-40) -10	(-40) -10	(-40) -10	(-40) -10
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
(*)-optional										

Electric heating elements

Heating element 2/3kW

Heating element pipe material is made of stainless steel.
No better material designed for heating elements ever existed!!!
This heating element can be used in an enameled tank,
stainless steel tank as well as in a simple carbon steel tank!
German thermostats inside! Best quality for decades!
Extra emergency thermostat for boiling protection included!
Double protection against overheating! The power plug is already connected to the cover.
Installation and wiring are perfectly simple! Screw into the tank and plug into electricity!
Set the desired temperature on the controller and it's ready to go!
Maximum heating temperature: 75°C.
-Scope of use: water heating.
-Suitable for tanks of 50-5000L. capacity.
-Connection size: 1 1/2".
-Cover material: stainless steel/plastic.
-Capacity: 2/3 kW.
-Heating rate: 54/81L./hour.
-Warranty: 1 year.

Heating element of 6/ 9/ 15 kW

-Scope of use: water heating.
-Suitable for tanks of 150-5000L. / 400-5000L. / 750-5000L. capacity.
-Cover material: stainless steel Incoloy 875 / plastic.
-Double boiling protection (2 thermostats: main + emergency thermostat).
-Antifreeze feature (prevents water from freezing inside the tank).
-Temperature control range: 30°C up to 75°C.
-Connection size: 1 1/2".
-Capacity: 6/9/15 kW.
-Heating rate: 161/243/405L./hour.
-Warranty: 1 year.

Active titanium anodes
Model SMART-TANK Gn / Hn / Hn-X

Dedicated for enameled carbon steel tanks
and stainless steel tanks with a capacity of 50L to 5000L.

MAIN FEATURES:

-Smart corrosion protection.
-Stainless steel tank protection against the harmful effects of chlorides and sulphates.
-Removes unpleasant odours from the water heater.
-Produces oxygen while working, thus disinfecting the water.
-Lets you forget about replacing the anode in the water heater.
-Measures and generates the potential inside the tank so that corrosion cannot occur.

Magnesium anodes

A magnesium anode protects the inner surface of the heater tank against corrosion and the heating element against limescale buildup, reducing its density and facilitating tank cleaning. The magnesium anode is installed by manufacturers in both dry and wet heating tanks, which provides corrosion protection not only for the heating element, but also for the internal surface of the tank. As most boilers are made of metal, their interaction with water cannot be avoided. This means that corrosion cannot be avoided because tap water contains dissolved oxygen, which promotes corrosion. As the water in the tank heats up, the oxygen is actively released from the water and reacts with the metal, destroying the tank walls of the water heater.
To prevent corrosion, the magnesium anode must be inspected regularly and replaced if the anode is even partially destroyed. For more information on inspection and replacement of the magnesium anode, refer to the tank's data sheet or the installation and operating instructions.

Magnesium anodes for tank corrosion protection (made in Germany)

Anode	Size	Weight
Magnesium anode for 3/4" bolt	450x22	0.3
Magnesium anode for 3/4" bolt on M8 stud	450x22	0.3
Magnesium anode for bolt (1")	650x26	0.6
Magnesium anode for bolt (1")	960x26	0.9
Magnesium anode for bolt (1 1/4")	850x33	1.3
Magnesium anode for bolt (1 1/4")	1250x33	1.9
Magnesium anode (1 1/2")	500x33	0.75

Poland 64-610 Rogożno
ul. Fabryczna 7
Województwo Wielkopolskie

SMART-TANK

keeping the best - moving forward

TELEPHONE:
+48668769708

e-mail: smart.hp.biuro@gmail.com

www.smart-tank.pl