

# Product catalogue 2021/22

## Innovative storage tank and container solutions

Valid from April 2021



*Clever heat storage.*



# Overview of our storage tanks - the right solution for every heating system

Solar storage tank			Domestic water storage tank							Buffer storage tank			
ESS-PU	SSH	SSH-Plus	EBS-PU	BS	HLS-Plus	PSB	HSO	WWS-TS	SPSX	SPSX-G/ SPSX-2G	PSX-ECO		
<b>Bare-tube heat exchanger</b>			<b>Bare-tube heat exchanger</b>							<b>Bare-tube heat exchanger</b>			
2	2	3	1	1	1 - 2	0	1	1	0	1 - 2	0		
<b>Compressive strenght</b>			<b>Compressive strenght</b>							<b>Compressive strenght</b>			
10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	10 bar	3 bar	3 bar	3 bar		
<b>Insulation</b> HS = PU rigid foam			<b>Insulation</b> HS = PU rigid foam							<b>Insulation</b>			
HS	Fleece	Fleece	HS	Fleece	Fleece	Fleece	HS	HS	Fleece	Fleece	Fleece		
<b>Contents</b>			<b>Contents</b>							<b>Contents</b>			
200 l to 500 l	300 l to 2.000 l	350 l to 800 l	120 l to 500 l	120 l to 2.000 l	150 l to 800 l	200 l to 2.000 l	120 l to 150 l	120 l to 200 l	200 l to 3.000 l	500 l to 2.000 l	200 l to 3.000 l		
<b>Standard energy efficiency class</b>			<b>Standard energy efficiency class</b>							<b>Standard energy efficiency class</b>			
Detailed product information and technical data are provided on the following pages:													
p. 10	p. 12	p. 14	p. 18	p. 20	p. 22	p. 24	p. 26	p. 28	p. 32	p. 34	p. 36		
<b>The suitable storage tank for your complete system</b> Note: Special solutions such as the combination of various heat sources also allow for other applications.													
										■	■	■	
										■	■	■	
										■	■	■	
■	■	■	■	■	■	■	■	■	■				
■	■	■	■	■	■	■	■	■	■				
■	■	■	■	■	■	■	■	■	■				
■	■	■	■	■	■	■	■	■	■	■	■		
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■	■	■	■	■	■	■	■	■	■				
■	■	■	■	■	■	■	■	■	■				

			System	Combined storage tank (Domestic water storage tank + Buffer storage tank)			Stainless steel storage tank			Other		
PSX-G-ECO	PS-BHKW	GPS (Großbuffer)	PSFW /-G	SKSW	WKS-WP	WKS	HSS	HBS	HPS	DWK	DLB	
			<b>GWTs</b>	<b>Bare-tube heat exchanger</b>			<b>Bare-tube heat exchanger</b>					
1	0	0	0 - 1	0 - 2	0 - 2	0 - 2	2	1	0	-	-	
			<b>Com. st.</b>	<b>Compressive strenght</b>			<b>Compressive strenght</b>					
3 bar	6 bar	3 bar	3 bar	3 bar	3 bar	3 bar	10 bar	10 bar	10 bar	4/6/10 bar	11/16 bar	
			<b>Insulation</b>	<b>Insulation</b>			<b>Insulation</b>					
Fleece	Fleece	Fleece	Fleece	Fleece	Fleece	Fleece	Fleece	Fleece	Fleece	-	-	
			<b>Contents</b>	<b>Contents</b>			<b>Contents</b>					
500 l to 2.000 l	500 l to 2.000 l	2.000 l to 10.000 l	500 l to 1.000 l	600 l to 1.500 l	600 l to 1.500 l	600 l to 1.500 l	200 l to 2.000 l	150 l to 2.000 l	150 l to 2.000 l	60 l to 3.000 l	40 l to 1.000 l	
			<b>Class</b>	<b>Standard energy efficiency class</b>			<b>Standard energy efficiency class</b>					
											-	-
<b>p. 38</b>	<b>p. 40</b>	<b>p. 42</b>	<b>p. 46</b>	<b>p. 54</b>	<b>p. 56</b>	<b>p. 58</b>	<b>p. 62</b>	<b>p. 64</b>	<b>p. 66</b>	<b>p. 72</b>	<b>p. 74</b>	
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## Huch solar storage tank

Hot water convenience even when the sun doesn't shine.

Our solar storage tanks are especially oriented to solar thermal installations. They have at least two large bare-tube heat exchangers and ensure that heat is rapidly transferred. The solar storage tanks can be easily combined with other heat generators, such as condenser boilers or a pellet heating system. Become part of the future and use regenerative energies. This goes easy on both the environment and your wallet/purse.

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## Quality features

### 1 High-grade bare-tube heat exchangers

Thanks to a special heat exchanger design and arrangement a high extraction grade of up to 96% is achieved.

### 2 Domestic water-suited

Hygienically correct domestic water heating thanks to high-grade enamelling. An anode supplied as standard also provides protection from corrosion.

### 3 Connection stubs

Our connection stubs are a standard 50 mm in length. The fleece insulation thus insulates any non-used connections. This cuts radiation losses and an improved energy efficiency is achieved by the storage tank.

### 4 Use of the entire storage tank capacity

An optimum hot water connection at the top of the storage tank means that the storage tank capacity is fully utilised.

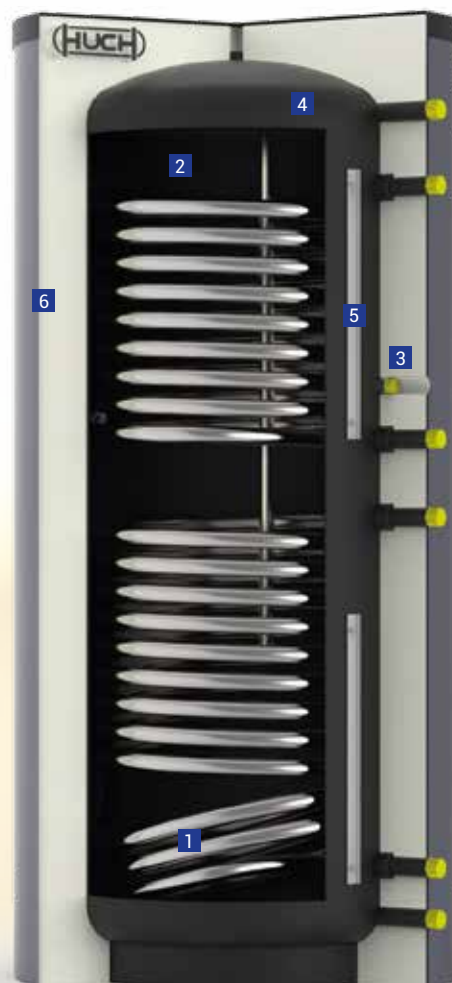
### 5 Flexible positioning of the temperature sensors

Sensor clamping strips allow the temperature sensor to be positioned at will. As a result, the Huch storage tanks are suitable for many application fields. (barring storage tanks with PU rigid foam; here firmly positioned sensor/controller connections).

### 6 Innovative highly efficient storage tank insulation

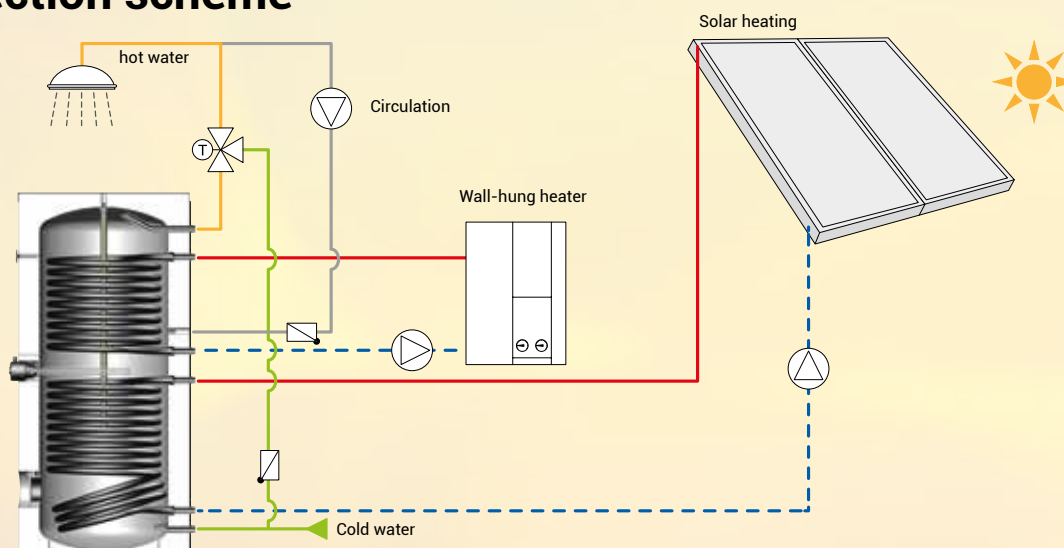
The high-grade Polyline© fleece insulation incl. a 100 mm lid and a 50 mm base insulation reduces heat loss by 10-15 % over soft foam.

**PU rigid foam insulation** - 50 mm high-grade polyurethane foam firmly wraps up the vessels in foam. No chimney effect develops and the insulation has excellent insulating properties.



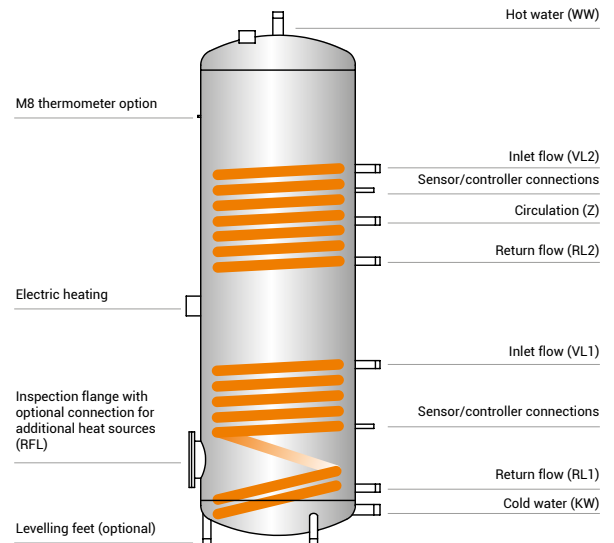
The SSH solar storage tank is shown in the illustration.

## Connection scheme



Schematic diagram – relevant standards and regulations must be observed!

# Solar storage tank ESS-PU



## Price / order number

Storage type	ESS-PU	200	300	400	500
<b>Price</b>					
ESS-PU with insulation	[€/item]	1129,-	1305,-	1595,-	1809,-
<b>Order number</b>					
ESS-PU with insulation RAL 9006		16593	14598	13813	14971
In stock		☑	☑	☑	☑

## Product description

- » **Material:** S235JR+N steel, internal enamelled, external primer coat
- » **Compressive strenght:** 10 bar
- » **Technical features:** two large bare-tube heat exchanger, Magnesium protection anode 1 ¼", Sensor sleeve, Thermometer, Inspection flange 180 x 110 x LK 150
- » **Connections:** Standard 1 ½" sleeve for retrofitting an electric heating, flat-sealing external threads
- » **Insulation:** 50 mm PU rigid foam insulation with Sky-coating
- » Levelling feet see list of accessories
- » **Energy efficiency class "B"** until 500 Litres on request
- » **Accessories:** are on the pages from 84



Special solutions such as the combination of various heat sources also allow for other applications.

## Technical data

Storage type	ESS-PU	200	300	400	500
Content	[Litres]	200	300	400	500
Energy efficiency class		<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>
Heat retaining loss (with insulation)	[Watt]	84	90	95	99
Diameter without insulation	[mm]	500*	500*	600*	650*
Diameter with insulation	[mm]	600	600	700	750
Insulation	[mm]	50*	50*	50*	50*
Height with insulation	[mm]	1232	1697	1660	1783
Tilted height	[mm]	1370	1800	1800	1970
Heating surface top/bottom	[m <sup>2</sup> ]	0,6 / 0,8	0,8 / 1,2	1,0 / 1,5	1,2 / 1,8
Water content WT top/bottom	[Litres]	3,8 / 5,0	5,0 / 7,5	6,3 / 9,4	7,5 / 11,3
Flow rate WT top/bottom	[m <sup>3</sup> /h]	0,7 / 1,2	1,0 / 1,6	1,2 / 2,0	1,4 / 2,4
Pressure loss WT top/bottom	[mbar]	30 / 70	35 / 90	45 / 120	55 / 250
NL number** top/bottom according to DIN 4708		1,23 / 3,6	1,8 / 8	2,1 / 11	2,5 / 14
Continuous output top/bottom according to DIN 4708 (10°/80°/45°)	[l/h] (kW)	410 (16,7) / 710 (28,9)	605 (24,6) / 970 (39,5)	720 (29,3) / 1180 (48,0)	830 (33,8) / 1400 (57,0)
max. T/ max. P - TW	[°C/bar]	95 / 10	95 / 10	95 / 10	95 / 10
max. T/ max. P - GWT-HZG***	[°C/bar]	160 / 25	160 / 25	160 / 25	160 / 25
Cold water / hot water AG (KW/WW)	[Inch]	G 1	G 1	G 1	G 1
Circulation AG (Z)	[Inch]	G ¾	G ¾	G ¾	G ¾
Heat exchanger all AG (VL/RL)	[Inch]	G ¾	G ¾	G ¾	G ¾
Electric heating IG (E-HZG)	[Inch]	G 1 ½	G 1 ½	G 1 ½	G 1 ½
Nominal width of inspection flange (RFL)		DN 110	DN 110	DN 110	DN 110
Sensor/controller connections (F1, F2)		Sensor sleeve, internal diameter = 9 mm			
Thermometer connections		M8 thermometer option			

Dimensions	ESS-PU	200	300	400	500
KW	[mm]	110	110	127	128
RL 1	[mm]	180	180	205	205
VL 1	[mm]	630	580	635	685
RL 2	[mm]	780	945	965	1020
Z	[mm]	880	1045	1065	1125
VL 2	[mm]	990	1215	1261	1325
WW	[mm]	top	top	top	top
E-HZG	[mm]	705	770	770	920
Weight	[kg]	85	114	166	215

Maintenance accessories	ESS-PU	200	300	400	500
Anode	[€/item] Order number	35,- 05714	37,- 03679	42,- 04041	62,- 04042
Blind flange	[€/item] Order number	21,- 03683	21,- 03683	21,- 03683	21,- 03683
Flange seal	[€/item] Order number	13,- 03684	13,- 03684	13,- 03684	13,- 03684

\* Insulation not removable. \*\* In order to achieve the specified NL number, the boiler output must be higher than the specified continuous output. \*\*\* Operating media for heat exchanger: water in liquid state only. Pay attention to the applicable DIN and DVGW specifications when connecting up the domestic water.