



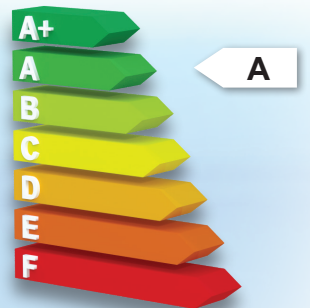
ENERGY SYSTEMS

Solarico[®]

Hygienic Hot Water
Radiator Heating
Underfloor Heating

UniQube 6C Energy Savings All-in

Solar heat source
Boiler heat source
Heat Pump heat source



NEW



live the future



Connection between us and water, in our homes, corresponds to the modality of living. Solarico UniQube leads us to new generations of storage tanks, a long life way of keeping our water hygienic and high quality.

Solarico thermal storage systems can store solar energy in the form of heat by using water as material with high specific heat capacity. Water stores heat and transfers energy in our home.

Solarico UniQube production

On the road to the highest energy efficiency, we choose the unique way for our "UniQube" hot water storage tanks.

Plastic-composite technology

Due to specific technology and materials used, reservoirs for our hot water tanks are long-lasting and thermal insulating vessels.

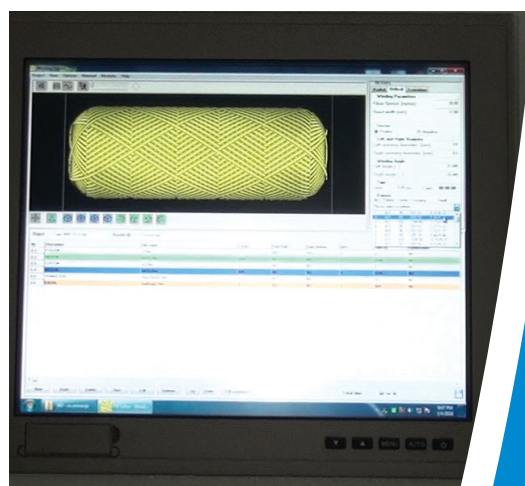
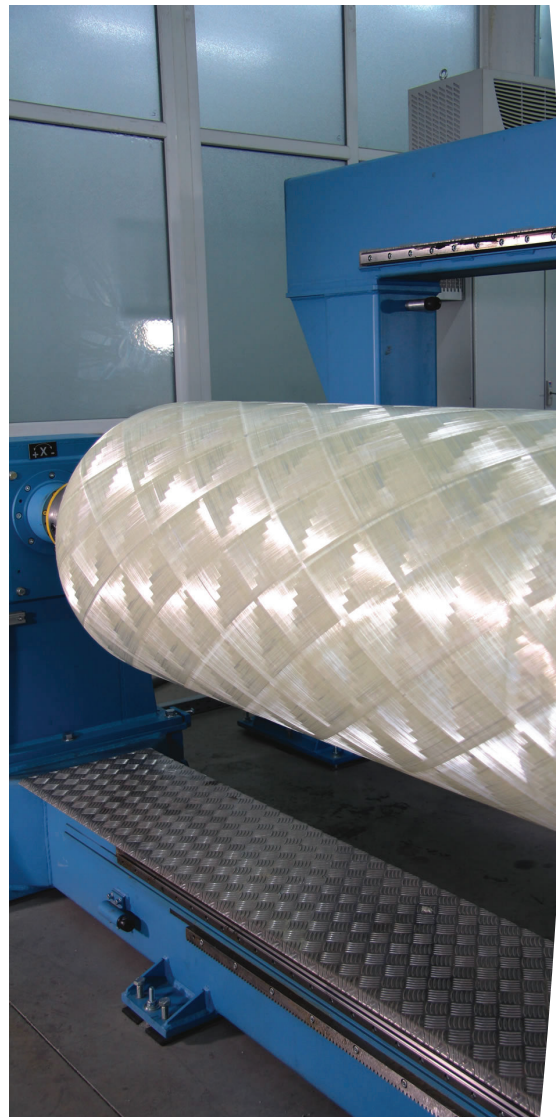
The **inner plastic reservoir** is made of cross-linkable HDPE:

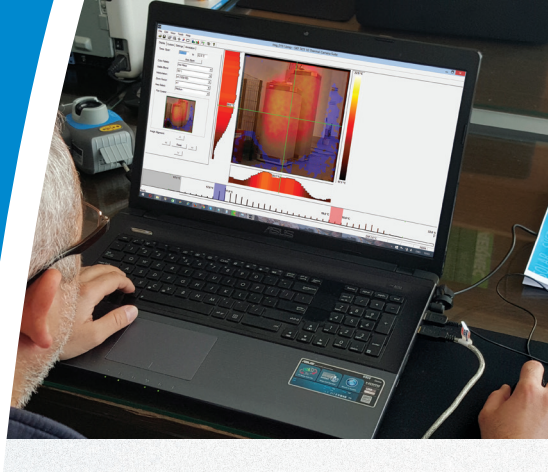
- It does not rust
- It is inactive in contact with a long list of chemicals
- Operates at temperatures up to 90°C
- Reliable for at least 30 years!
- Less than half the weight of steel reservoirs
- Smooth inner surface
- Reduced heat transfer

Composite filament winding is applied on the plastic reservoir:

- It does not rust
- It is inactive in contact with a long list of chemicals
- Operates at temperatures up to 90°C
- Operates at pressure up to 9 bars
- Ability to short-run production - we do not ask for a minimum order quantity
- Outstanding strength
- Impact resistance

- latest technology of filament winding
- laser-cut precision
- roto molding of thermal plastic
- computer controlled automated processes
- high quality materials





The 50% energy saving goal

Commitment to the next level of energy savings

Findings that our UniQube plastic-composite storage tanks are thermal insulators, and multifunctional, inspired our team of designers to check out the limits of product improvement and the benefits out of it.

Using sun heat for space heating

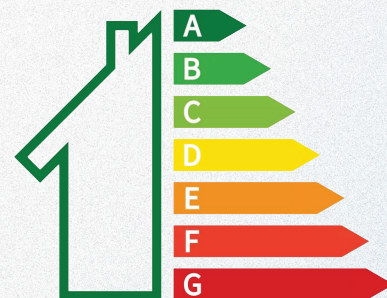
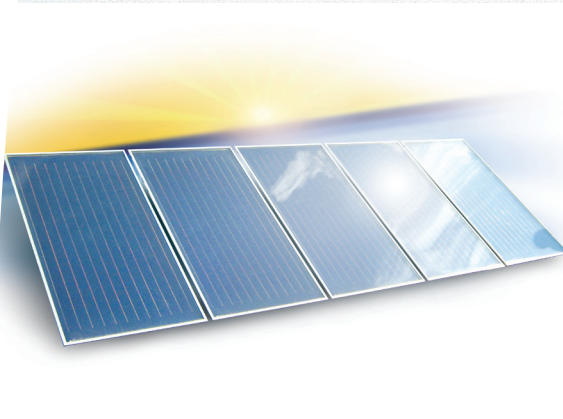
Conventional solar water heaters are using sun heat until the shower water temperature is reached. After this point, the available sun heat is not used.

UniQube solar storage tanks are using it until there is sun outside.

Our design of tanks integrates the solar thermal collectors with the space heating system and hygienic hot water.

Large solar input with UniQube Drain Back models

The Drain Back systems with UniQube solar tanks will not overheat and enable the installation of an oversized collector field that may save 50% energy of the heating system.



What is the 6C version of UniQubes?

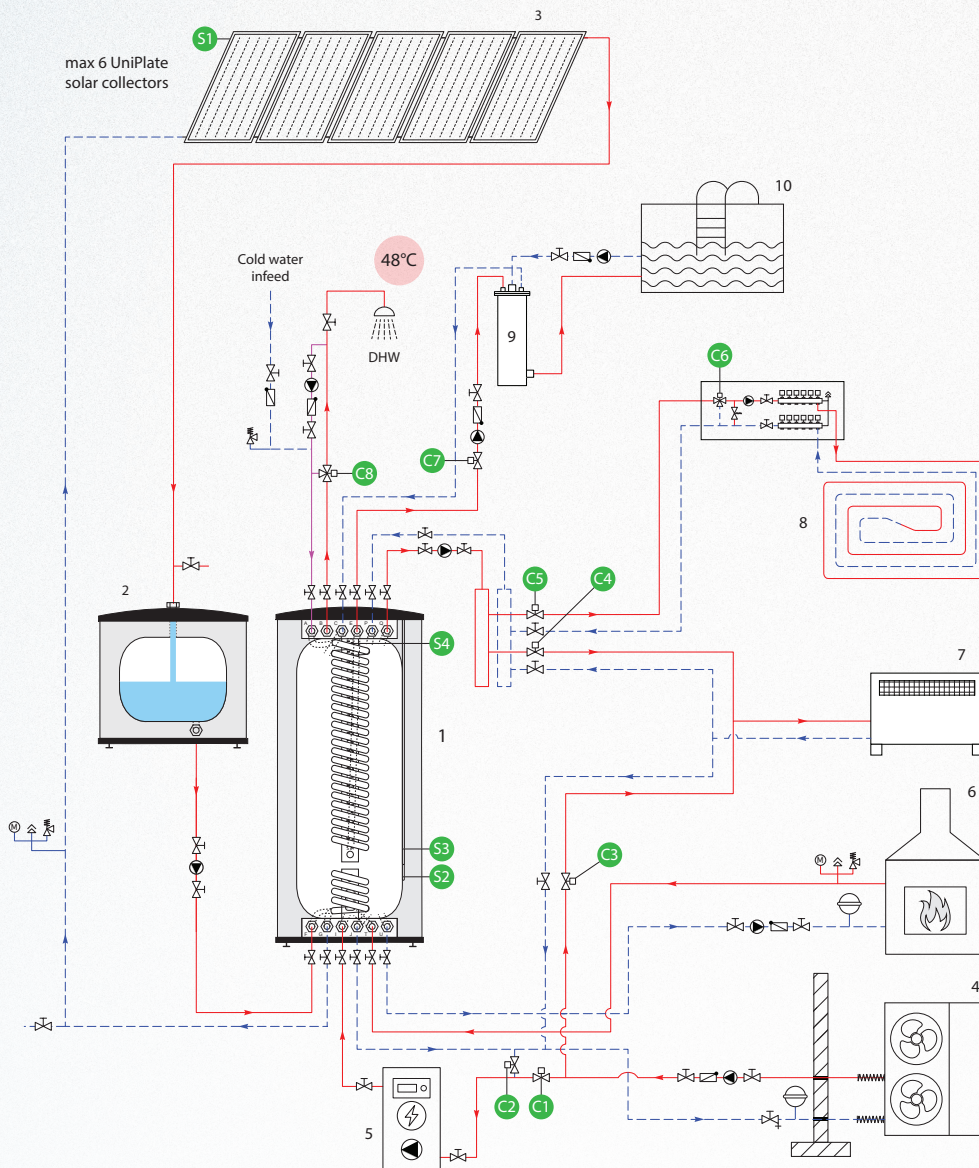
It is any UniQube model produced with the possibility to connect 6 heating circuits. Now it is possible to integrate 3 heat sources + 3 heat consuming circuits in direct connection with the heat accumulator.

More than conventional heat pump systems

UiQube 6C integration improves system performance by at least 25%. It may integrate and buffer high-temperature heat sources added to the heat pump systems. Solar thermal supports the heat pump work. It supplies multiple heat consumers like domestic hot water, swimming pools, radiator, or underfloor heating.

Now it is easy to design an energy-saving system

The system designers that will include UniQube 6C models in their projects, will offer a high-efficiency heating system for the end user.



1. UniQube SQ-BPSW-6C
2. UniQube Drain Back Reservoir DB
3. Solar collectors UniPlate 2.5 SB
4. Heat pump
5. Electric boiler
6. Boiler fireplace
7. Fan coil units
8. Floor heating
9. Solarico Heat Exchanger SHE
10. Pool

- S Sensors
- C Controllers

UNIQUE & PRIMARY CIRCUIT CONTROL

| | | | C1 | | C2 | C3 | C4, C5, C6, C7 |
|--|--------|--|-----------|-----------|-----|-----|----------------|
| | WINTER | Heat pump heating - ON | S4 < 40°C | S4 > 55°C | ON | ON | ON |
| | | Solar heating - ON | ON | OFF* | | | |
| | SUMMER | Electric boiler back up - ON | | | ON | ON | OFF |
| | | Heat pump cooling - ON | OFF | | | | |
| | | Solar heating - ON | OFF | | | | |
| | | DHW back up heating with electric boiler | OFF | | ON | ON | OFF |
| | | DHW back up heating with heat pump | S4 < 40°C | S4 > 55°C | OFF | OFF | |
| | | | ON | OFF* | | | |

* Heat Pump high pressure protection if Solar DHW heating is set above 55°C

UniQube 6C

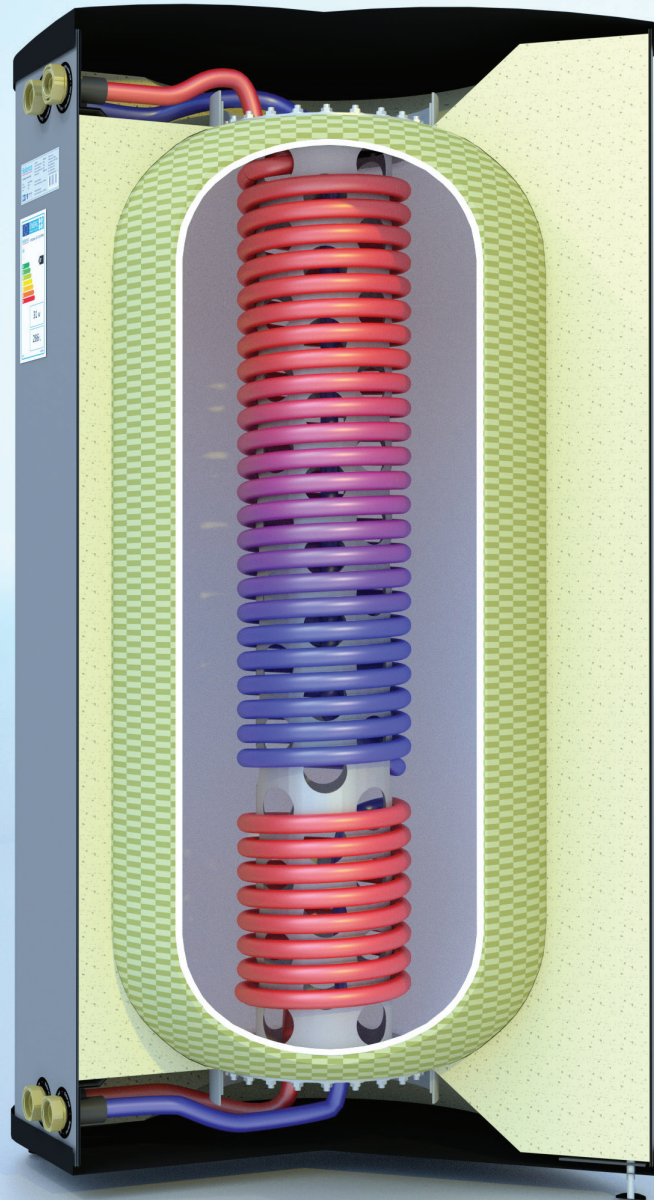
Solar Storage Tank Domestic Water Heater Stratified Separator Storage Tank

ADVANTAGES

- Easy integration of any type of heat source
- Easy integration of any type of heat consumers
- Total hydraulic separation of 6 circuits
- Available for 310, 440 and 800 liter accumulation tanks
- Simplified pipeworks
- Minimized heat losses

BENEFITS

- Smooth thermostat control over all heat consumers
- Solution for systems with multiple heat sources
- Extended lifetime of the system components
- Cheaper installation
- Lower energy bill
- Space saving installation



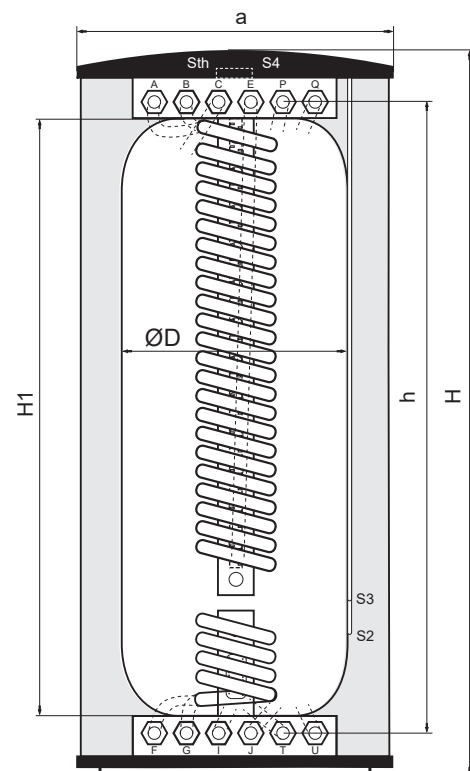
Solarico UniQube 6C models are the extended version of UniQube hot water storage tanks. Now, 6 hydraulic circuits may be directly connected to it, because of added connection points at the top and the bottom of the tank.

- The top connectors are for connection of heat consumers
- The bottom connectors are for connection of heat sources
- 3 different heat sources and 3 heat consumers may be directly connected to the UniQube 6C

UniQube 6C models are solutions for end users that require heating systems with Boiler Fireplace integration, energy-saving Heat Pump, and Solar Collectors. The added connection points on UniQube 6C's do not require installation of distribution manifolds for its circuits, simplifying pipeworks and overall installation. The 6 circuits are hydraulically separated, preventing pumps from interfering with one another and running in a mode of minimum energy consumption.

UNIQUBE MODEL - SOLAR STORAGE TANK, DOMESTIC WATER HEATER, STRATIFIED SEPARATOR STORAGE TANK

| TYPE SQ-BPSW-6C | | 310 | 440 | 800 |
|------------------------------------|-------------------|------|------|------|
| D (diameter) | (mm) | 620 | 620 | 890 |
| H1 (height) | (mm) | 1300 | 1730 | 1730 |
| h (connectors) | (mm) | 1320 | 1750 | 1750 |
| Connections C, E, P, Q, I, J, T, U | | 5/4" | 5/4" | 5/4" |
| H (height) | (mm) | 1570 | 2000 | 2000 |
| a (width) | (mm) | 725 | 725 | 960 |
| max. working temp. | (°C) | 90 | 90 | 90 |
| max. working pressure | (bar) | 6 | 6 | 6 |
| max. test pressure | (bar) | 9 | 9 | 9 |
| Net tank capacity | (liters) | 290 | 413 | 773 |
| Approx. weight | (kg) | 104 | 130 | 160 |
| S2 Solar sensor position | (mm) | 1110 | 1550 | 1550 |
| S3 Heating sensor position | (mm) | 910 | 1350 | 1350 |
| S4 DHW sensor position | (mm) | 140 | 140 | 140 |
| Pivot measurement | (mm) | 1730 | 2130 | 2219 |
| Solar heat exchanger | | | | |
| Connections F, G | | 5/4" | 5/4" | 5/4" |
| max. working pressure | (bar) | 10 | 10 | 10 |
| max. test pressure | (bar) | 15 | 15 | 15 |
| capacity | (liters) | 5 | 8 | 8 |
| output area | (m ²) | 1,2 | 2 | 2 |
| Water heat exchanger | | | | |
| Connections A, B | | 5/4" | 5/4" | 5/4" |
| max. working pressure | (bar) | 10 | 10 | 10 |
| max. test pressure | (bar) | 15 | 15 | 15 |
| capacity | (liters) | 15 | 19 | 19 |
| output area | (m ²) | 3,8 | 5 | 5 |



- A - Cold water in
- B - Hot water out
- C - Heating in
- E - Heating out
- P - Heating in
- Q - Heating out
- F - Solar in
- G - Solar out
- T - Heat Pump In
- U - Heat Pump out
- I - Boiler in
- J - Boiler out
- S2 - Solar sensor
- S3 - Heating sensor
- S4 - DHW sensor

Following the knowledge

The UniQube 6C models are Solarico's latest project, utilizing the potential of direct connection of multiple heat circuits to the tank.

- 3 heat sources + 3 heat consumers in direct connection to the A-class energy efficient heat storage.
- Heating System designs, where UniPlate solar collectors are added, result in notable energy savings because of 100% free solar thermal energy
- 4 times more efficient collectors per m², compared to photovoltaic panels, in a sense of sun energy utilization
- Usage of thermal collectors as a real support for the heating system by up to a fantastic 50%, and even more
- "Drain Back Solar" option, solar system is 100% stable

Solarico®

UniQube Heart of your energy systems



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