

Luxxor Thermocline storage

Takes warm water installation to the next level



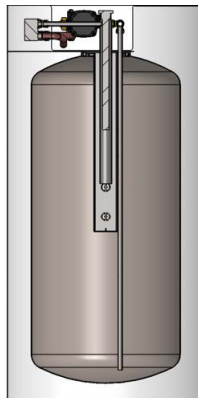
This universal storage tank improves every (sustainable) domestic hot water system. By controlling the temperature layers within the storage tank, the hot water conversion always operates at an optimal temperature. For a heat pump, for example, the Thermocline increases the COP of the installation, which reduces the electricity demand and the maximum required power. The Luxxor Thermocline works seamlessly with all sustainable heat sources.

This universal storage tank improves every hot watersystem.



Innovation

Our patented stratifier 'guides the incoming hot water to its ideal temperature layer within the tank. Special flaps prevent disruptive mixing, ensuring optimal stratification. This innovative design allows charging and discharging through a single passage.



Results of innovation

- Excellent layering
- Vastly reduced energy losses



Advantages

- Boosts heat pump efficiency by 9 to 25%
- Reduces heat pump electricity consumption
- Helps to prevent grid congestion
- Circular by design

Integration

Unlike traditional tanks that use a spiral heat exchanger inside the tank, the Thermocline features a highly efficient plate heat exchanger located on top. This innovative design minimizes heat loss (less thermal bridges) and surpasses the performance of traditional spiral heat exchangers by preserving stratification within the tank.

	RVS storage
Volume	150 / 200 / 270L
Material	Stainless steel
Diameter [mm]	660
Height [mm]	1080 / 1330 / 1660
Weight [kg]	53 / 57 / 67
Isolation	EPS
Energy label	A+ / A / A



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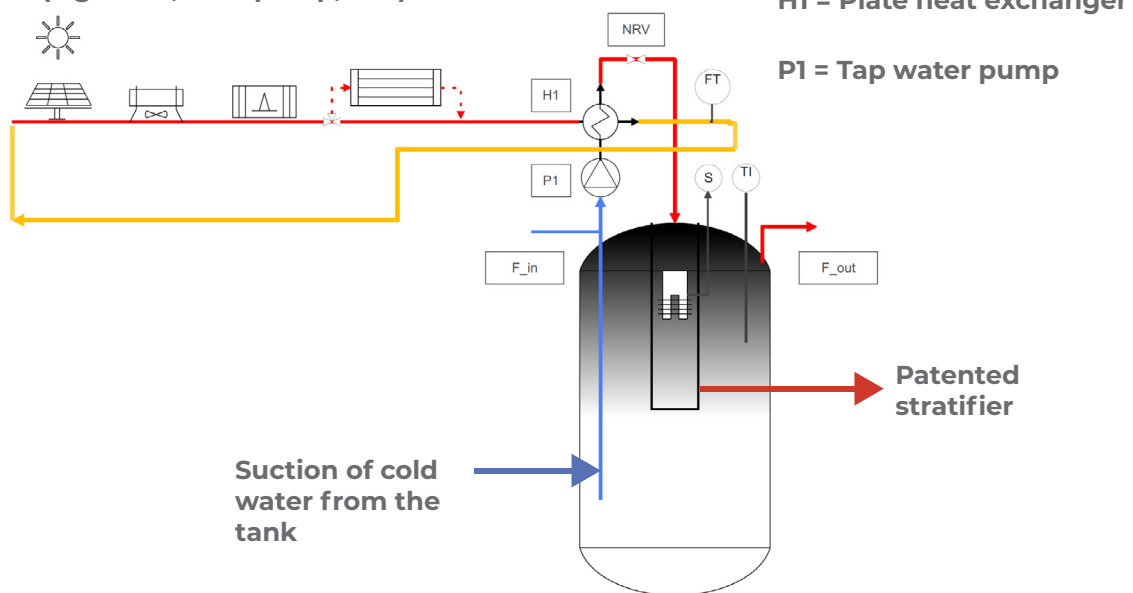
The importance of storage

Hot water represents a significant and increasing portion of heat demand, often exceeding 50% in new construction projects. This demand persists year-round, requiring temperatures of 55-60°C (potentially higher in utility depending on configuration) and high-power output (typically 15-20kW, with large showers reaching up to 40kW).

These high temperatures and power requirements pose challenges for many heat pumps. Hot water buffers offer multiple advantages to optimize hot water systems:

- Hot water buffers act as a thermal bank, allowing you to use smaller, lower-cost heat pumps that meet the demand. This minimizes grid connection capacity needed for peak usage.
- Buffers help manage the summer peak of solar power generation. Excess electricity can be used to heat water, reducing reliance on the grid
- Buffers increase year-round self-consumption of solar energy by using excess electricity for hot water heating when solar production is high.
- Buffers enable strategic hot water heating to occur when sustainable energy costs are low. This maximizes cost savings for the homeowner
- Buffers reduce peaks by distributing demand over a longer timeframe. This eases pressure on the grid during peak hours.

Heat source (e.g. solar, heat pump, etc.)



New

Luxxor hot water storage – layered for sustainability

The product group 'hot water storage' includes two product-series.

Thermocline - Layered heat

- High quality storage tank
- Increased heat pump performance (by 9 to 25%), due to improved layering with the patented stratifier
- Reduced heat losses due to a single passage

NESstore – Heat Battery

- Stores thermal energy like a home battery, but for heat.
- Holds 6 to 8 times more heat than traditional storage tanks
- Near zero heat loss to the environment because of the patented vacuum insulation
- Week-Long Shift: Store excess heat and use it for hot water needs over a week.