

# THERMAL STORES & HOT WATER TANKS

## HYGIENIK TANKS

Lying at the heart of many system designs and allowing for perfect integration of multiple heat sources is the Hygienik Hot Water Buffer Tank. This tank's ability to integrate with a wide range of micro-renewable and conventional technologies will enhance the efficiency of any heating or hot water system.

Hygienik Tanks are layered storage tanks where the upper area is heated up to provide hot mains water. It is both a thermal store and hot water buffer tank. Heat is stored in the form of hot water. The Hygienik Tank can be heated by a range of heat sources and provides both heating and hot water. When the hot water tap is turned on, cold mains water passes through an external heat exchanger. This results in a constant supply of fresh hot water.



## Unique Features

- Available in sizes 500-2000 litres
- Delivers fresh hot water straight from the tap (legionella free)
- Extremely efficient – no requirement for electric immerser
- Unvented, operates on mains pressure
- Extremely versatile; additional heat sources (eg heat pump, solar, biomass) can be integrated to create a hybrid system, tailored to every requirement. Any extra heat generated can be dumped into the tank and stored until it's required.
- No requirement for a second hot water tank
- CO2 reduction – the Hygienik Tank optimises the switch frequency of heating boilers which helps reduce emissions

Heating and hot water make up the largest part of the energy costs of a building. All solar heating systems require additional heating during winter.

Solar systems with solar back-up heating systems multiply your energy yield.

The heat exchanger is a truly unique design feature, ensuring one of the most energy efficient hot water systems on the market. Tap capacity is available from 25 l/min to 70 l/min. Several heat exchange stations can be combined to allow for installation in larger buildings.

IHS Solutions

Underfloor Heating

Ground Source Heat Pumps

Air Source Heat Pumps

Thermal Stores & Hot Water Tanks

Solar Thermal Systems

Manifolds, Pipe & Controls

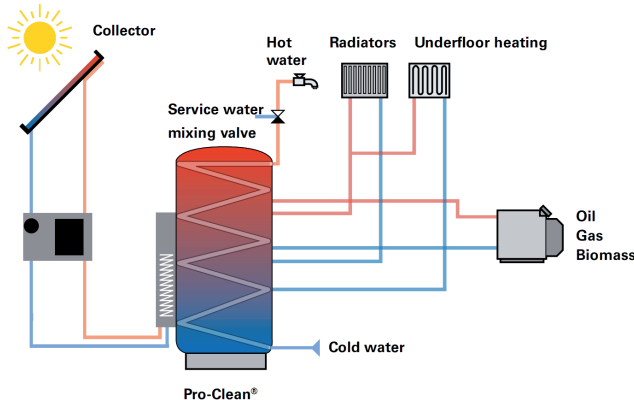
Road Energy

Lewis Plates

## PRO-CLEAN STRATIFIED TANK WITH SPHERICAL EXCHANGER

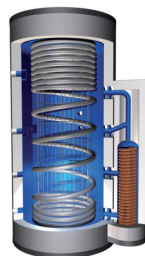
Solar energy can be more effectively used with larger collector surfaces and the Pro Clean Stratified Tank with spherical exchanger. Combined with a solar heating system, the Pro-Clean stratified tank can deliver savings of 70 to 90% energy costs for heating water.

### Pro Clean® Stratified Tank Functional Diagram



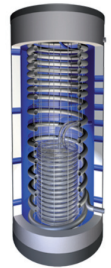
This tank is a simple and efficient back-up heating unit. It stores excess solar heat for heating and hot water for cloudy or overcast days.

The Pro Clean spherical exchanger works along the principle that hot water rises and cold water sinks and uses it to create layers of hot water with a range of temperatures in the tank. The required water temperature is delivered from the corresponding layer in the tank. Because of this, solar energy yields can be utilised much earlier than with traditional systems.



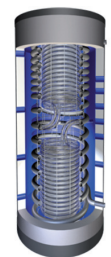
## Fresh Water Storage Tank FS 1R and FS 2R

This multi-functional fresh water storage tank delivers hot water and heating. The FS 1R fresh hot water tank with a single solar coil heat exchanger is suited to hot water production with additional heating functionality. Continuous flow water heating guarantees hygienic water.

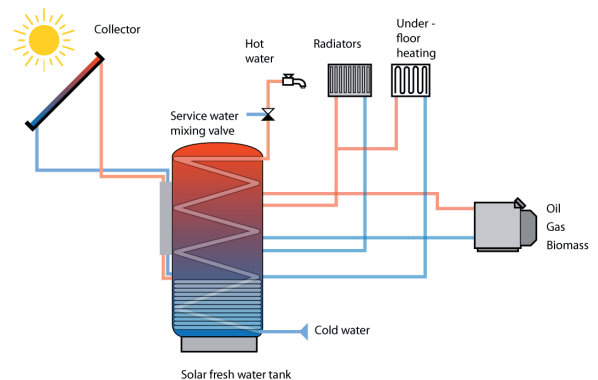


The FS 2R Tank with two coils ensures enhanced system efficiency. The integrated solar priority circuit heats the upper section of the tank; in doing so, it heats up more quickly.

These tanks are ideal for use with all solar systems and provide water heating, back-up heating and additional heating when combined with a boiler or other conventional heating systems.



### Fresh Water Tank Functional Diagram



### Benefits

- Simple concept and design, quick and easy to install
- Because it's not stored, water is hygienic and germ-free
- Perfect for combination with all heat sources (eg heat pumps, solar, biomass, oil, gas)
- Suitable for future upgrading or expansion
- Because tank is layered, solar energy utilisation is optimal
- Simple and clear control functions
- Patented stratified charging system
- Optimum use of solar energy for hot water and heating.

### Advantages

- Germ-free fresh water heating using special corrugated stainless steel pipe
- Enhanced efficiency when used with any heating system (solar, heat pump, biomass)
- Constant hot water supply; heats extremely quickly
- Uncomplicated technology -based on natural principles
- Superb additional heating together with conventional heating systems
- Long service life