

- Layered tank
- Solar layered tank
- Hygienic layered tank
- Hygienic solar layered tank



**Water is the primordial  
matter of all being!**  
*(Thales von Milet)*



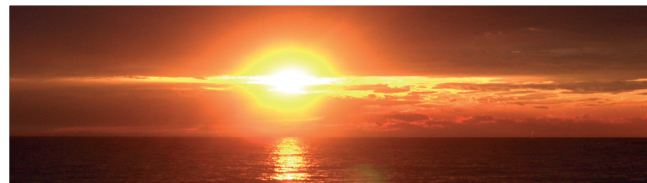
## Modern energy management

Every heating system has to be designed for the coldest times of the year. However, boilers very rarely have to work to full capacity. For most of the heating period, the average heat consumed is less than 50% of the rated heat output. A storage tank ensures an economic and environmentally-friendly use of energy in spite of this. This "heat manager" holds surplus heat and releases it again to the heat distribution system when required without having to restart the boiler. A Froling layered tank thus helps you reduce your fuel consumption, increases your ease of use and makes a valuable contribution to climate protection.



## Flexible applications

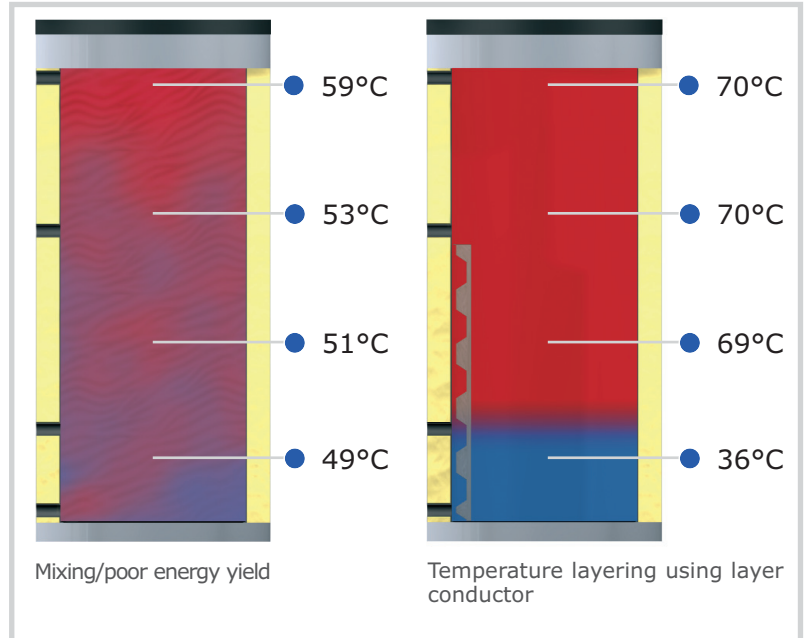
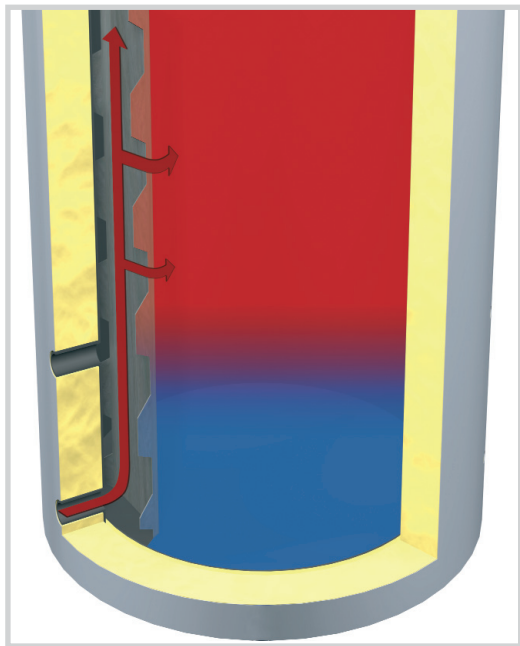
Froling layered tanks are best used in combination with a pellet, waste wood or wood chip boiler, but they can also be used with other heat sources, such as an oil or gas boiler, for example. With the solar layered tank and the H3 hygienic solar layered tank, an efficient solar panel system can also be integrated. The solar power always takes priority thanks to the Froling LambdaTronic's intelligent control management.



# Energy management perfected

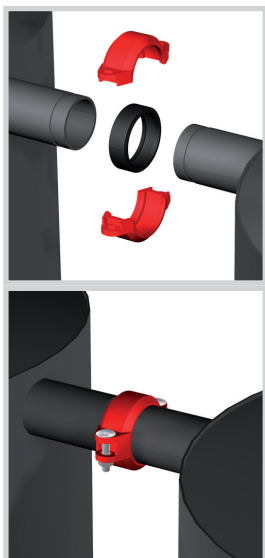
## Exact temperature layering in the tank

Precise temperature layering in the tank is crucial for optimal functioning, as it ensures that as much energy as possible can be reused. All Froling layered tanks feature a special layer conductor for this purpose.



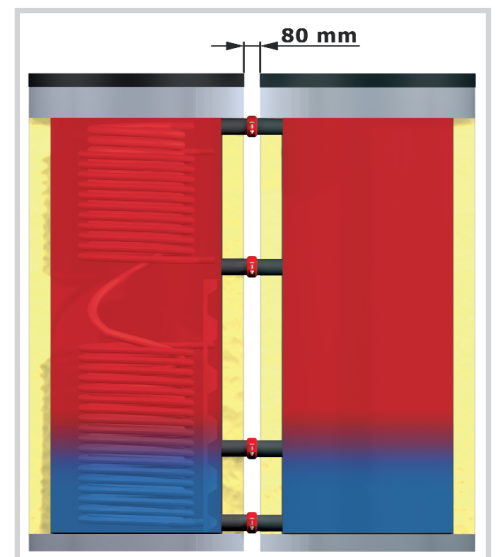
The specially developed layer separator allows inch-perfect temperature layering and guarantees maximum energy yield and low running costs.

## Integration made easy



Thanks to their intelligent measurements, Froling layered tanks can be easily installed in the boiler room. And where space is at an absolute premium, Froling offers even more: two short slim tanks can be connected together intercommunicating.

This "package solution with layer guarantee" distributes the heat equally to both tanks. Another advantage is the fast and easy assembly.



# Layered tanks



## Systems engineering perfected

The original Lambdatronic control for Froling firewood, waste wood and pellet boilers offers a range of interesting ways to increase efficiency. The Lambdatronic represents modern energy management. Everything - from the boiler to the entire tank system and the heating to the solar panel system - is operated using just one control. Now that's surely unique!

## The Froling layered tank systems



Store surplus heat	✓	✓	✓	✓
Precise temperature layering for high energy yield and low running costs	✓	✓	✓	✓
Best thermal insulation thanks to all-round CFC-free insulation	✓	✓	✓	✓
Communicating tank expansion in tight spaces	✓	✓	✓	✓
Combination with other heat generators	✓	✓	✓	✓
Integrated solar power		✓		✓
Hot water tank and layered tank in one			✓	✓
Hot water tank, layered tank and solar tank in one				✓
For more information, please see...	Layered tanks	Solar layered tank	Hygienic layered tank	Hygienic solar layered tank

# Layered tanks / solar layered tanks

## The Froling layered tank and solar layered tank

The sophistication is in the detail! Froling's layered tanks and solar layered tanks feature an impressive heat management concept which offers optimal energy intake and extraction in particular.

Froling's solar layered tank also allows you to easily integrate solar power.

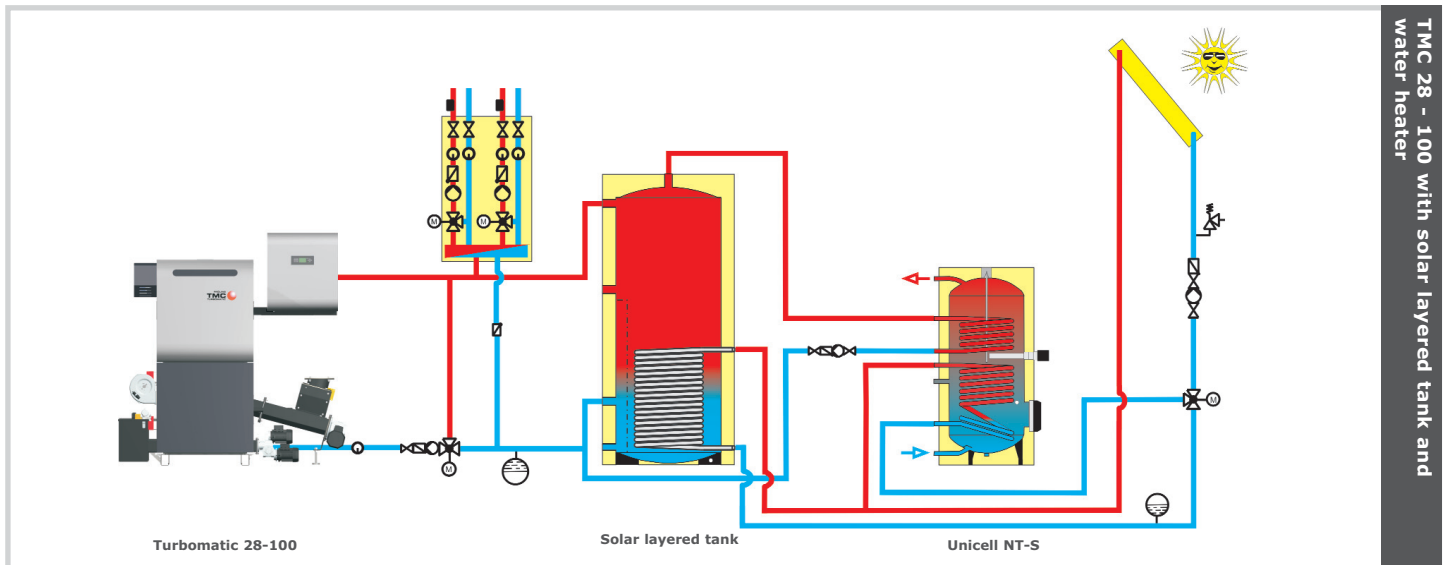
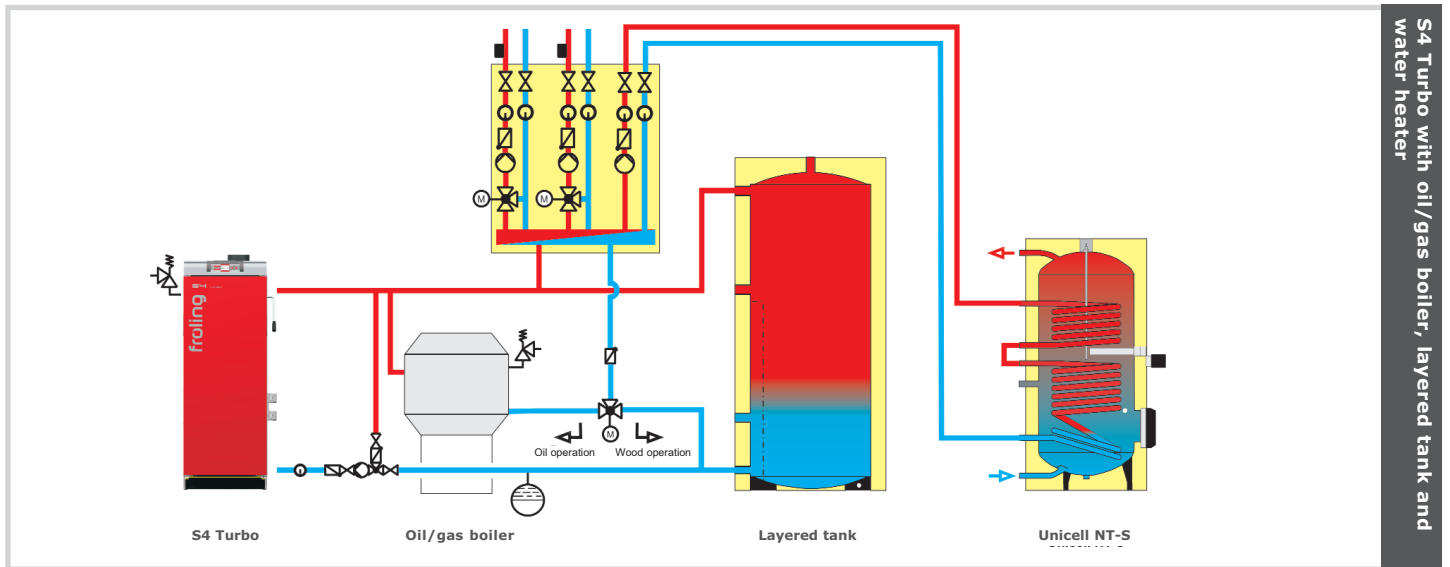
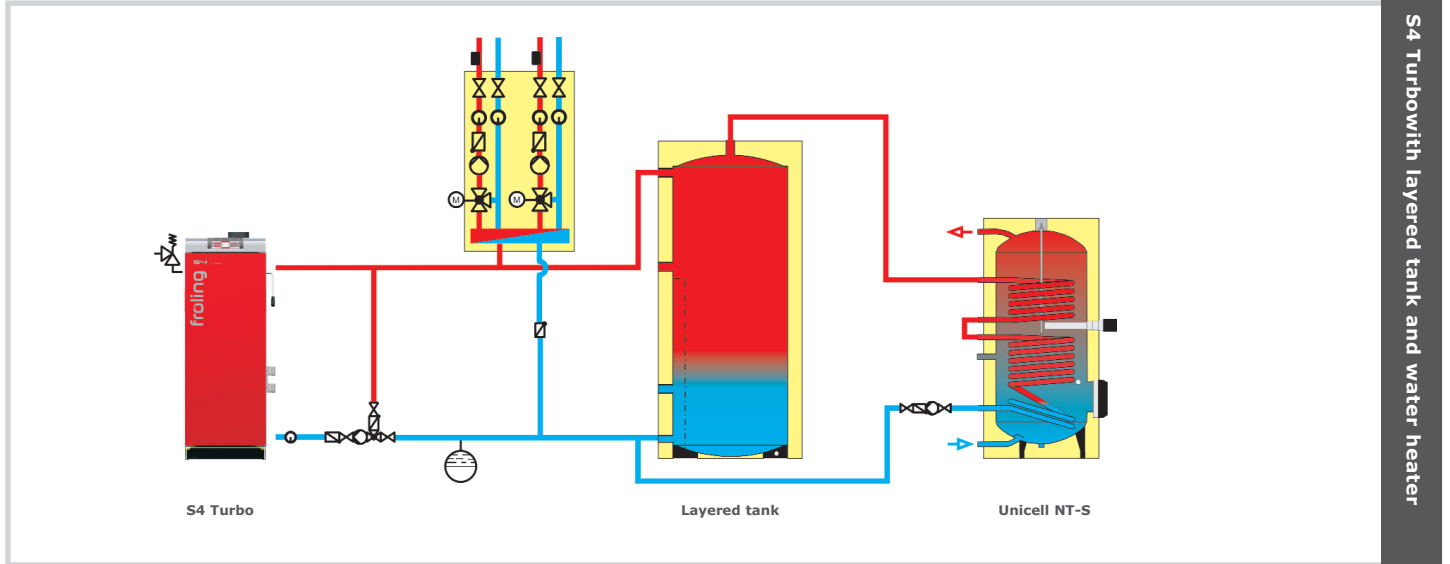


Layered tank / solar layered tank		500	850	1000	1500	1800	2200
Capacity	[l]	530	830	1000	1400	1800	2200
Permitted working over-pressure	[bar]	3	3	3	3	3	3
Permitted operating temperature	[°C]	95	95	95	95	95	95
Height of tank (excl. insulation)	[mm]	1650	1950	2160	2185	2190	2645
Height of tank (incl. insulation)	[mm]	1660	1970	2180	2215	2220	2670
Diameter of tank (excl. insulation)	[mm]	690	790	790	960	1100	1100
Diameter of tank (incl. insulation)	[mm]	880	980	980	1150	1290	1290
Surface of solar coil <sup>1)</sup>	[m <sup>2</sup> ]	-	3	3	4	4	4
Weight	[kg]	105	140	155	210	230	280
Weight incl. solar coil <sup>1)</sup>	[kg]	-	185	200	268	288	338
Minimum store height (tilt height)	[mm]	1700	2000	2220	2250	2300	2720

1) Solar coil only with solar layered tank.

# Layered tanks

## Connection examples



# H2 Hygienic Layered Tank



## The H2 hygienic layered tank

The H2 hygienic layered tank is a quality Froling product which generates hygienically hot water using the flow principle. It is a hot water tank and layered tank in one.



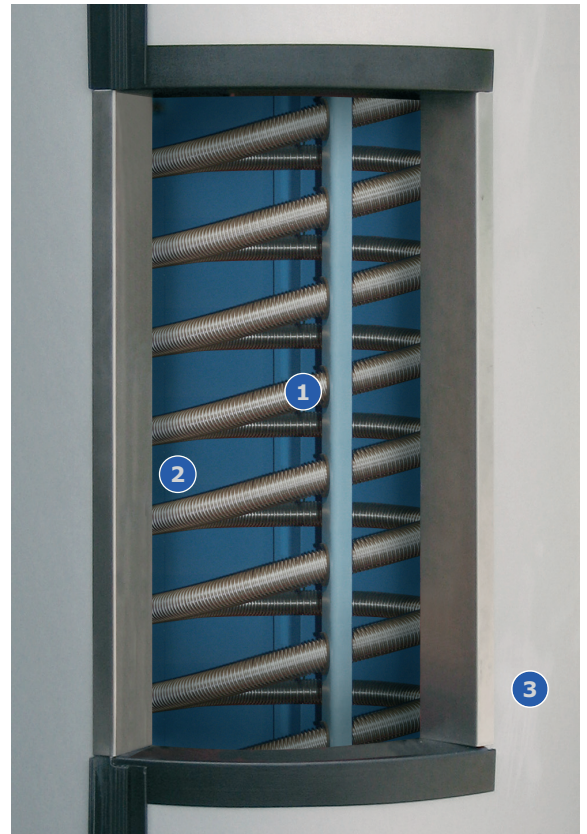
## Maximum hygiene thanks to legionella-free domestic hot water

The volume of the storage tank is large, yet the capacity of the high performance stainless steel corrugated pipe element is relatively low. Thanks to the highly efficient heat exchanger surface the tank consistently provides sufficient fresh hot water of exceptional quality using the flow principle. Guaranteed to be free from legionella!



## The H2 hygienic layered tank close up

- 1 Corrugated stainless steel pipe element** for hygienic water heating. Permanently fresh hot water free from legionella is guaranteed thanks to the flow principle. The short diameter of the corrugated pipe protects against cracks as a result of pressure surges. The corrugated pipe also practically cleans itself. The internal movement means that there is hardly any depositing, even with calciferous water.
- 2 Reliable layer conductor system** for exact temperature layering in the tank - guaranteeing you an ideal energy yield.
- 3 High quality insulation** with outer jacket for optimal thermal insulation.



H2 hygienic layered tank		700	1000	1500	
Capacity	[l]	700	1000	1400	
Height of tank (excl. insulation)	[mm]	1650	2160	2185	
Height of tank (incl. insulation)	[mm]	1670	2180	2215	
Diameter of tank (excl. insulation)	[mm]	790	790	960	
Diameter of tank (incl. insulation)	[mm]	980	980	1150	
Weight	[kg]	250	270	330	
Minimum store height (angled height)	[mm]	1750	2220	2250	
Domestic hot water element	Heating surface	[m <sup>2</sup> ]	5,4	6,6	6,6
	Domestic hot water capacity	[l]	40	43	43
	Maximum continuous output of coil (tV = 80 °C)	[kW]	60	75	75
	Flow capacity at 70 °C (fully loaded tank) and 25 l/min tapping quantity at tap temperature 45 °C	[l]	365	450	470
	Permitted working over-pressure	[bar]	6	6	6
	Connections (outer thread)	[inches]	5/4	5/4	5/4

# The H3 hygienic solar layered tank



## The H3 hygienic solar layered tank

The Froling H3 hygienic solar layered tank is a hot water tank, layered tank and solar layered tank all in one. Two high performance solar elements guarantee efficient solar integration.



## The big plus

When used in conjunction with the H3, the solar panel system not only heats water, it can also be used to boost your heating system, especially for preheating domestic hot water in the bottom of your tank. Which means you can maximise your use of solar power.

## The H3 hygienic solar layered tank close up

- 1 High performance solar element at the top** to quickly heat the hot water area of the tank. Priority operation to ensure a sufficient hot water supply via the solar panel system as quickly and for as long as possible.
- 2 Corrugated stainless steel pipe element** for hygienic hot water. Permanently fresh hot water, free from legionella, is guaranteed thanks to the flow principle. The large heating surface at the top ensures a high output, the heating surface at the bottom is responsible for preheating and cooling the tank. This optimises the use of solar power all year round.
- 3 High performance solar element at the bottom** ensures that the tank is loaded to full capacity when the solar panel system provides a lot of energy and preheats the cold zone when there is little solar radiation. Ideal in conjunction with systems featuring wall and underfloor heating!
- 4 Reliable layer conductor system** for exact temperature layering in the tank, thus guaranteeing optimal energy yield.
- 5 High quality insulation** with outer jacket for optimal thermal insulation.



# H3 Hygienic Solar Layered Tank

## Versatile

Froling's H3 hygienic solar layered tank is perfect in combination with a pellet, waste wood or wood chip boiler as well as oil or gas heating - especially for systems which utilise the calorific value and systems for heat recovery. The corrugated stainless steel hot water pipe element which runs through the tank optimally cools the bottom part of the tank by preheating the domestic hot water. The low temperatures at the bottom of the tank enable a low return feed temperature to the collector and thus extremely efficient utilisation of the solar energy irradiation (up to 70% more energy yield depending on the collector type). During the transitional period in particular, but also on sunny winter days, the solar panel system can be used to boost - and possibly even substitute - the heating boiler. The low return feed temperatures available are particularly appealing, as these enable maximum calorific value utilisation in calorific value boilers.

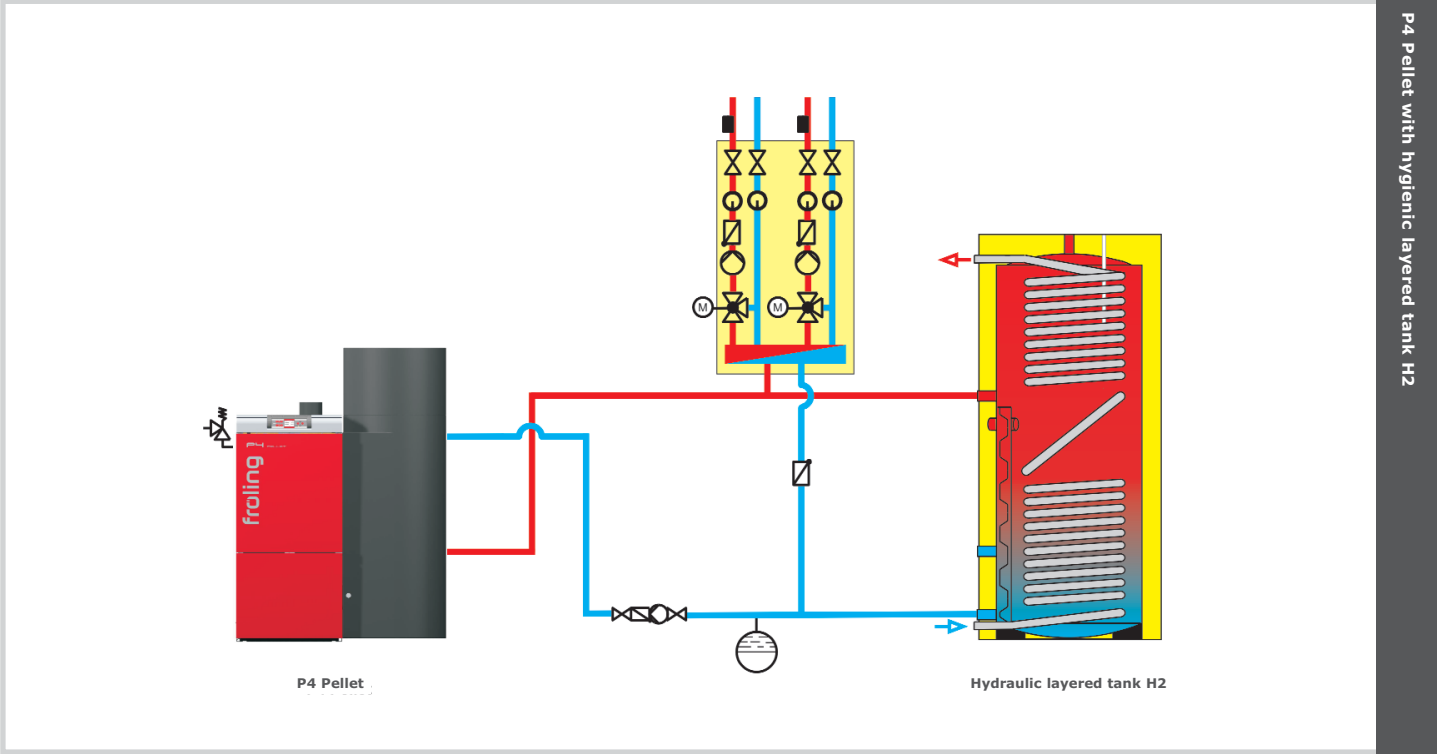


## Technical data

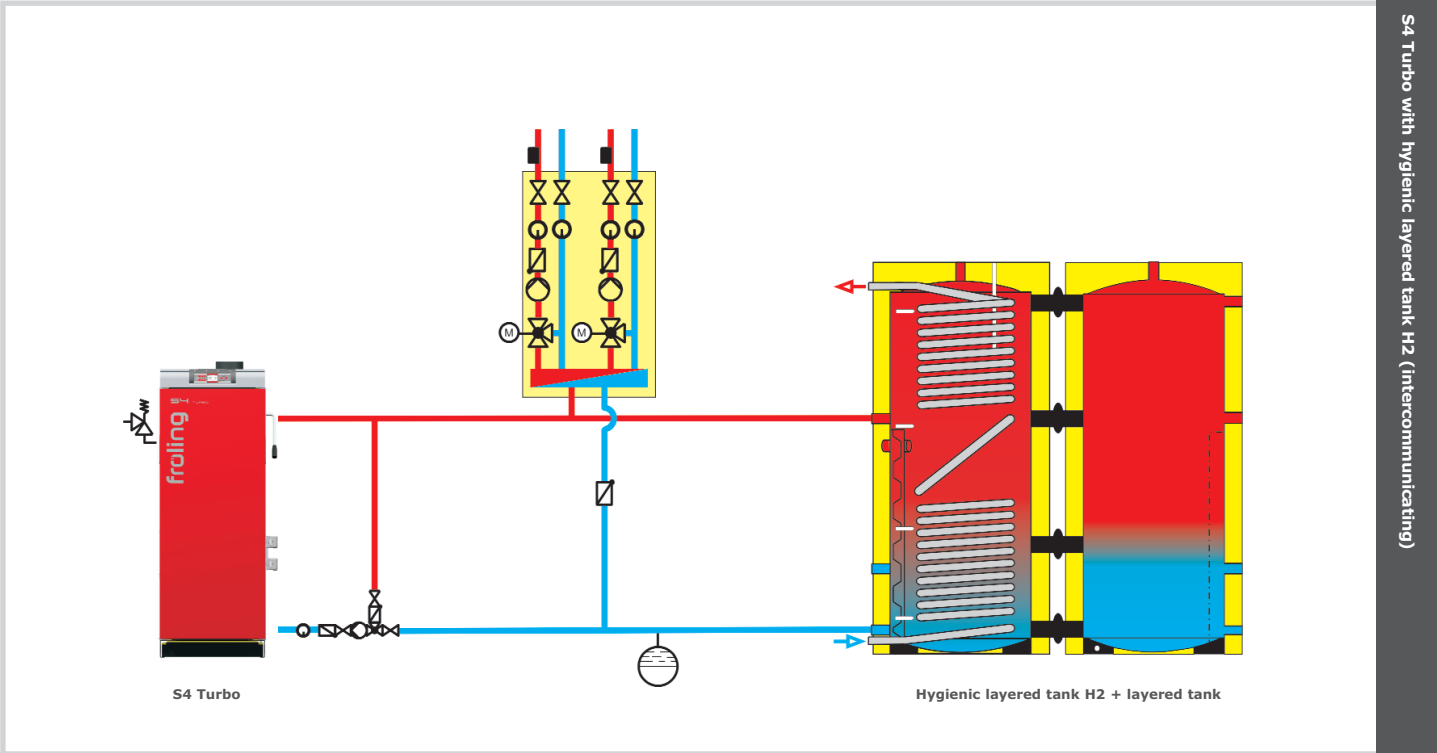
<b>H3 Hygienic Solar Layered Tank</b>		<b>850</b>	<b>1000</b>	<b>1500</b>	
Capacity	[l]	830	1000	1400	
Height of tank (excl. insulation)	[mm]	1950	2160	2185	
Height of tank (incl. insulation)	[mm]	1970	2180	2215	
Diameter of tank (excl. insulation)	[mm]	790	790	960	
Diameter of tank (incl. insulation)	[mm]	980	980	1150	
Weight	[kg]	290	305	360	
Minimum store height (angled height)	[mm]	2000	2220	2250	
<b>Domestic hot water coil</b>	Heating surface	[m <sup>2</sup> ]	6,0	6,6	6,6
	Domestic hot water capacity	[l]	40	43	43
	Maximum continuous output of coil (tV = 80 °C)	[kW]	60	75	75
	Flow capacity at 70 °C (fully loaded tank) and 25 l/min tapping quantity at tap temperature 45 °C	[l]	405	450	470
	Permitted working over-pressure	[bar]	6	6	6
	Connections (outer thread)	[inches]	5/4	5/4	5/4
<b>Top solar coil</b>	Heating surface	[m <sup>2</sup> ]	2,5	2,5	2,5
	Permitted working over-pressure	[bar]	16	16	16
	Permitted operating temperature	[°C]	110	110	110
	Connections (outer thread)	[inches]	1	1	1
<b>Bottom solar coil</b>	Heating surface	[m <sup>2</sup> ]	3,0	3,0	4,0
	Permitted working over-pressure	[bar]	16	16	16
	Permitted operating temperature	[°C]	110	110	110
	Connections (outer thread)	[inches]	1	1	1

# Hydraulic connections

## Connection examples with h



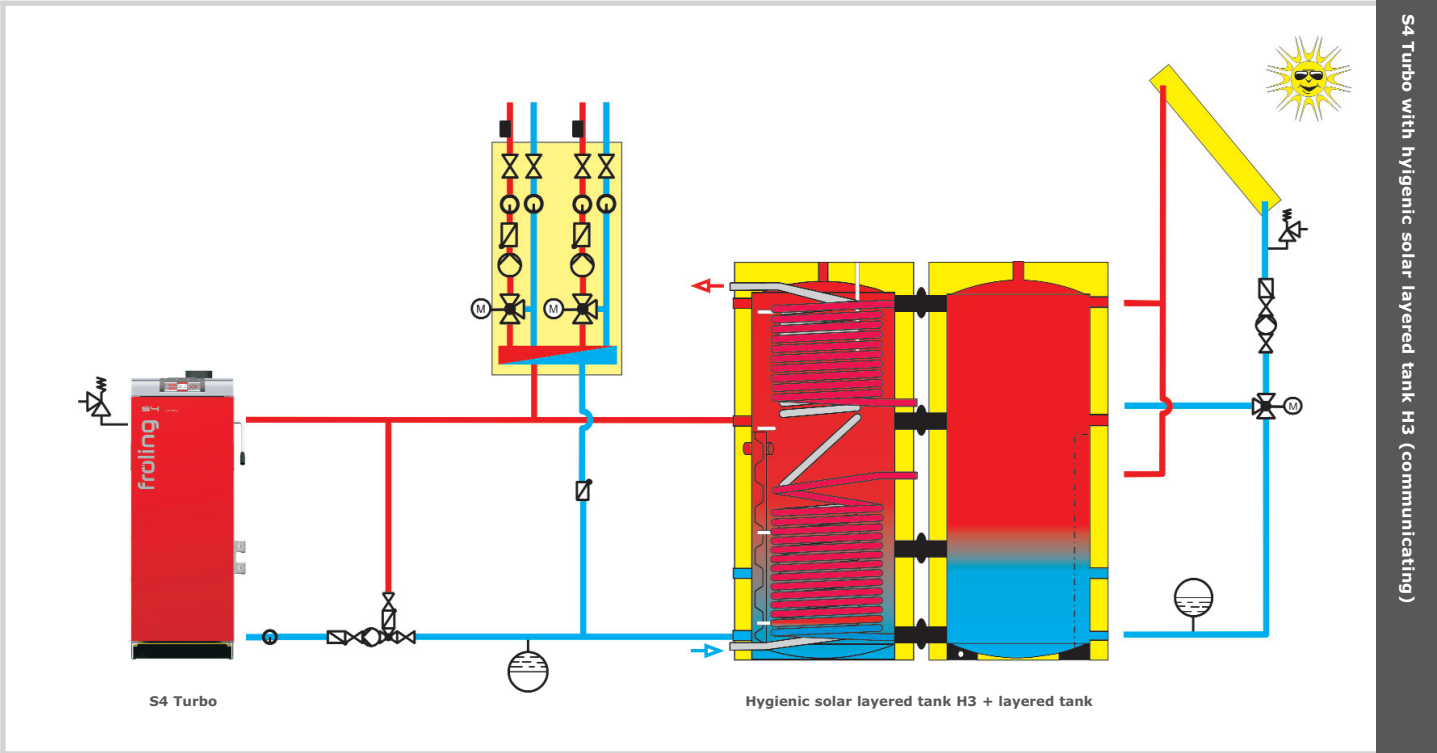
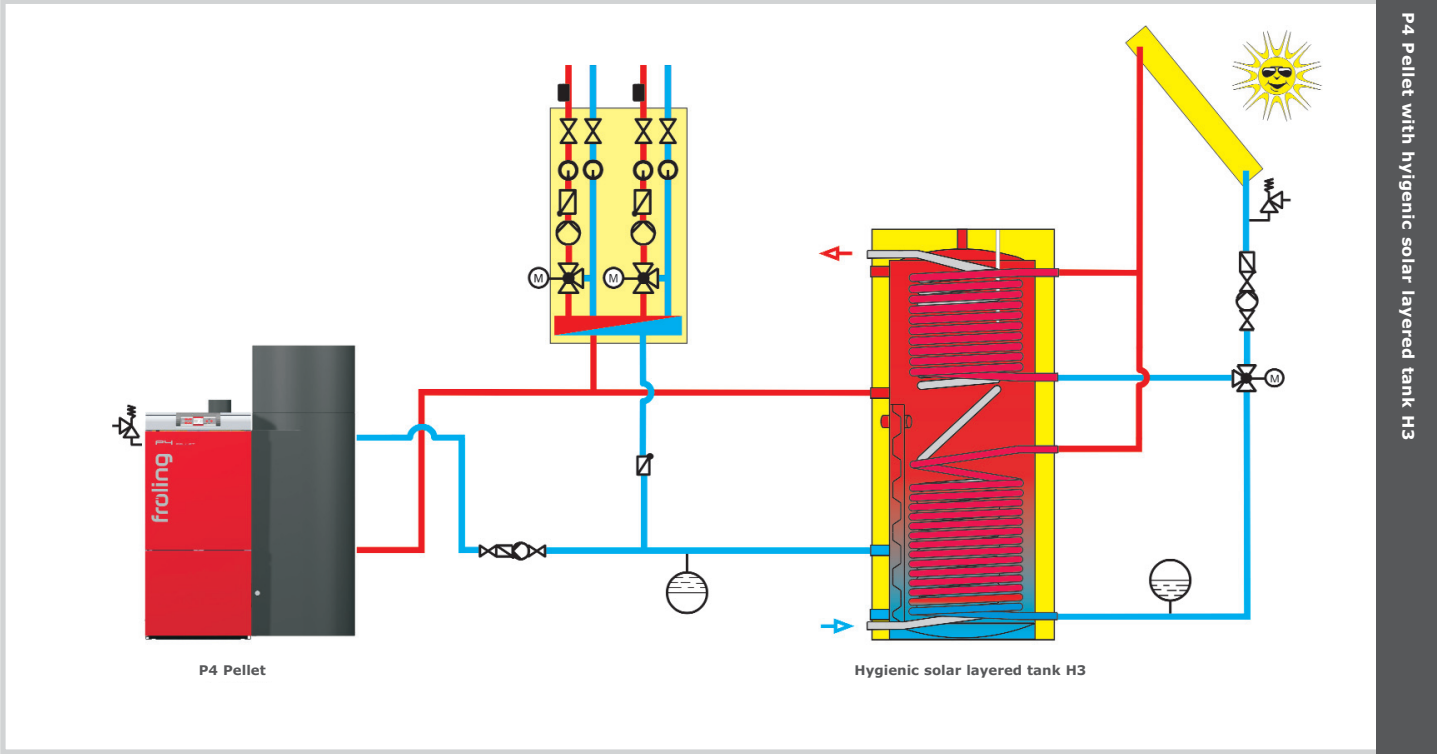
P4 Pellet with hygienic layered tank H2



S4 Turbo with hygienic layered tank H2 (intercommunicating)

# Layered tanks

## Connection examples with hygienic solar layered tank H3



# Efficient layered tank systems



## Super efficient heating from wood? Guaranteed with Froling layered tanks!

Whether you're installing a new heating system or would like to modernise your current one: Froling storage systems always provide optimal conditions for economic use of energy. With a range of options available, we can easily tailor a solution to nearly all specific system requirements.

## Upgrade later? Any time!

Thanks to a special modular system and modular control technology, upgrades can be added any time. Which means that an investment today does not preclude the possibilities of tomorrow.

## Want to find out more? We offer more!

Our detailed "Energy systems" brochure contains a range of other systems with exact functional descriptions.

Further technical details on request.  
We'd be happy to advise you.

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