FROLING
WOOD BOILERS

37 A Manchester Street | Keene, NH 03431 | 603-912-1212| info@woodboilers.com | www.woodboilers.com

fröling

Energy Tank

- One size 119 gallon carbon steel tank
- Corrugated stainless steel coil creates 64 square feet of heating surface
- Removable insulation results in losses of less than 1/3 degree Fahrenheit/hr.
- Stratification baffle enhances effectiveness of stored heat
- Strategically sized and located tappings for use as a thermal buffer or domestic hot water tank
- Sensor bar holds many sensors at various positions
- Perfect for Fröling PE1 model 20
- 5 year warranty

All-In-One Thermal Buffer and Indirect Domestic Hot Water Heater

The Energy Tank is built differently than typical indirect hot water heaters. Essentially, it is the reverse of a typical indirect hot water heater. The large volume of the storage tank is filled with boiler water. The super efficient 104' long heat exchanger, with a surface area of 64 square feet, consistently produces domestic hot water with either low buffer or appliance temperatures. Large tappings further increase potential applications for the Energy Tank.

Modern Energy Management

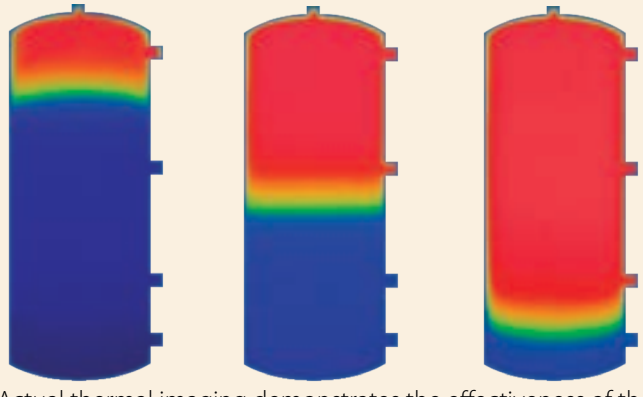
Heating systems are normally designed for the coldest times of the year. However, boilers very rarely have to work at full capacity. For most of the heating period, the average heat consumed is less than 50% of the rated heat output. A storage tank ensures an economic and environmentally-friendly use of energy in spite of boiler sizing difficulties. The buffer holds surplus heat and releases it again to the heat distribution system when required without having to restart the boiler. The Energy tank is great for smaller pellet boilers, but is too small for use on its own with cord wood boilers. Used as a domestic hot water tank, the Energy Tank also offers high performance even with low supply water temperatures.

Advanced Features

Precise temperature stratification in the tank is crucial for optimal functioning. Stratification ensures that as much energy as possible can be re-used by keeping the hottest water at the top of the tank and the coldest water at the bottom. The Energy Tank features a special stratification baffle designed for this purpose. The extra thick insulation is removable for easier handling of the tank. Heat loss is less than 1/3° Fahrenheit per hour. A sensor bar fixed to the exterior of the tank allows for a large number of sensors at a multitude of locations. The domestic hot water coil is made from 1 ¼" corrugated stainless steel. Vortices are formed in the helically corrugated pipe for optimal turbulence and heat transfer, while also eliminating the growth of Legionella and the formation of mineral deposits.

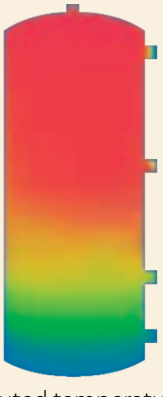
Energy Tank With and Without Stratification Baffle.

With Stratification Baffle



Actual thermal imaging demonstrates the effectiveness of the stratification baffle. Temperature is strictly separated between hot and cold allowing the boiler to remain off for longer periods. Heat output remains at maximum until energy is completely depleted.

Without Stratification Baffle



Diluted temperatures decrease the energy storage capacity of the tank.

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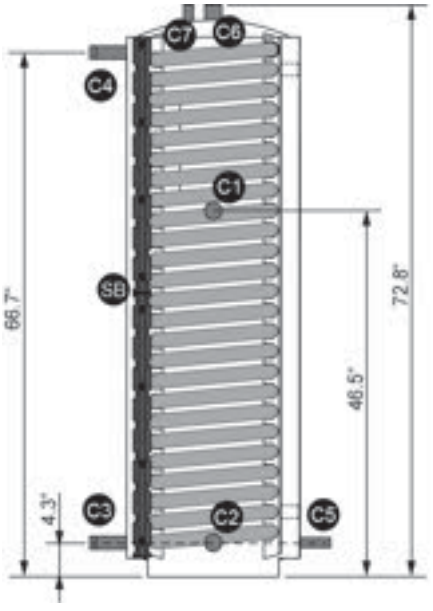
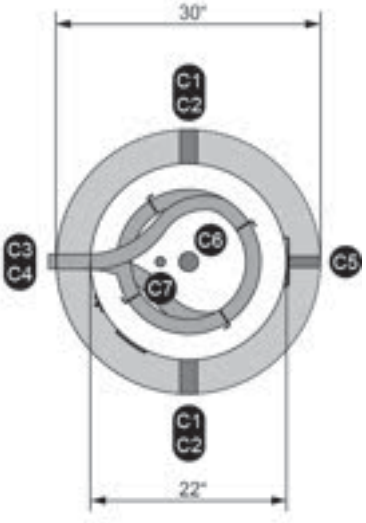
froling Energy Tank Specifications

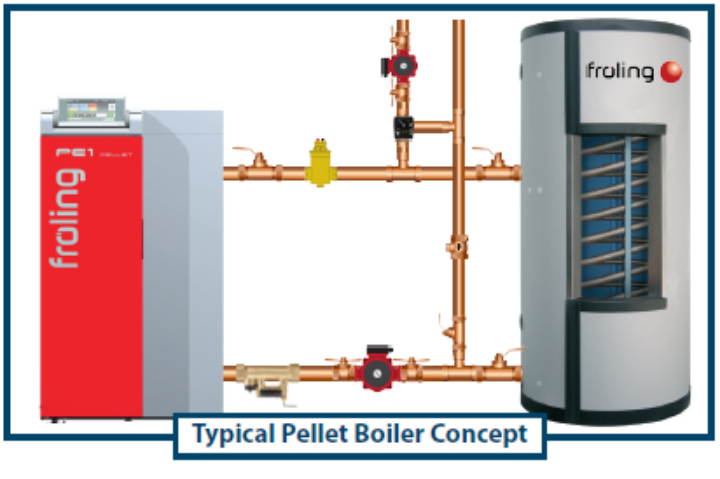




Description		FT 119
Capacity (total)		119 gal
Tank Capacity		108 gal
Maximum Tank Pressure		43.5 psi
Weight		260 lbs
Specification DHW Coil		
Heat Exchanger Surface		64.5 sq.ft.
Maximum Coil Pressure		87 psi
Coil Capacity (Domestic Hot Water)		11 gal
Maximum Temperature Domestic Hot Water		203°F
Recommended Flow Rate		4 gal/min
Pressure Drop (feet)		2.6 psi
180°F Boiler Water First Hour Rating [1]	140°F	103 gal
	115°F	133 gal

[1] DOE test method base on 90°F. Temperature rise, 50°F/140°F W/Boiler water at 180°F

Connections					
C1	Boiler Supply	1 ½"	C5	Drain Valve	¾"
C2	Boiler Return	1 ½"	C6	Air Vent	1 ½"
C3	Cold Water Inlet	1 ¼"	C7	Safety valve (T&P valve)	¾"
C4	Hot Water Outlet	1 ¼"	SB	Sensor bar	



Typical Pellet Boiler Concept

Froling Wood Boilers is not responsible for factory alterations to measurements. For final specifications, please see the Energy Tank Owner's Manual.