

ESS Water Tank

ESS offers a range of high quality tanks designed especially for "solar storage". These tanks can be used in combination with existing electric/gas mains pressure water heaters, or even as stand alone low pressure hot water systems with the addition of electric elements or external gas boosting.

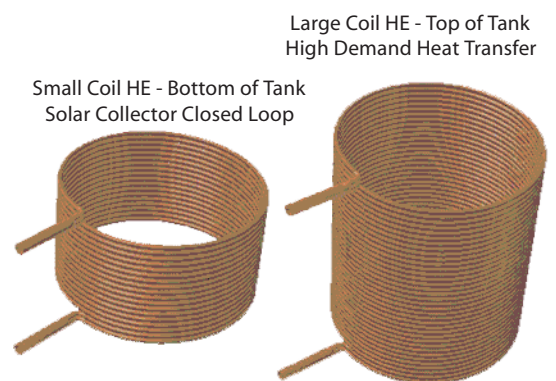
Ideal for use as low pressure thermal stores, the ESS Solar Tank range of tanks are available with the addition of one or two internal coil heat exchangers.

The key features are as follows:

- ☀ Corrosion resistant 304 SS inner tank
- ☀ Max pressure rating of 4 bar
- ☀ Fitted with magnesium sacrificial anode for enhanced corrosion resistance
- ☀ 8mm OD temperature sensor ports fitted top and bottom
- ☀ Stainless steel with 55mm thick polyurethane insulation or
- ☀ Fabric casing with 55mm polyethylene insulation
- ☀ Can be made with female port in top of tank for electric element

Tank Specifications

Tank Capacity	150L	200L	250L	300L
Overall Tank Height(mm)	1060m	1370m	1680m	1990m
Net Weight (Empty no Coil HE)	23kg	29kg	34kg	40kg
Inner Tank Diameter	450mm outside diameter			
Outer Casing Diameter	510mm outside diameter			
Standard Ports	3/4" female BPP thread			
Temperature Sensor Ports	8mm ID-total 80mm depth			
Insulation Material	55mm CFC free polyurethane insulation			
Inner Tank Material	2mm porcelain enamel			
Outer Tank Casing 1	0.4mm 304 2B SS or Waterproof Canvas (indoor use only)			
Tank Max Pressure Rating 2	4 bar			



714, Cyberport 1, 100 Victoria Road, Pok Fu Lam, Hong Kong

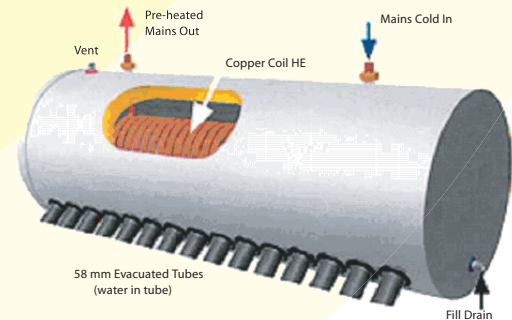
Tel: +852 2989 9171 Fax: +852 2838 7654 Email: info@esearth.com

www.esearth.com

Specifications and technical data are subject to change

Copper Coil Heat Exchanger Specifications

HE Material	10mm OD X 1.0mm copper pipe
HE Surface Area (large/small)	1.25m ² /0.625m ²
HE Max Pressure	8 bar
HE net weight (large/small)	8kg/4.2kg
Inlet & Outlet	3/4" male BSP thread



Thermo-siphon solar collectors provide mains pressure pre-heating via a high efficiency copper coil heat exchanger located within the solar collector tank. The way in which the mains pressure solar collector heats water is the same as the non-pressure solar collector. Rather than using the water in the tank directly as the non-pressure does, the type uses a 45 - 60 copper coil. A heat exchanger inside the tank provides more than 1.2m² of heat transfer area.

When water flows through the coil, it absorbs heat from the water inside the solar collector tank. The solar collector tank is therefore a thermal store. One advantage of this system is that almost no water is introduced into the tank (apart from occasional topping up), so corrosion and scale build up are almost totally eliminated. Tanks are designed for low to medium pressure applications using a gravity feed tank or pressure reduction valve.

Direct connection to mains pressure water supply is not permitted. Please check your local building/plumbing regulations regarding the installation of water tanks.

Tank Specifications

Tank Capacity	150L	200L	250L	300L
Overall Tank Height(mm)	1060m	1370m	1680m	1990m
Net Weight (Empty no Coil HE)	27kg	35kg	39kg	42kg
Inner Tank Diameter	450mm outside diameter			
Outer Casing Diameter	510mm outside diameter			
Standard Ports	3/4" female BPP thread			
Temperature Sensor Ports	8mm ID-total 80mm depth			
Insulation Material	55mm CFC free polyurethane insulation			
Inner Tank Material	2mm porcelain enamel			
Outer Tank Casing 1	0.4mm 304 2B SS or Waterproof Canvas (indoor use only)			
Tank Max Pressure Rating 2	6 bar			

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