

SUNHYDRO

SOLAR WATER HEATER

Features

Developed at the basic of principle can absorb more sunshine and generate more heat from multi-angle. No matter the house has flat roof, sloping roof or a special formed roof; it can also absorb the sunshine well, no need to drill and saw. It is very easy to install.

Inner tank : SUS3042B Food Grade Stainless Steel.

Outer shell : SUS3042B Food Grade Stainless Steel.

Heat insulation layer: 50-60mm polyurethane integral foam, superior heat Preservation.

frame: cold rolled steel, 3-level anti-corrosion treatment, , extra-strong and secure. Stainless steel frame on request

Vacuum tube: Hard borosilicate glass tube (diameter: 47mm and 58mm; length: 1,500 mm 1800mm), 25mm hailstone resistant.

No. of tubes: 15pcs, 18pcs, 20pcs, 24pcs, 30pcs.

Length of tubes: 1500mm and 1800mm

Capacity: 130 -160 - 200 - 300L

Evacuated tubes:

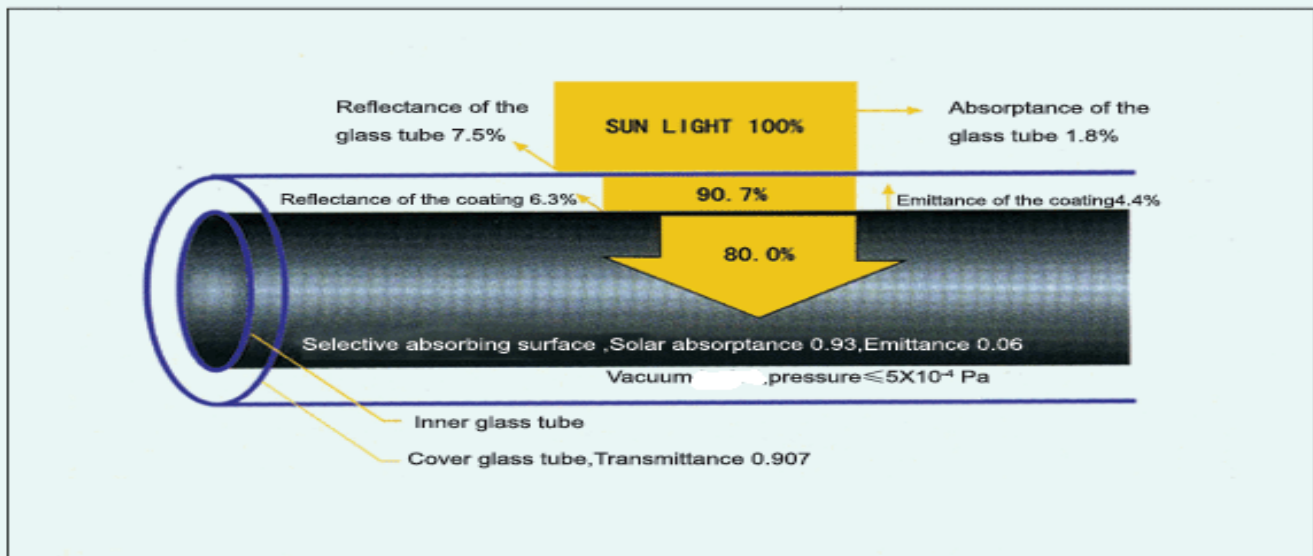
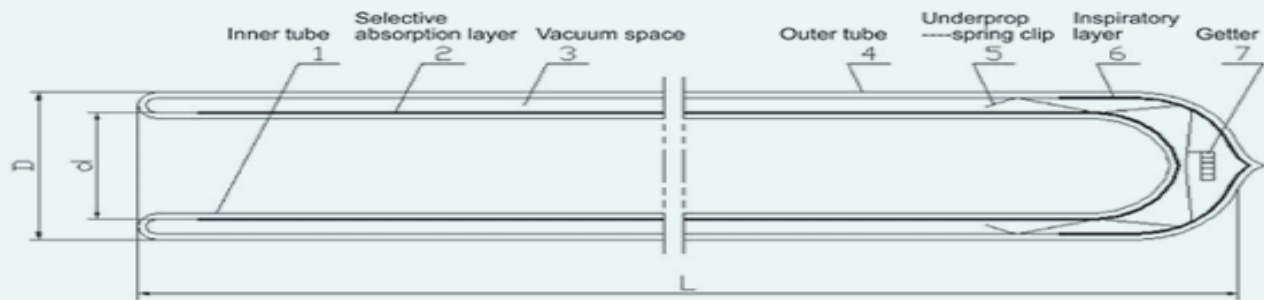
All "glass evacuated tubes" are the key component of solar collectors. The evacuated tube is similar to a conventional Dewar flask and consists of two borosilicate glass tubes, a glass with high chemical and thermal shock resistance.

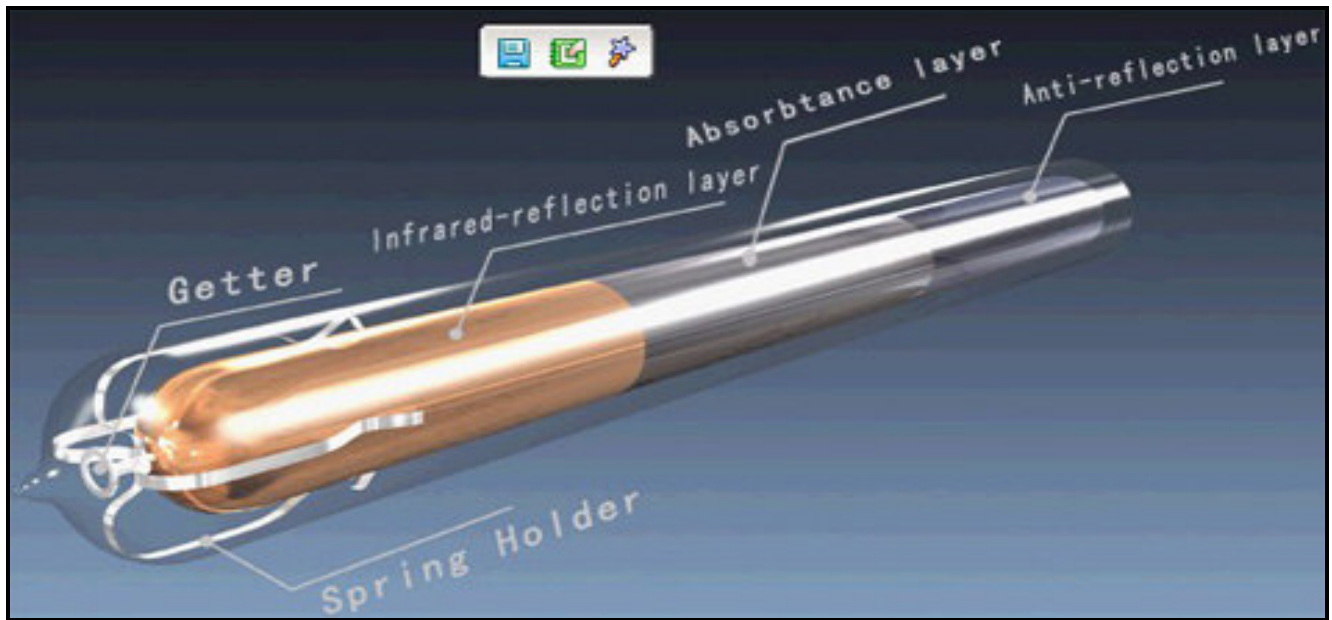
The outer side of the inner tube is coated with a solar selective surface. This coated inner tube is closed at one end, and sealed at the other end to the outer tube. The space between the outer tube and inner tube is evacuated to virtually eliminate heat loss by conduction and convection.

We use the tubes which use the successfully developed innovative Advanced Solar Selective Coatings in commercial scale, which achieve the highest thermal efficiency and good thermal

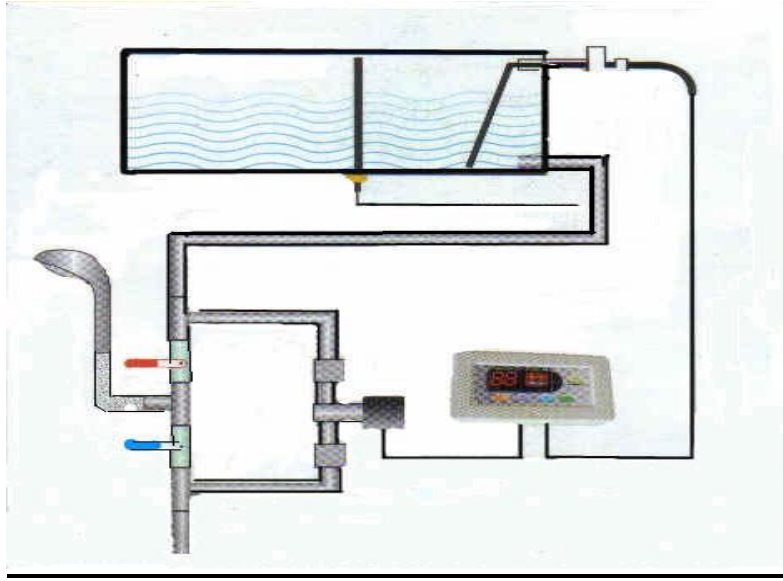
stability. Solar selective coatings absorb most solar radiation while simultaneously suppressing the thermal remittance loss from coating surfaces. They vary mainly in their optical property and thermal stability.

Excellent results have been obtained by using DC magnetron sputtering technology. A solar absorbance of 0.94 - 0.96 with a remittance of 0.04 - 0.06 at 100 centigrade has been achieved





Models	$\Phi 47 \times 150$	$\Phi 58 \times 180$
Wiegt	$1.35 \pm 0.12 \text{kg}$	$2.29 \pm 0.18 \text{kg}$
Structure	All glass coaxial double-layer tubes	All glass coaxial double-layer tubes
Outer tube diameter	$\Phi 47 \pm 0.7 \text{mm}$	$\Phi 58 \pm 0.7 \text{mm}$
Inner tube diameter	$\Phi 37 \pm 0.7 \text{mm}$	$\Phi 47 \pm 0.7 \text{mm}$
Outer Tube thickness	$1.6 \pm 0.15 \text{mm}$	$1.8 \pm 0.15 \text{mm}$
Inner tube thickness	$1.6 \pm 0.15 \text{mm}$	$1.6 \pm 0.15 \text{mm}$
Tubes length	$1542 \pm 4 \text{mm}$	$1812 \pm 4 \text{mm}$
Material of coating	AIN/AIN-SS/Cu	AIN/AIN-SS/CU
Absorptance	0.94~0.96	0.94~0.96
Emittance	0.04~0.06	0.04~0.06
Vacuum	$P \leq 5 \times 10^{-3} \text{pa}$	$P \leq 5 \times 10^{-3} \text{pa}$
Transmittance of Outer Tube	0.91	0.91
Stagnation temperature (height)	$270 \sim 300^\circ \text{C}$	$270 \sim 300^\circ \text{C}$
Heat-loss coefficient	$\leq 0.6 \text{w/ m}^2 \cdot ^\circ \text{C}$	$\leq 0.6 \text{ w/ (m}^2 \cdot ^\circ \text{C)}$
Bearing hailstone ability	hailstone diameter $\Phi 25 \text{mm}$	hailstone diameter $\Phi 25 \text{mm}$
Pressure-endure ability	1MPa	1MPa

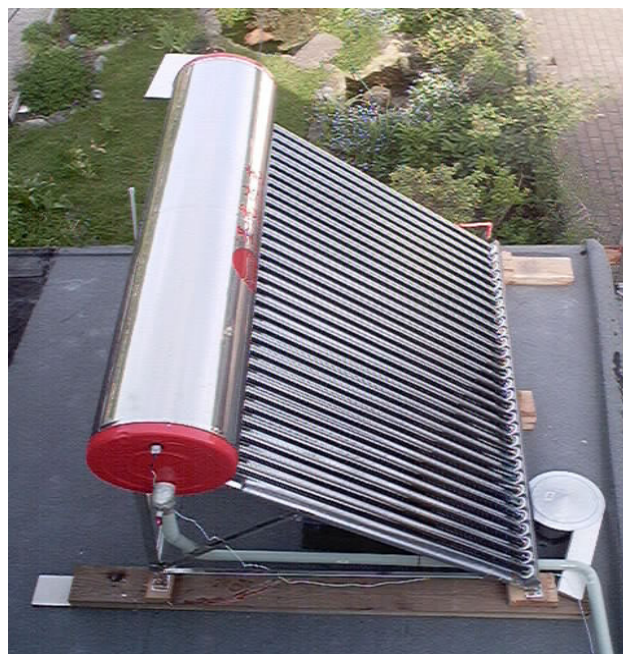


PRINCIEPE SCHEMA





300 liter 30tubes



200 liter 24tubes

type	Area (m ²)	Vacuum tube		Volume (litres)	Approx. weight(empty)
		Ø (mm)	Length (mm)		
SLD 130/20	2.50	47	1500	130	69
SLD 160/24	3.00	47	1500	160	77
SLD 200/30	3.75	47	1500	200	90
SLD 300/30	4.60	58	1800	300	89