# YUHO TECHNOLOGY LTD.



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# **Company Introduction**

YOUR HOME TECH., LTD is a professional Heat Pipe manufacturer in TAIWAN. OUR R&D team has the well experience in the category of solar and tank technology. YUHO otained many patents for our products.

The heat pipe of solar water heater is the most efficient thermal system. Sunlight is passing through an outer glass tube to heat the absorber tube contained within the outer glass tube In the evacuated chamber, there are three selective targets of sputtered coatings installed to cover the inner tube. The energy is transmitted from the vacuum tube to the manifold rapidly so there is not the calcium to be deposited in the manifold. YUHO heat pipe of solar water heater is pressurized system so it is suitable for being installed in any application as either from the Torrid Zone to Frigid Zone.



# **Characteristics**

- High transfer efficiency:
  - The heat pipe condenser contacts with the liquid or water directly. therefor there won't any energy to be loss due to it is transmitted by other materials.
- Maintains water with high temperature:
  - The storage tank is equipped with high-density foam for keeping the water from being maintained with the high temperature.
- Save energy: The large capacity of manifold can absorb the energy well to make the circulating pump won't need to operate all day long and then it can save the energy as well.
- Certifications: YUHO products were certificated by CE, ISO 9001;2000 as well as the Bureau of Energy Ministry of Economic Affairs.
- Cleaning cost free: There is not any calcium to be generated inside the pipe for keep high absorptivity.
- Long lifespan: The stainless steel made of storage tank can extend the useful life of water heater.









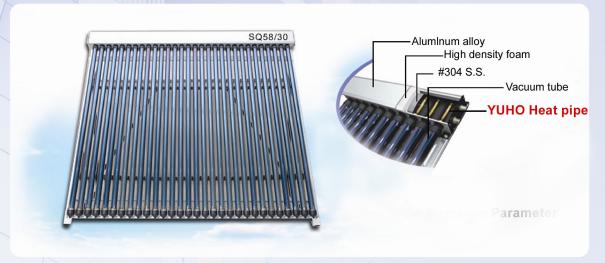


# SEPARATE TYPE HEAT PIPE SOLAR WATER HEATER MODEL-SQ58/20, SQ58/30, SQ58/10 (DIY)

Separate type of solar water heater. The manifold is installed on the roof of the building and set up its storage tank at the suitable space, such as the basement or garage, etc. The manifold is made of the stainless steel #304 and its outer cover is made of aluminum so it can reduce the corrosion created at the whole system including the collector of solar water heater circulating

pump, work station, solar tank and insulation pipe, etc.

The heat pipe of vacuum tube solar thermal collector can absorb the radiation and then to store the energy in the manifold, The heat pipe is inserted into the manifold and then to contact with the water directly so the energy won't be lost by the intermediate metal. The whole system pushes the hot water down to the storage tank as well as pushing the cold water up into the manifold and then to absorb the solar radiation in the meanwhile. But the work station can get the different temperature of water between the storage tank and manifold, and then to control the circulation pump ON and OFF. Therefore, it is easy to retrofit the whole system as it can increase or decrease the numbers of thermal collectors when it is required to do so. Application: residential, condo, resort, apartment, hotel, motel, tour van and industries, etc.



#### **Conventional Specification (Pressurized)**

7	Heat Pipe of Vacuum Tube			Manifold		Bracket of Material	Pressure Resistance	Absorptive Area
Model No.	Q'ty. (pcs)	O. D. (mm)	Len. (mm)	Material	Outer covering	DIACKET OF MATERIAL	(Mpa)	(m <sup>2</sup> )
SQ58/10(DIY)	10	φ58	1700	#304 S.S.	Aluminum Alloy	Aluminum Alloy	0.7	0.77
SQ58/20	20	φ58	1700	#304 S.S.	Aluminum Alloy	Aluminum Alloy	0.7	1.54
SQ58/30	30	φ58	1700	#304 S.S	Aluminum Alloy	Aluminum Alloy	0.7	2.31











# INTEGRATE TYPE HEAT PIPE SOLAR WATER HEATER MODEL-P58/15, P58/20, P58/25

Integrate type of solar water heater. Their thermal collector and storage tank are connected together. The heat pipe transmitted the energy from the vacuum tube to the water storing tank and then to store the water in the tank. There won't be any circulation pump as well as the electronic controls needed to keep running in this system. P series of solar water heater need to be installed at the flat and strong roofs.



#### Conventional Specification as the Pressurized type

Mode	I NO.	P58/15	P58/20	P58/25		
	Number (pcs)	15	20	25		
Heat Pipe of Vacuum tube	O.D. (mm)	φ58	φ58	φ58		
vacuum tube	Length (mm)	1,700	1,700	1,700		
Heat collecting A	rea (m²)	1.15	1.54	1.92		
Capacity (Liter)		120	180	200		
Inner tank	Material	Stainless Steel 304	Stainless Steel 304	Stainless Steel 304		
	Thickness(mm)	1.2				
0	Material	Stainless Steel 304				
Outer tank	Thickness(mm)	φ470×1270	φ470×1700	φ470×1700		
Pressure Resista	nce (Mpa)	0.7				
Bracket Material		#304 S.S. / Hot Dip Galvanized coating (Optional)				
Inlet Diameter		φ 3/4"				
Outlet Diameter		φ 3/4"				
Insulation Layer	Material	High Density Polyurethane				
modiation Layer	Thickness (mm)	45~50				

- All solar storage tanks are made of the #304 S.S. so there is not any corrosion problem to be existed.
- There are the double testing process run on our tank for the water tightness.
- High efficiency, low thermal emission obtained from the quality insulation foam.
- 2 KW-6 KW, 220V electric heating element provided as the accessory.
- Long lifespan and absolute safety in operation.
- Automatic GTA welding adopted.



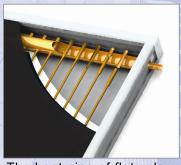


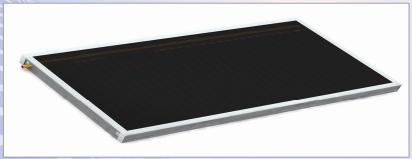






# **HEAT PIPE FLAT PANEL SOLAR COLLECTOR MODEL HP-2200**





The heat pipe of flat solar collector combine with the advantages of heat pipe as well as the flat solar plate.

#### Characteristics

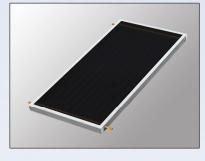
- The solar collectors are finished with the black paint or the coating.
- Heat pipe transmits the energy from the flat plate to the horizontal tubes. There is not the vertical water tube designed in this system.
- Insulation layer minimize the thermal emission in the low seasonal temperatures.
- Solar tempered glass is adopted to build the covers to protect the thermal collectors from being damaged by the hailstone. The absorber area is 2.0 m²

# Conventional Specification as the Pressurized type:

	Heat Delivery	Dimensions	Pressure Resistance	Absorber	
Model NO.	Component	(mm)	(Mpa)	Absorptivity	Emission
HP-2200	Heat Pipe	2000×1000×90	0.7	95%	5%

# FLAT PANEL SOLAR COLLECTOR MODEL HP-2000

- The solar collector is equipped with Copper or Aluminum plate.
- Coating: The black paint or coating.
- Surface of sbsorber: 2.0m<sup>2</sup>.
- The selective coating has highly solar absorptance equal to 95%.
- The insulation layer can reduce heat loss in Frigid Zone and in the night time.
- The high quality solar tempered glass can reduce the damage from the environment.



# **Conventional Specification (Pressurized)**

	Heat Delivery	Dimensions	Pressure Resistance	Abso	orber
Model NO.	Component	(mm)	(Mpa)	Absorptivity	Emission
HP-2000	water	1000×2000×90	0.7	95%	5%











## TANK EQUIPPED WITH COIL HEAT EXCHANGERS



- YUHO boilers are synchronized with the European Standards.
- The boilers are made of the Stainless Steel #304.
- There is the double testing process adopted for checking the water tightness.
- YUHO products have the long lifespan as well as they are safety in operation
- Automatic GTA welding adpoted.
- ◆ All specification of outer tank (mm): Ø400, Ø425, Ø475, Ø620, Ø760, Ø970, Ø1300, Ø1420, Ø1600, Ø1,700, etc. Available with Non heat exchanger (C0), One coil heat exchanger (C1), Two coil heat exchangers (C2), Three coil heat exchangers (C3) heat Exchangers which are suitable for any application, e.g. . YT-200-C0, YT-200-C1, YT-200-C2, YT-200-C3, YTP-200-C0, YTP-200-C1, YTP-200-C3.

Mod	lel No.	YT 200	YT 300	YT 400	YT 500	YT 600	
Capacity (Liter)		200	300	400	500	600	
Innan Tank	Material	Stainless Steel 304					
Inner Tank	Thickness (mm)	2.0	2.0	2.0	2.0	2.0	
O., ( T)	Material		Stainless Steel 304				
Outer Tank	Size (mm)	φ620×1250	φ670×1600	φ670×1950	φ670×2350	φ670×2700	
Inculation Layer	Material	High Density Polyurethane					
Insulation Layer	Thickness (mm)	45~50					
	Туре	Without Coil (C0), One coil (C1), Two Coils (C2), Three Coils (C3)					
Heat Exchanger	Material	Stainless Steel					
	Diameter (mm)	19					
	Length (m)	18 / 24 / 36 / 42					
Connections		3/4"					

- (1) YT Models- Both of inner tank and outer tank are made of Stainless Steel 304.
- (2) YTP Models-Inner tank is Stainless Steel 304; Outer tank steel with powdered coating.













# **STAINLESS STEEL #304 INSULATION PIPE**

#### **SPECIFICATIONS**

DIAMETER	Thickness of Insulation	LENGTH		
(mm)	Layer (mm)	20m	30m	
Ø 16	2.5	•		
Ø 18	2.5	•		
Ø 25.6	2.5			

### **Characteristics:**

### 1.Anti-UV coating:

It can prevent the pipes from being exposed to the ultraviolet (UV) rays and also the infrared rays. The high density foam is protected by the coating to prevent its insulating pipes from being pecked by the animals.

#### 2. Insulation foam:

The insulation foam is made of PE material and maintain the water temperature well.

#### 3. #304 Stainless steel pipe:

The high quality #304 Stainless Steel can extend the useful life of pipes and also to reduce the corrosion problem.

#### 4. Easy to install:

Its insulation pipes can be formed even with the curve at 180° angle to make them can be installed in any situation.

#### **Application:**

- 1. The connecting tank and thermal collector are designed and built in the passive solar thermal system to replace the traditional copper pipes used.
- 2. They are the electric and gas water heater pipes used.

### **INSULATION PIPE QUICK COUPLING SYSTEM**

\*Quick assembly without special tool required.

\*Simple components used to reduce the incorrect assembly incurred.



1.Nut.

2. Clamping segments 3.seal ferrule

4.Base element



External	thread (Male)
18mm	1/2" and 3/4"
25.6mm	3/4" and 1"



internal thread (Female			
18mm	1/2" and 3/4		
25.6mm	3/4" and 1"		



**Double coupling For** 18mm & 25.6mm



Triple coupling For 18mm and 25.6mm

















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