



# **Characteristics**

- The Thermosyphon solar water heater is composed of storage tank, supporting structures, Evacuated tubes and installation parts.
- It is the method of passive heat exchange, based on natural convection, which circulates a fluid without the necessity of mechanical pump.
- Natural convection of the liquid starts when heat transfer to the liquid gives rise to the temperature difference from one side of the loop to the other.
- Multifunction: bathing, domestic heating etc.
- Could work at any time in sunny days.

# **Technical Credentials**

• Inner tank : SS 316 with 0.6 mm Thickness

• Outer tank : Precoated Galvanized Iron Sheet

Insulation : High Density Polyurethane Foam with

50 mm thick with Density of 38 kg/cm<sup>3</sup>

Vacuum tube : 58\*1800 mm SS-CU-ALN Coating

No. of Vacuum Tubes : 10 no's

• Absorber Area : 1.64

Space Required : 5 X 7 Sq. Ft

Bracket : GI Press Tool Stand 1.6mm; 30-50<sup>o</sup>

Working pressure : Up to 0.5 kg/cm<sup>2</sup>

# **Thermosyphon System**

# Typical Requirement of hot water in household Application Typ. Req. of Hot water at 60°C

Bathing using Bucket 35-40 liters per person bath

Bathing using shower 45-50 liters per person

Shaving while a tap runs 7-10 liters per person

Household Bathing in bathtub 60-80 liters per person

Washbasin with a mixing tap 3-5 liters per person

Kitchen washing 2-3 liters per person

# Heating 100 liter of water daily with 25°C rise in Temp. Using conventional energy

	LP Gas	Electricity
Efficiency	80%	95%
Req. Heat	3125 K Cal	2632 K Cal
Req. Fuel Amount	0.31 Kg	3.06 Units
Cost of Fuel	Rs. 59.8 Per Kg	Rs. 7 Per Unit
Daily Expenses	Rs. 18.7	Rs. 21.4
<b>Monthly Expenses</b>	Rs. 561	Rs. 643
Yearly Expenses	Rs. 6734	Rs. 7711

Base on this cost, a Waaree Solar Hot Water System will start paying for itself in less than 3 years.

# **Salient Features**

- Excellent generation performance with reasonable cost.
- Undergoes rigorous quality control and in-house testing.
- Long lasting and highly efficient.
- Low maintenance.
- Reducing Global warming and environment ecofriendly.
- Good for the environment, Good for you.

### Warranty

- One year of warranty (For manufacturing Parts).
- Warranty is applicable for input water condition (Water hardness < 150 ppm, Sulphur Content < 500mg/l, Chloride content < 250mg/l, Fluoride Content < 1.5mg/l).</li>
- All the warranties are applicable for & against manufacturing defects & are not applicable for any breakages or malfunctioning observed at customer end
- The warranty withstand nullified incase if it is observed the systems is being tempered by customer after Installation & Commissioning of company representative
- Any relocation of system then the pre decided place is then in cost for exclusion of warranty conditions.
- Warranty for glass, electrical item are not applicable.

**WNP 100** 

A. System Space Required : 3.7 X 6.5 X 5 Ft

B. System Weight : 50 kg

C. Stress (Weight / Sq. Ft ) : 2.1 kg/sq. Ft

D. Height between Cold Water storage : 4-5 Ft minimum

input to solar system

E. Waaree Finished Good Code : STWHPEHOGLAAB00100

About Waaree:

Waaree is the largest vertically Integrated Company engaged in Solar Business in India with diversified business interest with in over 65+ nations across the globe. It is fact that 44 % energy is consumed in Thermal Applications Globally and if we replace 10 % of the thermal energy with Solar Thermal, there will be enormous savings in High Recurring Energy Bills & Consumption of Fossil Fuels while great savings on Carbon Foot Prints as well . We strongly believe that the Customized application development is essential for the promotion of Solar Thermal and hence we have always emphasized on development In house Research Team. Solar thermal has been key Business Vertical which helps to save recurring energy expense with attractive IRR. Waaree possess Passionate team of Techno commercial professions who provides Solutions for Hot Water, Process Heat and Its applications.

## Contact:

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