



# Harnessing nature for a better tomorrow.

**SOLAR WATER HEATER** 

# **WIN-HOT ZA SERIES**

Harnessing the sun



Sacrificial Anodic Corrosion protection



ISI Electric Back up heater optional



High density
PUF insulation



A Product from ISO 9001: 2015 Certified Company A revolutionary product from the house of V-Guard, the brand that has always delivered the best in quality, technology, performance and service. The most advanced in Solar Water Heaters, V-Guard Solar Water Heaters are made from high-quality components and come with international technology. The Evacuated Tube Collector System facilitates high-efficiency absorption and utilization of solar energy, with minimum heat loss. V-Guard Solar Water Heater saves a substantial amount on electricity bills and other fuels, making it a worthy investment for a lifetime.

### **Working Principle**

Sunlight, incident on the Vacuum Tube, passes through the outer transparent glass tube and strikes the outer surface of the inner glass tube with selective coating (AIN/SS/Cu). This glass tube, which acts like a black body, absorbs the radiation and gets heated up in the process. The presence of vacuum between the two tubes prevents heat loss to the surroundings. The heated inner tube transfers this heat to the water with which it is directly in contact. Hot water is lower in density and therefore has a tendency to rise up. Cool Water from the tank flows down to replace the hot water, facilitating circulation by thermosyphon. And through this process, the entire water in the storage tank heats up and gets ready for use. The storage tank is insulated with PUF which minimizes the heat loss at night.

# Features of V-Guard Evacuated Tube Collector System

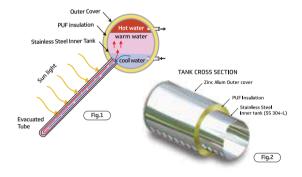
- Generates hot water without electricity or any other fuel High quality vacuum tubes made from Borosilicate minimize heat loss
- Negligible scaling of tube
   SS 304L tank with Zinc Alum outer cladding
   High quality PUF insulation minimizes the heat loss of water inside the tank. Auto sun tracking due to circular shape of vacuum tubes. Efficient performance in winter and partially cloudy days
- ISI Electric back up heater (optional to the customer) Compact size, low height, light weight Easy to install and transport Advanced technology at competitive rate • Huge saving on electricity and fuel charges.

### V-Guard Solar Water Heaters are manufactured in our factory with

Imported machineries
 Latest welding technology
 Experienced R&D personnel

Received business leadership award (Solar Thermal) from Solar Energy Society of India, New Delhi.

Model Win-Hot series	Utility points	Number of persons using hot water	Number of evacuated tube	Back up heater (optional)	Inner tank	Inlet/outlet pipe size of storage tank	Outer Tank	Size of the evacuated tubes	Tank insulation	Weight of the tank without water	System height from the roof	Minimum required overhead tank height from the roof	Minimum space area reqd. (NS X EW)
100 LPD	2	2-3	8	2kW	SS 304-L	1.9 cm (3/4)	Zinc Alum	Ø5.8 x 210 cm	PUF	14 kg	1.3 m	1.45 m	2.5 x 1 m
150 LPD	3	3-4	12	2kW	SS 304-L	1.9 cm (3/4)	Zinc Alum	Ø5.8 x 210 cm	PUF	16 kg	1.3 m	1.45 m	2.5 x 1.2 m
200 LPD	4	4-5	16	2kW	SS 304-L	1.9 cm (3/4)	Zinc Alum	Ø5.8 x 210 cm	PUF	19 kg	1.3 m	1.45 m	2.5 x 1.5 m
250 LPD	4	5-6	20	2kW	SS 304-L	1.9 cm (3/4)	Zinc Alum	Ø5.8 x 210 cm	PUF	24 kg	1.3 m	1.45 m	2.5 x 1.8 m
300 LPD	5	6-7	24	2kW	SS 304-L	1.9 cm (3/4)	Zinc Alum	Ø5.8 x 210 cm	PUF	27 kg	1.3 m	1.45 m	2.5 x 2.1 m



ANNUAL SAVINGS ON ELECTRICITY BILLS (SAMPLE CHART)								
Electricity consumed for heating 100 L of water with electric water heater	4.65 Electrical Unit/day							
4.65 x 300 (sunshine days)	1395 Electrical Unit							
1395 x 7.5 (rate/unit)*	Rs. 10462/-							

No. of units saved will depend on the usage.

\*Electricity tariff is calculated as per the charges in the state of Kerala, for the consumption of 501-600

Note: Only 300 days of a year have considered. Rest of the days are assumed to be cloudy and overcast.

Authorised DMA/ Dealer:

## V-Guard Industries Ltd.

V-Guard Care

CIN: L31200KL1996PLC010010

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