Pressurized Split Solar Water Heating Systems

With the ability to separately allocate the water tank and solar collectors; this energy saving invention is the most flexible solution for both small and big projects!

Product Features:

Design

- Available in two models; flat glass plates or vacuum glass tubes, the split solar heater can connect multiple collectors with the pressurized water tank which can be located separately and connected with the collectors through insulated pipes.
- Available in a variety of capacities, customized systems are also available for capacities beyond 500 liters; making it suitable for all kinds of projects.

Different Utilities

- The predetermined sizes model takes the water temperature up to 60 degrees and varies between 200 up to 500 liters; making it suitable for small projects such as villas and small factories where you can leave the tank in the basement or keep it outdoor while installing the collectors on the roof.
- For projects that require more than 500 liters of water capacity or higher temperatures up to 85 degrees, the split solar heater can be customized according to required water quantities, temperatures, and available areas. Residential buildings, factories, hospitals, hotels and resorts benefit from the split solar heater in saving energy and having custom tailored systems that suit the architecture of the space.
- The split solar heater can also be utilized to provide heat for swimming pools and central heating systems or for floor heating systems.

Efficiency:

- In the flat plates model, the solar collector is composed of coated copper tubes and fins, while the upper surface is made of low iron transparent glass; whereas in the vacuum tubes model a group of vacuum glass tubes encompass copper heating pipes; where all
elements contribute in the gaining of maximum solar energy absorption.

- The outer casing of the pressurized water tank is made from environmental resistant aluminum alloy while the internal tank is available in a stainless steel version equipped with a magnesium anode for corrosion prevention, or a carbon steel version lined with hydrotalcite for perfect durability.

- The system provides high efficiency solar heating that reaches 60+ degrees in Winter, with heat preservation technologies that keep hot water for up to 72 hours; making it a truly accountable heating system.

- The system works with solar rays and not heat energy, so even in the cold winter, as long as the sun is shining, the solar collectors will still perform efficiently.

- If there isn't enough sunlight or there's a need for extra heating, the water tank is equipped with a heating element made of pure copper that works as an alternative energy source; providing you with hot water even when it's shady.

- The operation system of the split solar heater is equipped with a circulation pump that guarantees the efficiency of water circulation even among 30 collectors and even when the water tank is distantly allocated.

**Safety Measures:**

- In case of water cut off, a Non-Return valve maintains hot water inside the tank and prevents it from returning back into the pipes. This is for your own safety and also to preserve the heating element!

- The water tank is equipped with a pressure-relieve safety valve to balance water pressure between the heater and the water supply, in case of internal high pressure.

- When water temperature increases excessively, an air vent releases hot vapor to prevent over heating.

**Energy Saving:**

- Solar heaters use clean and renewable energy that preserves the environment's nonrenewable resources.

- Consumption of electric energy is minimized compared to regular electric heaters which will positively reflect on project budgets.
• Pipes connecting the water tank and solar collectors are thermally insulated, while a layer of heat resistant polyurethane or rock wool insulates the internal water tank; preserving hot water temperature for a longer time and reducing energy consumption.
• An electric control unit organizes the operation of the circulation pump, and operating the backup heater.

Maintenance:
• Nova's split solar water heating systems are easily operated and do not require frequent maintenance. With its long-term warranty, this system also comes with a complete installation and maintenance manual, and spare parts are always available at Nova.

Product Specifications:
• **Flat Plates Collectors**: Selective Blue Coated Flat Absorber – Low iron glass
• **Vacuum Tubes Collectors**: Ø 58 / 1800 mm length with copper heating pipes.
• **Capacities**: 200, 300, 400, 500 and +500 Liters (custom made)
• **External Tank**: Painted galvanized steel
• **Tank Insulation**: 50 mm thick Eco-friendly Polyurethane or Rock Wool
• **Internal Tank**: Hydra Stone-coated carbon steel or stainless steel with magnesium anode
• **Alternative Heating Element**: High thermal conductive pure Copper or Stainless Steel
• **Bracket**: 1.2mm galvanized steel inclined at 45 degrees
• **Spare Parts**: Always Available

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*As we continuously develop our products, the company has the right to change product specifications whenever needed.*