

## **Solar Water Heating System (FPC)**

Solar Water Heater is a device, which heat the water by solar radiation, consist of a Flat Plate Collector & insulated Storage Tank. In Flat Plate Collector Solar radiation is passed through cover plate (Toughened glass), which is absorbed by the Copper Absorber and converted in to heat and it pass to the water inside the absorber tube. Thus water gets heated by solar radiation. Hot water is stored in insulated Hot Water Storage Tank from which we can utilized hot water as and when we require. Mostly the water heating system is working on greenhouse effect and thermosyphone principle

### **Applications :**

Hot water from Solar Hot Water System can be utilized for Bathing Cooking, Washing etc in domestic Sector, and for Preheating of Boiler feed water up to 80 oC., Washing & Cleaning of vessels, Sterilizing Process, Pasteurization Process in dairy industries. Same can also utilized in other industries like Textiles, Edible oil and refining, Breweries, Pharmaceuticals - drug manufacturing Units, Electroplating / Galvanizing Unit, Paint Shops, Pulp and Paper Industries, Soft drink bottling plant and also Hot water at 60-80 degree for hostels, Hospitals, restaurants, dairies, homes, industries etc.

### **Payback Period :**

Solar water heaters are cost comparative in many applications, when you calculate account for the total energy cost over the life of the system. Approximate life of the solar water heating system is 15-20 year. Although the initial cost of the solar water heaters is higher than conventional water heaters, but the fuel (solar radiation) is free. A 100 liters per day capacity SWHS can replace an electric geyser for residential use and saves 1,435 units of electricity annually. The return on investment has become increasingly attractive with the increase in prices of conventional energy. The payback period will be around:

- 1.5-2.5 years when electricity is replaced
- 3-4 years when furnace oil is replaced
- 3-4 year when coal replaced

Plus, they are environmentally friendly. A SWHS of 100 Liters capacity can prevents emission of 1.5 tones carbon dioxide per year.

## **Solar Water Heating System (ETC)**

Solar Water Heater is a device, which heat the water by solar radiation, consist of a Evacuate Glass Tube & high quality PUF insulated GI/SS Storage Tank. In Evacuated tube collector, Solar radiation is passed through cover plate, which is absorbed directly to the water inside the selective coated absorber tube. Thus water gets heated by solar radiation directly. Hot water is stored in to high quality PUF insulated Hot Water Storage Tank from which we can utilized hot water as and when we require. Mostly the water heating system is working on and thermosyphone principle.

### **Applications :**

Hot water from Solar Hot Water System can be utilized for Bathing Cooking, Washing etc in domestic Sector, and for Preheating of Boiler feed water up to 80 oC., Washing & Cleaning of vessels, Sterilizing

### **Payback Period :**

Solar water heaters are cost comparative in many applications, when you calculate account for the total energy cost over the life of the system. Approximate life of the solar water heating system is 10-12 year. Although the initial cost of the solar water heaters is higher than conventional water heaters, but the fuel (solar radiation) is free, A 100 liters per day capacity SWHS can replace an



Process, Pasteurization Process in dairy industries. Same can also utilized in other industries like Textiles, Edible oil and refining, Breweries, Pharmaceuticals - drug manufacturing Units, Electroplating / Galvanizing Unit, Paint Shops, Pulp and Paper Industries, Soft drink bottling plant and also Hot water at 60-80 degree for hostels, Hospitals, restaurants, dairies, homes, industries etc.

electric geyser for residential use and saves 1,435 units of electricity annually. The return on investment has become increasingly attractive with the increase in prices of conventional energy. The payback period will be around:

- 1-2 years when electricity is replaced
- 2-3 years when furnace oil is replaced
- 2.5-3 year when coal replaced

Plus, they are environmentally friendly. A SWHS of 100 Liters capacity can prevent emission of 1.5 tones carbon dioxide per year.