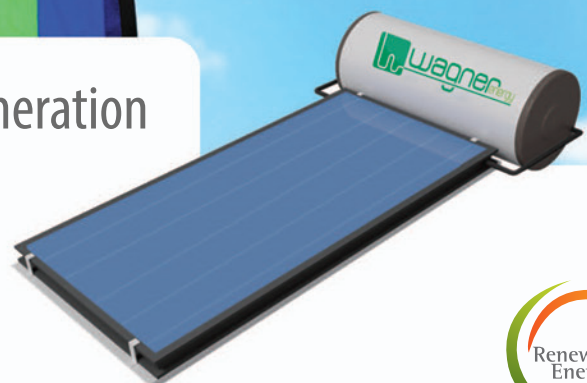




Solar system for hot water generation





WAGNER ENERGY

With continuously rising energy demands, finding alternative energy sources that would decrease CO₂ emissions has become vital for sustainable development on a global scale. Scientific research in this field has revealed that the sun beams onto Earth enough energy to meet the planet's demand for generations to come.

The **Wagner Solar System** by **Wagner Energy**® allows you to harness this inexhaustible, pollution and noise free energy for domestic water heating applications.

The **Wagner Solar System** consists of highly efficient flat plate collectors used to heat a solar fluid (glycol) flowing in a closed loop scheme into specially designed hot water tanks. The unique properties of the various components and their ability to bring together solar and conventional heating sources render a system that is highly effective, reliable and maintenance free. Wagner Solar is available as a compact unit (**WSCompact**) where the hot water tank is connected on top of the collectors or as a split pressurized system (**WSPPro**) with a working station (intelligent controller and pump).



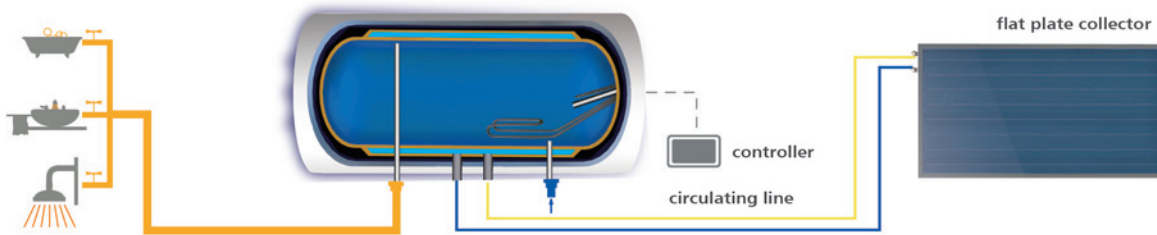
WAGNER SOLAR - FLAT PLATE COLLECTORS

- Manufactured from the finest materials in fully automated production lines using laser welding technology to ensure premium quality and durability
- EPDM gaskets for a durable vacuum seal
- Aluminum casing and mounting accessories to resist weathering
- Inclined and flat installation possible
- Highly selective blue titanium full sheet absorbers, copper serpentine and anti-reflective glass maximize heat conversion efficiency and minimize losses even on low irradiation days
- Highly efficient back insulation layer to avoid deterioration due to condensation
- Above average aging and temperature resistance, maintenance free





WAGNER SOLAR - WSCompact System

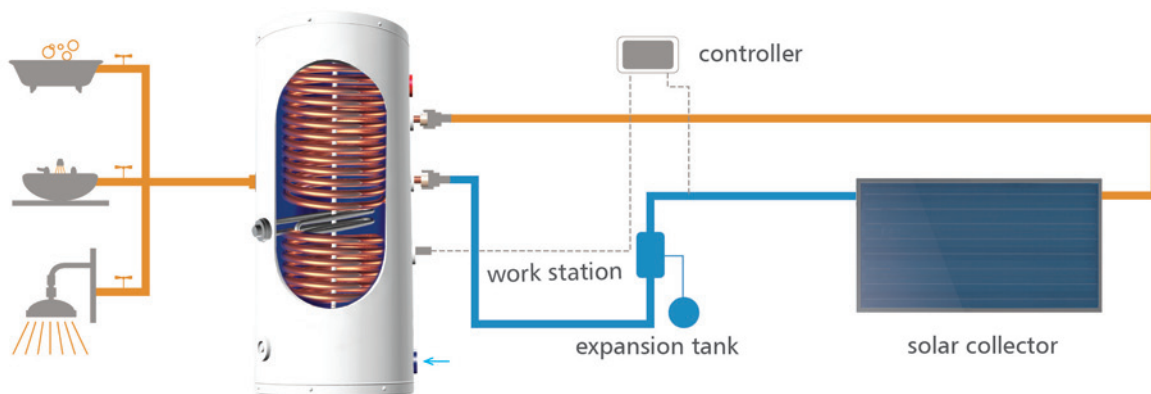


- ✓ Wagner Solar flat plate collectors to maximize heat conversion efficiency and minimize losses even on low irradiation days
- ✓ Tank-in-tank special design system for solar fluid to flow in a closed loop protecting domestic water from contamination
- ✓ Tank connection on top of collectors for fast and easy installation
- ✓ Backup electric heater to meet hot water demand all year round
- ✓ Intelligent controller to monitor solar earnings and customize settings
- ✓ Hot water tank with double enamel coating and magnesium anode for corrosion protection

COMPONENTS

- ▶ Flat plate collector with copper pipes and blue titanium absorber sheet
- ▶ Tank-in-tank special design hot water storage (150L, 200L, 300L)
- ▶ Intelligent controller
- ▶ Aluminum mounting brackets and accessories for inclined and flat installation

WAGNER SOLAR - WSPro System



- ✓ Wagner Solar flat plate collectors to maximize heat conversion efficiency and minimize losses even on low irradiation days
- ✓ Double coil closed loop hot water tank with top coil for glycol fluid heated in the solar collectors and bottom coil for connection to the boiler heating circuit
- ✓ Solar fluid flows in a closed loop to protect domestic water from contamination
- ✓ Fast and easy retrofitting with conventional boiler heating system
- ✓ Separate installation of collectors and hot water tank to minimize wait times for warm water supply
- ✓ System may be expanded to serve larger demand
- ✓ Backup electric heater to meet hot water needs all year round
- ✓ Intelligent controller to monitor solar earnings and optimize the integration between solar and conventional energy sources
- ✓ Highly reliable working station
- ✓ Hot water tank with double enamel coating and magnesium anode for corrosion protection

COMPONENTS

- ▶ Flat plate collector with copper pipes and blue titanium absorber sheet
- ▶ Double coil tank with backup electric heater and magnesium anode (300L, 500L)
- ▶ Intelligent working station with pump and controller
- ▶ Aluminum mounting brackets and accessories for inclined and flat installation

TECHNICAL DATASHEET

WAGNER SOLAR FLAT PLATE COLLECTORS

Model No.	WSP-BT2.0	WSP-BT2.5
Absorber Area (m²)	2	2.5
Gross Area (m²)	2.15	2.68
Maximum Working Pressure (Bar)	7.5	7.5
Size(L*W*H) (mm)	2050*1050*80	2050*1250*80
Cover Material	Tempered glass 3.2mm	Tempered glass 3.2mm
Glass Transmittance	>92%	>92%
Absorber Material	Aluminum plate	Aluminum plate
Absorber Surface	Blue titanium	Blue titanium
Treatment	Selective absorbing coating	Selective absorbing coating
Absorptivity	95%±2	95%±2
Emissivity	5%±2	5%±2
Construction Type	Fin & Tube	Fin & Tube
Copper Pipes (T2)	ø12*0.8mm*10pcs	ø12*0.8mm*12pcs
Welding Process	Laser welding	Laser welding
Insulation Material	40mm rock wool (30K)	40mm rock wool (30K)
Frame	Aluminum	Aluminum
Sealing Profile	EPDM	EPDM
Low-temp Resistance	-40°C	-40°C

WSCompact System

Model No.	Collectors	Tank		Max. Working Pressure (Mpa)	Electric Heater Capacity 220V-50Hz (W)
		Capacity (L)	Size (ø*L) (mm)		
WSC150-BT2.0	1*WSP-BT2.0	150	ø 520*1377	0.7	2000
WSC200-BT2.5	1*WSP-BT2.5	200	ø 520*1737	0.7	2000
WSC300-BT2.0	2*WSP-BT2.0	300	ø 520*2560	0.7	2000

WSPro System

Model No.	Collectors	Tank		Max. Working Pressure (Mpa)	Electric Heater Capacity 220V-50Hz (W)
		Capacity (L)	Size (ø*L) (mm)		
WSPro300-BT2.0	2*WSP-BT2.0	300	ø 620*1530	0.7	2000
WSPro500-BT2.5	2*WSP-BT2.5	500	ø 710*1715	0.7	3000



A Quality product of SpecsPro International

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