

SECUSOL - Compact solar hot water system

Compact safety for rapid installation!



Advantages at one view

It doesn't get more compact

During the development of the SECUSOL system it was accomplished to integrate all solar circulation components in the storage unit. No additional space is required for pumping station, controller and expansion vessel. The entire installation therefore can easily be installed where only limited space is available.

The solar circulation piping consists of 2x12 mm Cu micro-pipes and fits even into tight ventilation shafts.

Installation made easy

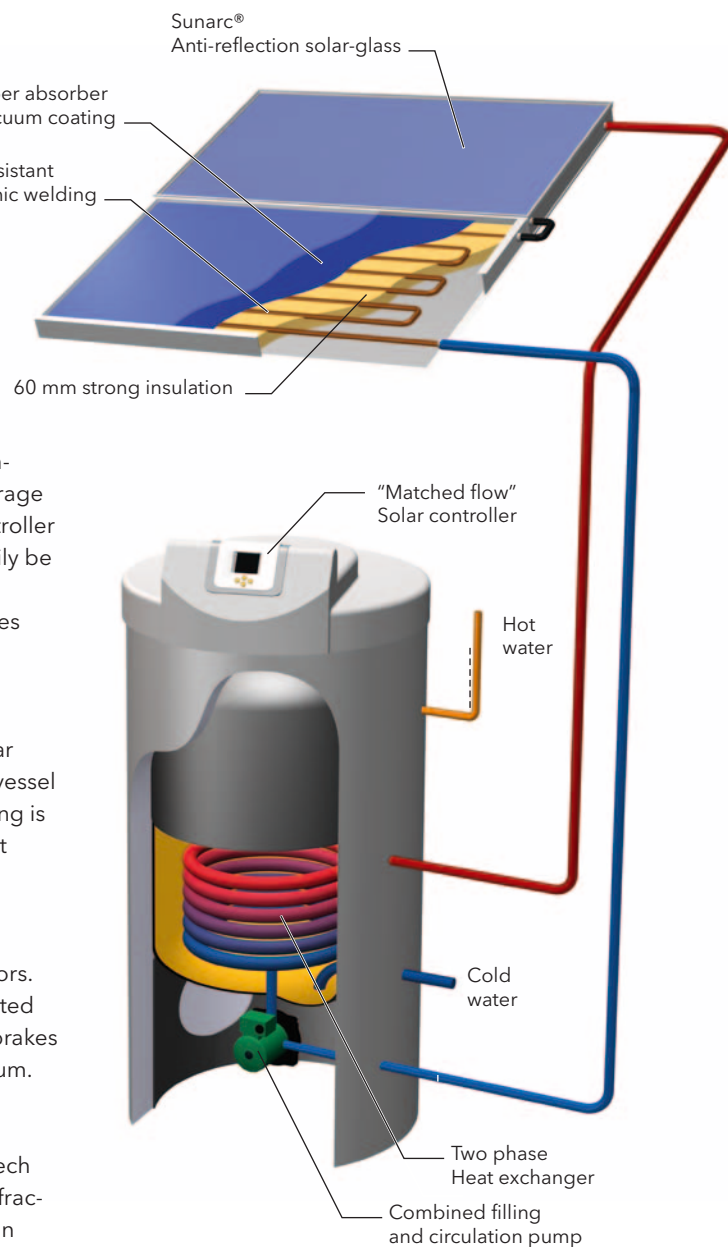
The pre-assembled storage-unit renders the installation of solar pumping station and solar controller unnecessary. Expansion vessel and deaerators also are not needed. Additionally the pipe laying is simplified. Quickly installable micro-tubing from the reel is all it takes to connect solar storage cylinder and collectors.

Low maintenance and high operational safety

When the pump is idle, no solar liquid is present in the collectors. During hot season all critical components therefore are protected against overheating. Expansion vessel, deaerator and gravity brakes are not required. This way maintenance is reduced to a minimum.

Permanent high Yields

1-2 EURO collectors (type C22 M10 AR or C20 AR) with high-tech nano-technology based anti-reflection glass assure high solar fractions. SECUSOL was analysed at the solar testing centre TZSB in Saarbrücken, Germany, and carries the European quality label "Solar Keymark".*



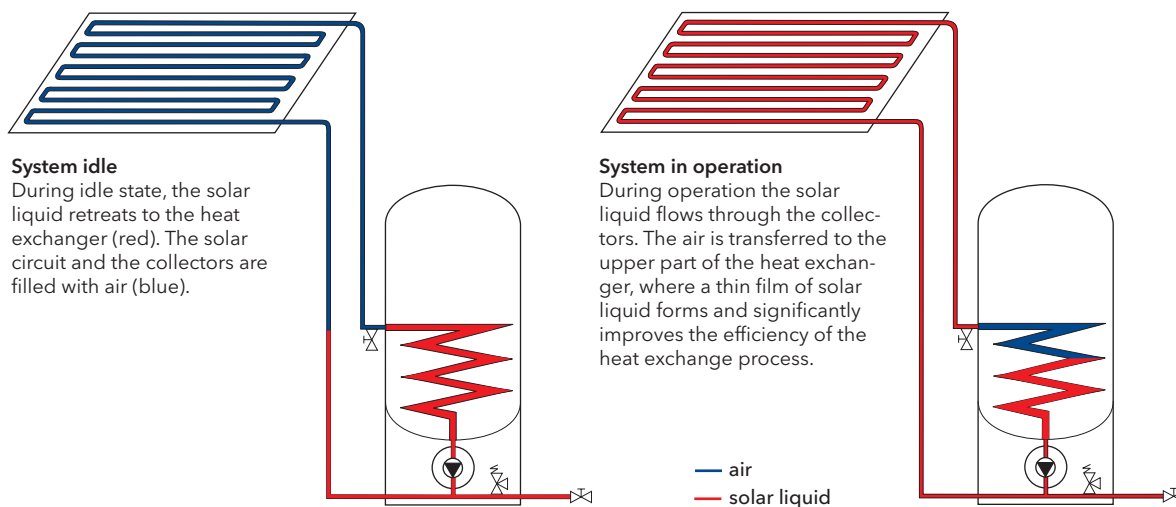
* The installation was tested with a collector area of 2.4 m².



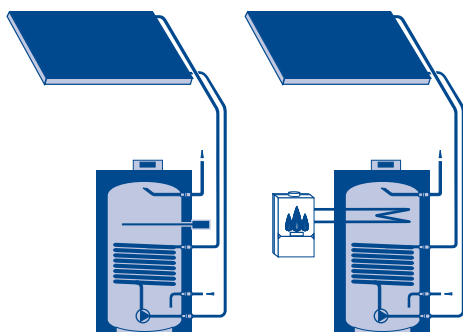
Technical data

SECUSOL system ¹	160-1 C22	250-2 C22	350-2 C20
Persons (rough estimate)	1 - 3	3 - 5	6 - 8
Solar fraction (conforming to the Eurocode DIN EN 12976)	84,9 % (140 l/day ² ; SECUSOL 160-1, 1 collector, 35°N, e.g. Messina, Sevilla)	92,1 % (250 l/day ² ; SECUSOL 250-2, 2 collectors, 42°N, e.g. Barcelona, Rome, Istanbul)	88 % (350 l/day ² ; SECUSOL 350-2, 2 collectors EURO C 20, 42°N)
Solar collector (gross surface)	EURO C22 M10 AR (2,24 m ²)	EURO C22 M10 AR (2,24 m ²)	EURO C20 M8 AR (2,61 m ²)
Solar storage cylinder	160 l nominal capacity; approx. 50 residual volume when auxiliary heating is used (electric immersion heater) Insulation of approx. 75 mm	250 l nominal capacity; approx. 120 l residual volume when auxiliary heating is used (electric immersion heater or central heating), Insulation of approx. 75 mm	350 l nominal capacity; approx. 160 l residual volume when auxiliary heating is used (electric immersion heater or central heating) Insulation of approx. 75 mm
Piping	Total length of solar circuit limited to 30 m, vertical distance between collector and storage: min 1 m/max. 8,5 m, piping of size 2 x 12 mm (tubing not included)		
Solar controller	Pump speed regulation, limitation of maximum storage temperature, monitoring functions for system operation, thermostat function (aux. heating control).		

¹ Limited regional availability: Please enquire which system is available in your country or region. ² hot water preparation



The patented operational principle of the SECUSOL Compact System



SECUSOL 160-1
With electric immersion heater

SECUSOL 250-2/350-2
With electric immersion heater or central aux. heating

Wagner & Co Solartechnik GmbH
Zimmermannstraße 12
D-35091 Cölbe/Marburg

Tel. +49 (0) 64 21 80 07-0
Fax +49 (0) 64 21 80 07-22

info@wagner-solar.com
www.wagner-solar.com

