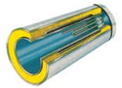
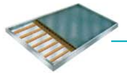
design innovation energy saving

## Specifications of SIELINE solar heaters



**BOILER**

- Close loop from 2,5mm thickness steel boiler, direct enameled with titanium substance for flexibility and durability to dilation and shrinkage.
- Magnesium anode rod. 40cm long and 2cm diameter.
- Polyurethane insulation pressed under constant temperature of 45°C for uniformswelling.
- External cover suitable for adverse weather conditions, from galvanized steel sheet, white color oven painted with polyester treatment seaside class protection (SXF series) or inox glossy antimagnetic stainless steel, with manufactured pressed covers (LX Series).



**COLLECTOR**

- Selective new absorber Full Plate technology (SXF Series) blue titanium single body without absorber fins with copper tubes with frame collector made of aluminum alloy, white color oven special paint Seaside Class for greater protection or selective collector with solid anodized aluminum frame for solidity with no joints at the corners.
- Wool Insulation 30mm on the back and perimetrically glass wool 20mm or polyurethane foam pressed-in oven with a temperature of 45°C for uniform swelling thickness 35mm and perimetrically thickness 20mm.

**VACUUM TUBES**

- Tubes from borosilicate glass 1.6mm thick, high durability in mechanical loads (resistance in hail 25mm diameter).
- Internal surface selective coating AL - N/AL for maximum collectivity of solar energy.
- Heat is exchanged through special tubes inside the boiler so this avoids the accretion of salts.
- Maximum absorption of solar energy due to the geometry of the tubes and minimum thermal lose because of the vacuum all over the length of the tubes.

**BASE**

- Innovative design of the base ensures large durability and quick assembling of the solar heater (about 30 min.).
- Special additional base for tile roof.
- Base from galvanized steel sheet.

**ACCESSORIES**

- Expansion vessel for the protection of the system in all models. (modul)*
- Entering edge between boiler and collectors in all models.(LX series)
- Possibility to be connected with heating boiler.(3 Way Flange)
- Special anti-freeze anti-corrosive liquid, protects from corrosion and frost for temperature below -5°C.
- Connection set by inox coil for safe operation.(SXF Series)

***Exept the Vacuum technic series.**

Manufactured based on SIEMENS German standards

## Dimplex Domestic Hot Water Heat Pump

The solution for energy saving from the environment

BWP 30 H/HLW

**It offers:**

- Plenty of domestic water 300 Lt.
- Up to 65% energy saving, from the environment with performance ratio COP 3,7
- Protects the house and its surroundings from pollutants.
- Ability of dehumidification and ventilation of the space.
- Adjust the water temperature up to 60°C.
- Return of the investment in less time than other systems.

**Variety of applications:**

- In detached, semi-detached houses and cottages
- In hotel units
- In premises that use plenty of hot water
- For independent implementation from central heating

Dimplex domestic hot water heat pump with combined solar systems by SIELINE

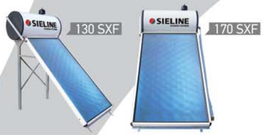
www.sieline.gr


SOLAR SYSTEMS

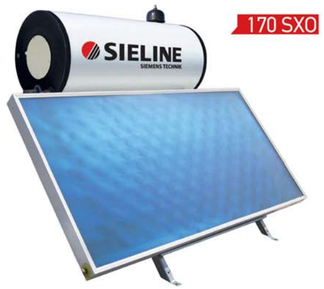
SIELINE
SIEMENS TECHNIK

SIELINE
SIEMENS TECHNIK

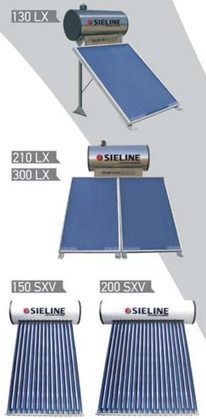
quality performance durability
with respect to the environment












## SIELINE → SIEMENS TECHNIK

New series — Quality that interests ει

| SIELINE | 130 SXF | | 150 SXF | | 170 SXF | | 210 SXF | | 300 SXF | | 170 SXO | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Linear representation of solar heater | | | | | | | | | | | | |
| Dimensions under 45° inclination | 2000 | 1000 | 1900 | 1180 | 2017 | 1277 | 1517 | 2138 | 2000 | 2100 | 980 | 1980 |
| | 1850 | 1980 | 1750 | 1980 | 1750 | 1980 | 1400 | 1690 | 1750 | 2020 | 1160 | 1350 |
| Collector m² | 2.0 | | 2.3 | | 2.6 | | 3.0 | | 4.0 | | 2.0 | |

### SXF Series

- **Boiler** with direct enameled with titanium substance. External cover from galvanized steel sheet, white color oven painted with polyester treatment seaside class protection. With second loop outlets, at the sides of the boiler for better water stratification.
- **Selective absorber** with unique aluminum foils, titanium selective (full plate) for optimum performance, laser welded on copper piping. Suitable for forced circulations systems and solar space heating.
- **Bronze accessories** for the connection set.
- **New SXO series: with horizontal high-performance collector, low height (only 140cm) suitable for adverse weather conditions and with respect to the aesthetics of the environment, addition to saving space, easy transportation and installation.**

### LX Series

- **Boiler** with direct enameled with titanium substance. External cover from inox glossy antimagnetic stainless steel, with manufactured pressed covers.
- **Selective collector** with solid framework for solidity, with no joints at the corners from pressed polyurethane.
- **Front** protection cover.
- **New SXV series (Vacuum Technik): Special design with vacuum tubes German technology from borosilicate glass ensuring large durability and resistance in hail 25mm diameter. Maximum absorption of solar energy with less surface. Easy transportation, installation and service.**

## SIEMENS → SIELINE

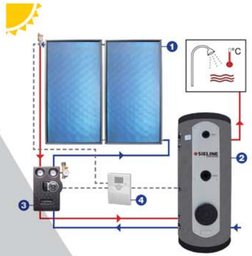
Same product — Same quality

| SIELINE | 130 LX | | 170 LX | | 210 LX | | 300 LX | | 150 SXV | | 200 SXV | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Linear representation of solar heater | | | | | | | | | | | | |
| Dimensions under 45° inclination | 1600 | 1300 | 1600 | 2000 | 1600 | 2700 | 1600 | 2700 | 1720 | 1100 | 1720 | 1420 |
| | 1900 | 1760 | 1900 | 1870 | 1900 | 1870 | 1900 | 1870 | 1750 | 1720 | 1750 | 1720 |
| Collector m² | 2.0 | | 3.2 | | 4.0 | | 4.0 | | 1.9/15 tubes | | 2.6/20 tubes | |

## free energy

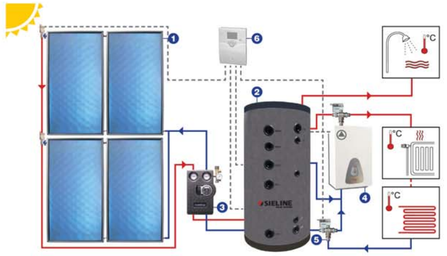
Sieline with the experience of 30 years in the construction and technology of solar systems and with purpose the maximized use of the solar energy, offers systems for:

A. Domestic hot water with forced circulation for better water management, installation flexibility, reduction of energy loses, aesthetics in the surroundings.



The selective collectors Full Plate Sieline (1) heating the water where then transferred to the Boiler Sieline (2) through the transfer unit Oventrop (3). The control of the system is made by the automation unit from Siemens (4) which can control and all other energy sources (for example oil burner).

B. Solar space heating system & domestic hot water preparation with simultaneous production of domestic hot water, reduction of operating costs, suitable of all types of central heating, better energy management through the automation from SIEMENS.



The selective collectors Full Plate Sieline (1) transfers the solar heating energy to the special boiler Tank in Tank Sieline (2) for heating support and DHW production through the transfer unit Oventrop (3). Main energy source may be a Heat Pump, electrical burner (4) etc. The energy saving 3-way valve (5) and all the functions of the system are controlled by the automation unit from Siemens (6).