

SOLAHART HEAT STORE SERIES II COMMERCIAL SOLAR

How Solahart
water heaters can
help your business

COMMERCIAL SOLAR WATER HEATER SOLUTIONS

THE ADVANTAGE OF DRAIN BACK



- Automatic control system
- DRAIN BACK design for optimum performance and durability
- Compact and modular
- Easy Installation
- Choice of collectors for high and low radiation zones
- Suitable for varying weather conditions

Auxiliary Boost Options

- Solar Pre-Heat
- Solar Electric
- Solar Gas
- Solar Electric/Gas

- Substantially reduced operating costs when compared to conventional hot water systems
- Suitable for a wide range of applications
- Uninterrupted hot water, even in inclement weather
- Reduced CO2 emissions
- Peace of mind with 5/1/1 year warranty (refer warranty policy)
- Peace of mind with quality back-up and after sales service
- Low maintenance costs

Overview

For over fifty years Solahart has been a world leading supplier of solar water heating systems; its success based on the quality, performance and reliability of its products. As a leading environmental brand we recognise that the importance of switching to solar water heating cannot be underestimated; both the environmental benefits and financial savings are significant, particularly when providing commercial hot water solutions. With this philosophy in mind, Solahart have designed the Heat Store Series II. It provides large volumes of hot water, in a powerful and cost effective packaged system that delivers hot water free from the sun to meet the hot water needs of hotels, hospitals, apartment buildings, factories, mines, caravan parks, etc.

Description

The Solahart Heat Store II is designed as central storage systems and is recommended where hot water usage exceeds 1,500 litres of hot water per day. The system comprises a Central Heat Store located at ground level connected to a set number of Solahart's proven high performance solar collectors.

The Solahart Heat Store Series II's large capacity storage vessel is filled with a heat transfer fluid. Immersed in the fluid are copper coil heat exchangers through which the potable water supply is circulated. As the potable water passes through the coils the stored energy within the heat transfer fluid is conducted through the copper providing instantaneous hot water.

How it Works

The Solahart Heat Store Series II system is designed utilising the Drain Back principle; the advantage of which is its ability to provide high performance, overnight heat conservation, the elimination of overheating on high radiation days, and protection against freezing. The Solahart Heat Store Series II system incorporates an automatically controlled pump, which is activated by a smart active controller that can be integrated into most building management systems.

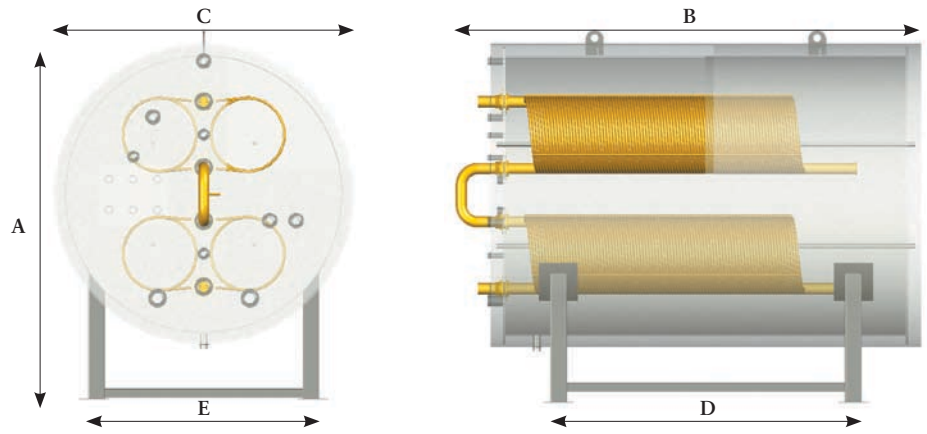
The Solahart System of heat transfer and storage provides the user with far greater flexibility in the capacity of the system to provide large volumes of hot water over short periods without incurring a significant reduction in the temperature of the water.

Flexible Configurations

The flexibility of the system ensures it can be connected to almost any existing hot water plant as a solar pre-heater, with minimum disruption to the existing installation, immediately reducing its running costs. Alternatively, the system can be tailored for new building projects or as a replacement for old, inefficient water heaters.

This flexibility makes the Heat Store Series II a cost effective choice for a variety of applications such as hotels, hospitals, apartment buildings, space heating or a combination of different heating loads. The Solahart Heat Store Series II allows you to replace or add to traditional boiler plant with environmentally friendly solar hot water, saving carbon dioxide emissions while lowering ongoing running costs.

Specifications



MODEL		1000 DB	1500 DB	2200 DB	3500 DB	5000 DB	7000 DB
Nominal Storage Capacity	Litres	1000	1500	2200	3500	5000	7000
Peak DHW Flow rate	L/Min	60	60	120	120	180	180
Max Working Pressure of Tank	kPa	90	90	90	90	90	90
Cold Water Supply Pressure Min/Max	kPa	140/1200	140/1200	140/1200	140/1200	140/1200	140/1200
Weight Empty	kg	750	900	1180	1200	1670	2180
Weight Full	kg	1750	2400	3380	4550	6770	8980
Domestic Hot Water Connection ⁺	mm	DN32	DN32	DN50	DN50	DN80	DN80
Dimension A	mm	1272	1422	1672	1966	2210	2210
Dimension B	mm	2150	2150	2150	2150	2150	2750
Dimension C	mm	962	1112	1362	1656	2016	2016
Dimension D	mm	1400	1400	1400	1400	1400	2000
Dimension E	mm	650	800	1050	1250	1500	1500
Coil Surface Area	m ²	8	8	16	20	32	32
Qty of Collectors	pcs	8-12	12-16	16-24	24-36	36-60	56-96
Collector Aperture Surface Area	m ²	15.2 - 22.8	22.8 - 30.4	30.4 - 45.6	45.6 - 68.4	68.4 - 114	106.4 - 182.4
Maximum Auxiliary Energy Input Electric	Kw	14.4	28.8	28.8	43.2	57.6	57.6
Maximum Auxiliary Energy Input Gas	MJ/h	200	200	200	200	430	430

⁺ The domestic hot water connection is to copper pipe headers. The figures above for the connection relate to the copper pipe nominal size as defined by Australia Standard AS1432. This nominal size relates to the pipe outside diameter: DN32 = 31.75mm (1.25") max., DN50 = 50.80mm (2") max. and DN80 = 76.20mm (3") max.

Electric Boost (in tank)

	Rating	3 Phase Power Supply		Load	Heating Capacity	No. of Elements
	kW	Volts	Amps	Δ40°C l/hr	(4.8kW)	
1	28.8	415	50	618	6	
2	43.2	415	75	927	9	
3	57.6	415	100	1,237	12	

Gas Boost (in line)

	Rating	Heating Capacity
	MJ	Δ40°C l/hr
1	200	937
2	430	2,012

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