Indirect & Solar Storage Tanks for Domestic Hot Water

DHW Tanks
FOR ALL SOLAR, GEOTHERMAL OR HYDRONIC APPLICATIONS

› Heavy Gauge Steel With Porcelain Enamel Coating
› Superb Quality Results In Long Service Life Backed By A Lifetime Warranty
› Sacrificial Anode Rod
› Up To 3” R-21 Urethane Foam Insulation For Low Standby Heat Loss
› Large Clean-Out Port For Ease Of Maintenance

800.582.8423
www.stiebel-eltron-usa.com
**New! SB-E Tanks**

Solar-ready  
Powder-coated steel outer jacket  
Standard junction box for electrical connection  
All connections are NPT  
Two auxiliary ports  
Sleeved heating element can be replaced without draining tank

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**Single Heat Exchanger with Electric Element**

**DHW Tank Model**  
**SB 300 E**  
**SB 400 E**

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<th><strong>SB 300 E</strong></th>
<th><strong>SB 400 E</strong></th>
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<tr>
<td>Storage capacity</td>
<td>79.3 gal (300 l)</td>
<td>105.6 gal (400 l)</td>
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<tr>
<td>Heat exchanger volume</td>
<td>2.4 gal (9.5 l)</td>
<td>2.9 gal (11.1 l)</td>
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<td>Surface area of heat exchanger</td>
<td>16.1 ft² (1.5 m²)</td>
<td>20.6 ft² (1.9 m²)</td>
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<tr>
<td>Working pressure</td>
<td>145 psi (10 bar)</td>
<td>145 psi (10 bar)</td>
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<tr>
<td>Max. pressure of boiler loop</td>
<td>145 psi (10 bar)</td>
<td>145 psi (10 bar)</td>
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**Heating Element**

- **Heating element voltage**: 220 – 240 V, 60 Hz
- **Heating capacity**: 10,239 Btu/hr (3.0 kW)
- **Rated current**: 12.5 A
- **Required circuit breaker**: 20 A
- **Heating element**: Ceramic dome element
- **Temperature control**: Knob with °F & °C scale under heating element cover
- **Set range of thermostat**: 86 – 167 °F (30 – 75 °C)

**Other**

- **Cold/hot water connection**: 1” male NPT
- **Heat exchanger & auxiliary connections**: 1” female NPT

**Performance Data**

- **Standby losses in 24 hours**: 2.8 kW (9,553 Btu)  
  3.0 kW (10,236 Btu)
- **Pressure drop at 4.4 gpm**: 3.7 ft. head (11 kPa)  
  4.0 ft. head (12 kPa)
- **Heat exchanger power rating**: 165,000 Btu/hr (48.4 kW)  
  183,000 Btu/hr (53.7 kW)
- **Recovery rate (maximum input)**: 234 gal/hr (885 l/hr)  
  258 gal/hr (976 l/hr)
- **Recovery rate (electric element only)**: 13.7 gal/hr (51.8 l/hr)  
  13.7 gal/hr (51.8 l/hr)

**Weights & Dimensions**

- **Tank weight empty**: 355 lb (161 kg)  
  432 lb (196 kg)
- **Tank weight full**: 1,051 lb (477 kg)  
  1,366 lb (169 kg)
- **Height**: 61 1/8” (1552 mm)  
  60 13/16” (1544 mm)
- **Diameter**: 25 1/16” (650 mm)  
  29 1/2” (750 mm)
- **Insulation thickness**: 2” (50 mm)
- **Diameter without insulation**: 21 5/8” (550 mm)  
  25 5/8” (650 mm)

**Stiebel Eltron SBB and SB-E tanks and heat exchangers are warranted against material defects for 10 years, excluding the sacrificial anode. See warranty for complete details.**

**New!**

- Solar-ready
- Powder-coated steel outer jacket
- Standard junction box for electrical connection
- All connections are NPT
- Two auxiliary ports
- Sleeved heating element can be replaced without draining tank

**Certified to ANSI/UL Std. 174. Conforms to CAN/CSA Std. C22.2 No. 110-94.**

**Tested and Certified by Water Quality Association against NSF/ANSI 372 for lead free compliance.**
Highly Efficient Domestic Hot Water Storage Tanks for Solar Thermal, Geothermal or Hydronic Applications

**Single Heat Exchanger**

- **Storage capacity:** 40 gal (150 l)
- **Upper Heat exchanger volume:** 2.2 gal (8.2 l)
- **Lower heat exchanger volume:** 1.9 gal (7 l)
- **Max. temp. lower loop:** 266 °F (130 °C)
- **Max. temp. upper loop:** 266 °F (130 °C)
- **Max. pressure of boiler loop:** 150 psi (10 bar)
- **Pressures:**
  - Working pressure: 150 psi (10 bar)
  - Tested to pressure: 217 psi (15 bar)

**WEIGHTS & DIMENSIONS**

- **Height with insulation:** 800 mm
- **Width with insulation:** 1850 mm
- **Thickness of insulation:** 2" (50 mm)

**PERFORMANCE DATA**

- **Flow Rate:**
  - 285.6 gal/hr (1,081 l/hr)
  - 212.4 gal/hr (804 l/hr)

**Other**

- **Sacrificial anode indicator**
- **Thermal well**
- **Foam insulation**
- **Spare port**

**Dual Heat Exchanger**

- **Storage capacity:** 88 gal (330 l)
- **Upper Heat exchanger volume:** 2.2 gal (8.2 l)
- **Lower heat exchanger volume:** 1.9 gal (7 l)
- **Max. temp. lower loop:** 266 °F (130 °C)
- **Max. temp. upper loop:** 266 °F (130 °C)
- **Max. pressure of boiler loop:** 150 psi (10 bar)

**WEIGHTS & DIMENSIONS**

- **Height with insulation:** 800 mm
- **Width with insulation:** 1850 mm

**PERFORMANCE DATA**

- **Flow Rate:**
  - 328.5 gal/hr (1,240 l/hr)
  - 255.3 gal/hr (950 l/hr)

**Other**

- **Sacrificial anode indicator**
- **Thermal well**
- **Foam insulation**
- **Spare port**

**Engineering & Manufacturing Excellence**

Over 90 Years Of German Technology

All Stiebel Eltron SBB/SBE series tanks are made in our factories in Germany and Slovakia. They can be used in residential or commercial installations as individual domestic hot water storage tanks in conjunction with any type of boiler, geothermal, or solar hot water application.

The vessels and heat exchangers in SBB/SBE tanks are made from heavy gauge steel. All surfaces in contact with domestic hot water receive a thick porcelain enamel coating after shot-peening to clean the steel surface. In addition, vessel exteriors receive a light porcelain coating. Up to three inches of urethane foam insulation ensures that hot water stays hot, and standby heat loss is minimized. All SBB/SBE tanks come with heavy-duty sacrificial anodes and visible anode wear indicators. SBB/SBE tanks are also fitted with an extra-large clean-out port for ease of maintenance.

Stiebel Eltron SBE series tanks are equipped with either one or two large-bore heat exchangers, designed to maximize heat transfer. For solar thermal applications, an SBB tank can be used with an external backup heater, or an SBE tank with its integral electric element can be used. Dual heat exchanger models are typically used in solar thermal applications by connecting the lower coil to the collector array, and the upper coil connected to any type of boiler for backup heat input or as a takeoff for a radiant heating loop.
1924

Sometimes a “little thing” leads to a whole lot more

Dr. Theodor Stiebel designed the first coil immersion heater and founded “ELTRON Dr. Theodor Stiebel” in 1924 in a small workshop on Reichenberger Strasse in Berlin, Germany.

Since then, Stiebel Eltron has manufactured 20 million tankless electric water heaters, holds hundreds of patents, has won more than fifty design awards, and continues to stay at the forefront of water heating technology.

2019

Continuing to lead innovation in energy efficiency

One of the first manufacturers to develop and manufacture heat pumps and solar thermal water heating, Stiebel Eltron has been a technological leader in renewable energy since 1976.

Today Stiebel Eltron is the heat pump market leader in Germany, and continues creating innovative, energy efficient products for the homes of the future.

Stiebel Eltron Family of Energy Saving Water Heating Products

Efficient tankless electric water heaters

Point-of-use Tankless

Whole House Tankless

Solar Thermal & Heat Pump Water Heaters

Complete Solar Hot Water Components

Heat Pump Water Heaters

Stiebel Eltron’s plant in Holzminden, Germany.

Stiebel Eltron has been a world leader in the development of advanced water heating technology for more than 90 years. Our pursuit of engineering excellence and high-quality manufacturing results in products fulfilling the highest expectations of performance and reliability. They are...Simply the Best.