

# BUDERUS

Indirect Fired Domestic  
Hot Water Tanks



S, SU, and LT Thermoglaze Single Coil Tanks  
SM Thermoglaze Dual Coil Tanks  
SST Stainless Steel Single-Coil Tanks

## Clean, Pure, Reliable Hot Water

Comfortable. Efficient. Intelligent Heating.

# Buderus

# The Buderus Hot Water Advantage

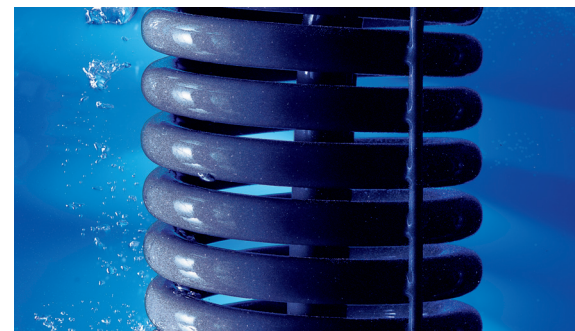
In North America the average household spends around 30% of their energy costs on domestic hot water. Buderus designs its hot water tanks to work more economically and efficiently. Buderus pioneered new methods of producing and storing domestic hot water, so you are assured of greater operating efficiencies, lower fuel consumption and consistent hot water while saving money.



Buderus water tanks are a reliable and clean way to store hot water. From small residences to large commercial operations, there is a Buderus domestic hot water tank that is just right for your application.

## Simple Maintenance and Reliable Operation

Buderus domestic hot water tanks offer features that provide for ease of installation, simple maintenance and reliable operation. All Thermoglaze models are equipped with a magnesium anode rod for protection against corrosion, a drain for easy maintenance, and have adjustable screw-on feet for leveling. An easy-access cover aids in cleaning and maintaining the coil and tank interior.



### Thermoglaze Tank Features and Benefits

Buderus' patented Thermoglaze® is a ceramic material which is thermally bonded to the internal components of the tank to provide a glass-like coating to protect against the corrosive effects of minerals naturally existing in water. All Thermoglaze tanks are equipped with the following additional features:

- Corrosion Protection – the Buderus Thermoglaze® process and standard magnesium anode rod(s) protect tank interior from corrosion caused by most types of water
- Economical – high density insulation for better temperature maintenance of stored hot water
- Heat exchanger has large surface area for excellent hot water recovery rates

**NEW**



### S and SU Series – Buderus Thermoglaze Single-Coil Tanks

Buderus' four single coil indirect DHW storage tank models S32, SU54, SU80 and SU100 offer easy installation and simple maintenance to provide excellent value at a competitive price.

- All tanks feature an aesthetic white cover design, patented Thermoglaze® enamel interior and magnesium anode rod for optimal service life
- Models SU80 and SU100 have a large front clean out port for easy maintenance and a second magnesium anode rod for extended tank life
- Screw-on feet enable easy leveling of the tank
- Model S32 features top connections ideal for use with wall mounted boiler, the SU tank series offers universal rear pipe connections
- Available capacities 32, 53, 80 and 103 gallons

## BUDERUS Indirect Fired Domestic Hot Water Tanks



### SM Series – Buderus Thermoglaze Dual-Coil Tanks

Buderus' dual coil indirect DHW storage tanks, SM80 and SM100, are designed for solar and high performance applications.

- Tanks have two internal coils for connection to two heat sources such as one solar thermal system and one boiler
- Features a blue or universal white cover design, patented Thermoglaze® enamel interior and magnesium anode rod for optimal service life
- Second magnesium anode rod for extended tank life and a large front clean out port for easy service
- Screw-on feet enable easy leveling of the tank
- Available capacities 80 and 103 gallons



### LT Series – Buderus Thermoglaze Horizontal Single-Coil Tanks

Short on space? The LT horizontal tanks are designed to fit under Buderus boilers resulting in a smaller footprint.

- Horizontal design for small footprint
- Constant hot water at the turn of the tap
- Available capacities in 42, 53 and 79 gallons



### SST Series – Buderus Stainless Steel Single-Coil Tanks

The SST stainless steel indirect hot water tank has a welded and passivated 316L stainless steel interior and a 304L stainless steel single coil heat exchanger. This provides durability and resistance to the corrosive tendencies of domestic water.

- Stainless steel heating coil efficiently transfers high volumes of BTU's from the heat source to domestic water stored in the tank
- Two inches of high density CFC/HCFC-free polyurethane foam with a tested R Value of 13.4 provide economical standby losses
- Available capacities 40, 67, 82 and 113 gallons



Configuration	Product Updates				Vertical Dual Coil Models						Horizontal Single Coil Models		
	Vertical Single Coil Models				SM80		SM100				LT160	LT200	LT300
	S32	SU54	SU80	SU100									
<b>Physical Data</b>													
Tank Capacity, gal	31.7	52.8	79.3	103	79.3			103			42	53	79
Diameter, in.	21 $\frac{3}{4}$	21 $\frac{3}{4}$	26 $\frac{3}{8}$	26 $\frac{3}{8}$	26 $\frac{3}{8}$			26 $\frac{3}{8}$			25 $\frac{3}{4}$	25 $\frac{3}{4}$	25 $\frac{3}{4}$
Height, in.	38 $\frac{5}{8}$	60 $\frac{1}{4}$	58 $\frac{7}{8}$	72 $\frac{1}{4}$	58 $\frac{7}{8}$			72 $\frac{1}{4}$			25 $\frac{3}{4}$	25 $\frac{3}{4}$	25 $\frac{3}{4}$
Length, in.	–	–	–	–	–			–			36 $\frac{1}{4}$	42 $\frac{7}{16}$	57 $\frac{3}{4}$
Connection Heat Exchanger Coil, in.	$\frac{3}{4}$	1	1	1	1			1			1	1	1
Connection DHW outlet, in.	$\frac{3}{4}$	1	1	1	1			1			1	1	1
Connection Cold Water Inlet, in.	$\frac{3}{4}$	1	1	1	1			1			1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$
Connection Recirculation, in.	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$			$\frac{3}{4}$			$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Approx. Dry Weight, lbs	160	185	231	263	260			298			220	247	363
Max. DHW Temperature, °F	203	203	203	203	203			203			203	203	203
Max. DHW Operating Pressure, psi	145	145	145	145	145			145			145	145	145
Standby Heat Loss, °F/h*	0.86	0.65	0.41	0.34	0.43			0.34			0.49	0.45	0.36
Max. Heat Exchanger Coil Water Temperature, °F	320	320	320	320	320			320			320	320	320
Max. Heat Exchanger Coil Pressure, psi	232	232	232	232	232			232			232	232	232
<b>Performance Data**</b>													
					Lower Coil	Upper Coil	Dual Coil	Lower Coil	Upper Coil	Dual Coil			
Heat Input to Tank, MBH	90.5	80.2	100.7	157	100.7	78.5	161.2	157	97.2	228.8	100.3	113	167.2
Continuous Rating at: (gph)	120	107	134	209	134	105	215	209	129	305	134	150	223
First Hour Rating: (gph)	143	144	190	281	190	105	215	281	129	305	163	187	278
Boiler Water Flow Rate, gpm	11	9	11	11	11	11	11	11	11	11	12	12	12
Coil Pressure Drop: ft of Head:	3	1.6	3.1	3.7	3.1	2.3	5.7	3.7	2.4	6.4	2	2.3	2.7

Configuration	Stainless Steel Models			
	SST150-40	SST250-65	SST300-80	SST450-119
<b>Physical Data</b>				
Tank Capacity, gal	40	67	81	113.4
Diameter, in.	20	24	24	28
Height, in.	56	60	70	69
Length, in.	–	–	–	–
Connection Heat Exchanger Coil, in.	1	1	1	1
Connection DHW outlet, in.	1	1	1	1
Connection Cold Water Inlet, in.	1	1	1	1
Approx. Dry Weight, lbs (5% higher including packaging)	105	147	177	213
Max. DHW Temperature, °F	194			
Max. DHW Operating Pressure, psi	150			
Standby Heat Loss, °F/h*	0.7	0.5	0.5	0.4
<b>Performance Data†</b>				
Heat Input to Tank, MBH	115	154	171	216
Continuous Rating at: (gph)	181	263	285	349
First Hour Rating: (gph)	208	327	350	459
Boiler Water Flow Rate, gpm	14	14	14	14
Coil Pressure Drop: ft of Head	4.5	5.7	6.1	6.5

\* Standby heat loss tested at 149°F (65°C) DHW Temperature, 68°F (20°C) Room Temperature

\*\* Performance data tested at 176°F (80°C) Boiler Supply Temperature, 50°F (10°C) Cold Water Inlet Temperature, 140°F (60°C) DHW Outlet Temperature

† Performance data tested at 180°F (82.2°C) Boiler Supply Temperature, 58°F (14.4°C) Cold Water Inlet Temperature, 135°F (57.2°C) DHW Outlet Temp



### A Tradition of Excellence

The world leader in heating technologies since 1825, Buderus produced the first low-temperature hydronic heating systems. Today, Buderus products are acknowledged as the global standard in high-efficiency, low emissions hydronic heating. All Buderus products are designed to meet strict safety and environmental regulations.

Buderus boilers are quick and easy to install and will outlast and outperform virtually any other hot water heating system. They are designed for easy access and service. With appropriate maintenance, Buderus boilers deliver the highest efficiencies throughout the lifespan of operation. Buderus is a member of Bosch Thermotechnology.