



September 1, 2015

Heat Storage Tanks and Accessories

Pressurized Heat Storage

Price

220JWHST	220 Gallon ASME steel tank - uninsulated 79"H x 30"D	\$ 2,200
300JWHST	300 Gallon ASME steel tank - uninsulated 75"H x 36"D	\$ 3,000
400JWHSTP	400 Gallon ASME steel tank - uninsulated 96"H x 36"D	\$ 3,250
ETX60	expansion tank (accommodates up to 400 Gallons system volume)	\$ 300
ETX90	expansion tank (accommodates up to 600 Gallons system volume)	\$ 500
ETX110	expansion tank (accommodates up to 850 Gallons system volume)	\$ 545
KTANKINSU	Tank insulation kit	\$ 250

KBHST440PIPE	near tank piping kit for two 220JWHST tank system	\$ 608
KBHST660PIPE	near tank piping kit for three 220JWHST tank system	\$ 1,081
KBHST600PIPE	near tank piping kit for two 300JWHST tank system	\$ 620
KBHST900PIPE	near tank piping kit for three 300JWHST tank system	\$ 1,099
KBHST800PIPE	near tank piping kit for two 400JWHST tank system	\$ 620
KBHST1200PIPE	near tank piping kit for three 400JWHST tank system	\$ 1,099

KLK180578	Termovar diverter valve kit	\$ 195
BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$ 450
L4008A	tank aquastat	\$ 125
ZV1	1" motorized zone valve	\$ 128
ZV1114	1-1/4" motorized zone valve	\$ 199

LK181256	Automix outdoor reset control	\$ 500
KLK180856	1-1/2" brass three-way mixing valve kit (including unions and gaskets)	\$ 167
LK4906	1-1/4" brass union fitting	\$ 20
LK4806	union fitting fiber gasket	\$ 4

Circulators

ALPHA15-55 FR/LC	Grundfos Alpha 15-55 variable speed circulator pump (uses 30% - 80% less electricity than UPS 15-58)	\$ 160
UPS15-58FC	Grundfos 15-58 3-speed circulator pump (standard flange orientation)	\$ 89
UPS15-58FRC	Grundfos 15-58 3-speed circulator pump (rotated flange orientation)	\$ 85
UPS26-99FC	Grundfos 26-99 3-speed circulator pump	\$ 265
UP15-42F	Grundfos 15-42 single-speed circulator pump	\$ 89
UP26-64F	Grundfos 26-64 single-speed circulator pump	\$ 240

Indirect Water Heaters

TMT23	High Performance Indirect Water Heater - 26 gallons (for use in standard applications)	\$ 1,350
TMT24	High Performance Indirect Water Heater - 26 gallons (for use in high volume applications)	\$ 2,025
ENERGYTANK	Combination Buffer Tank and Indirect Water Heater - 119 gallons (65 square feet heat exchanger for domestic hot water production)	\$ 2,500



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Pressurized Heat Storage Packages - (based on 220 gallon tanks)

Heat storage systems should be sized to match the boiler output. We recommend a **minimum** of 40 gallons of heat storage per 10,000 BTU of boiler output and an **ideal** of 70 gallons of heat storage per 10,000 BTU of boiler output.

Heat storage packages include the storage tanks and many of the accessories necessary to integrate heat storage with your wood and fossil fuel heating system. Pressurized thermal storage packages require the use of an indirect water heater to produce domestic hot water. If you do not already have an indirect water heater, one may be ordered with your tank package. In addition to the tanks, pressurized heat storage systems include piping kits to mate the tanks, insulation kit, tank thermometers, expansion tank, automatic wood/fossil fuel/automatic back up control, diverter valve, zone valve and tank aquastat. These packages are intended for installation according to our pressurized thermal storage drawing "PT1C", "PT1Z" or "PT2" as found in our "Wood Boiler Plumbing Schematics" document.

The following heat storage systems are based on the **220** gallon 220JWST tanks. These tanks are **79" tall** so will fit in most basements and are a good choice if the 400 and 300 gallon tanks are too tall and/or too wide. These tanks are only **30"** in diameter so will fit through most doorways.

Price

SHST440PAK		440 Gallon thermal storage system - minimum storage for use with 30 KW boilers	\$ 6,991
this thermal storage system consists of:			
two each - 220JWHST	220 Gallon ASME steel tank - uninsulated 79"H x 30"D (2 x \$2200 each)	\$	4,400
one each - ETSX90	expansion tank (accommodates up to 600 gallons system volume)	\$	500
two each - KTANKINSU	tank insulation kit (R18) (2 x \$250 each)	\$	500
one each - KBHST440PIPE	near tank piping kit for two 220SHST tank system	\$	608
one each - UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$	85
one each - KLK180578	Termovar diverter valve kit	\$	195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$	450
one each - L4008A	tank aquastat	\$	125
one each - ZV1	1" motorized zone valve	\$	128

SHST660PAK		660 Gallon thermal storage system - recommended for use with 30 and 40 KW boilers	\$ 9,959
this thermal storage system consists of:			
three each - 220JWHST	220 Gallon ASME steel tank - uninsulated 79"H x 30"D (3 x \$2200 each)	\$	6,600
one each - ETSX110	expansion tank (accommodates up to 850 gallons system volume)	\$	545
three each - KTANKINSU	tank insulation kit (R18) (3 x \$250 each)	\$	750
one each - KBHST660PIPE	near tank piping kit for three 220SHST tank system	\$	1,081
one each - UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$	85
one each - KLK180578	Termovar diverter valve kit	\$	195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$	450
one each - L4008A	tank aquastat	\$	125
one each - ZV1	1" motorized zone valve	\$	128



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Pressurized Heat Storage Packages - (based on 300 gallon tanks)

Heat storage systems should be sized to match the boiler output. We recommend a **minimum** of 40 gallons of heat storage per 10,000 BTU of boiler output and an **ideal** of 70 gallons of heat storage per 10,000 BTU of boiler output.

Heat storage packages include the storage tanks and many of the accessories necessary to integrate heat storage with your wood and fossil fuel heating system. Pressurized thermal storage packages require the use of an indirect water heater to produce domestic hot water. If you do not already have an indirect water heater, one may be ordered with your tank package. In addition to the tanks, pressurized heat storage systems include piping kits to mate the tanks, insulation kit, tank thermometers, expansion tank, automatic wood/fossil fuel/automatic back up control, diverter valve, zone valve and tank aquastat. These packages are intended for installation according to our pressurized thermal storage drawings "PT1C", "PT1Z" or "PT2" as found in our "Wood Boiler Plumbing Schematics" document.

The following heat storage systems are based on the **300** gallon 300JWST tanks. These tanks are **75" tall** so will fit in most basements and are a good choice if the 400 gallon tanks are too tall. These tanks are also **36"** in diameter so doorway widths should also be taken into account.

Price

SHST600PAK	600 Gallon thermal storage system - recommended for use with 30 and 40 KW boilers	\$ 9,148
this thermal storage system consists of:		
two each - 300JWHST	300 Gallon ASME steel tank - uninsulated 75"H x 36"D (2 x \$3000 each)	\$ 6,000
one each - ETSX110	expansion tank (accomodates up to 850 gallons system volume)	\$ 545
four each - KTANKINSU	tank insulation kit (4 x \$250 each)	\$ 1,000
one each - KBHST600PIPE	near tank piping kit for two 300SHST tank system	\$ 620
one each - UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$ 85
one each - KLK180578	Termovar diverter valve kit	\$ 195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$ 450
one each - L4008A	tank aquastat	\$ 125
one each - ZV1	1" motorized zone valve	\$ 128

SHST900PAK	900 Gallon thermal storage system - recommended for use with 40, 50 and 60 KW boilers	\$ 13,653
this thermal storage system consists of:		
three each - 300JWHST	300 Gallon ASME steel tank - uninsulated 75"H x 36"D (3 x \$3000 each)	\$ 9,000
two each - ETSX90	expansion tank (accomodates up to 1200 gallons system volume)	\$ 1,000
six each - KTANKINSU	tank insulation kit (6 x \$250 each)	\$ 1,500
one each - KBHST900PIPE	near tank piping kit for three 300SHST tank system	\$ 1,099
one each - UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$ 85
one each - KLK180578	Termovar diverter valve kit	\$ 195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$ 450
one each - L4008A	tank aquastat	\$ 125
one each - ZV1114	1-1/4" motorized zone valve	\$ 199



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Pressurized Heat Storage Packages - (based on 400 gallon tanks)

Heat storage systems should be sized to match the boiler output. We recommend a **minimum** of 40 gallons of heat storage per 10,000 BTU of boiler output and an **ideal** of 70 gallons of heat storage per 10,000 BTU of boiler output.

Heat storage packages include the storage tanks and many of the accessories necessary to integrate heat storage with your wood and fossil fuel heating system. Pressurized thermal storage packages require the use of an indirect water heater to produce domestic hot water. If you do not already have an indirect water heater, one may be ordered with your tank package. In addition to the tanks, pressurized heat storage systems include piping kits to mate the tanks, insulation kit, tank thermometers, expansion tank, automatic wood/fossil fuel/automatic back up control, diverter valve, zone valve and tank aquastat. These packages are intended for installation according to our pressurized thermal storage drawings as "PT1C", "PT1Z" or "PT2" found in our "Wood Boiler Plumbing Schematics" document.

The following heat storage systems are based on the **400** gallon 400JWST tanks. Please keep in mind that these tanks are **96" tall** and a ceiling height of **at least 101"** is required to be able to stand them from horizontal to vertical position - in other words, these tanks will not fit under a typical 8' ceiling. These tanks are also **36"** in diameter so doorway widths should also be taken into account.

		Price
SHST800PAK	800 Gallon thermal storage system - minimum storage for use with 50 and 60kW boilers	\$ 9,719
this thermal storage system consists of:		
two each - 400JWSTP	400 Gallon ASME steel tank - uninsulated 96"H x 36"D (2 x \$3250 each)	\$ 6,500
one each - ETSX110	expansion tank (accommodates up to 850 gallons system volume)	\$ 545
four each -KTANKINSU	tank insulation kit (4 x \$250 each)	\$ 1,000
one each - KBHST800PIPE	near tank piping kit for two 400SHST tank system	\$ 620
one each -UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$ 85
one each - KLK180578	Termovar diverter valve kit	\$ 195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$ 450
one each - L4008A	tank aquastat	\$ 125
one each - ZV1114	1-1/4" motorized zone valve	\$ 199
SHST1200PAK	1200 Gallon thermal storage system - recommended for use with 50 and 60kW boilers	\$ 14,493
this thermal storage system consists of:		
three each - 400JWSTP	400 Gallon ASME steel tank - uninsulated 96"H x 36"D (3 x \$3250 each)	\$ 9,750
two each - ETSX110	expansion tanks (accommodates up to 1700 gallons system volume)	\$ 1,090
six each -KTANKINSU	tank insulation kit (6 x \$250 each)	\$ 1,500
one each - KBHST1200PIPE	near tank piping kit for two 400SHST tank system	\$ 1,099
one each -UPS 15-58FC	Grundfos 15-58 3-speed pump (C1 circulator)	\$ 85
one each - KLK180578	Termovar diverter valve kit	\$ 195
one each - BLTCONTROL	Wood/Oil/Auto Back-Up switch control	\$ 450
one each - L4008A	tank aquastat	\$ 125
one each - ZV1114	1-1/4" motorized zone valve	\$ 199



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Tarm Bonus Plus Pressurized Heat Storage Package - (Automix)

Because of its relatively small firebox, the Tarm Bonus Plus is well suited to a single 300 gallon thermal storage tank. If ceiling height allows, a single 400 gallon tank would also be a good choice (8'6" ceiling height required).

This ALPHA pressurized thermal storage package includes a single tank plus an expansion tank, tank insulation kit, tank aquastat, Grundfos Alpha variable speed circulator, Automix control and Termomix three-way valve kit. This package is intended for installation according to the "**Automix - Single Tank**" drawing found in our "**Wood Boiler Plumbing Schematics**" document.

		Price
ALPHA300PAK	Single 300 Gallon tank - minimum for use with 30kW Tarm Bonus Plus	\$ 4,752
this thermal storage system consists of:		
one each - 300JWSTP	300 Gallon ASME steel tank - uninsulated 75"H x 36"D	\$ 3,000
one each - ETSX60	expansion tank (accommodates up to 400 gallons system volume)	\$ 300
two each - KTANKINSU	Tank Insulation Kit for SHST tanks (R18) (2 x \$250 each)	\$ 500
one each - L4008A	Tank Aquastat for back-up boiler lock-out	\$ 125
one each ALPHA1555FR/LC	Grundfos Alpha 15-55 variable speed circulator pump	\$ 160
one each - LK181256	Automix outdoor reset control	\$ 500
one each - KLK180856	1-1/2" brass three-way mixing valve kit (including unions and gaskets)	\$ 167



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Pressurized Heat Storage Packages - (Automix)

Heat storage systems should be sized to match the boiler output. We recommend a **minimum** of 40 gallons of heat storage per 10,000 BTU of boiler output and an **ideal** of 70 gallons of heat storage per 10,000 BTU of boiler output.

This ALPHA pressurized thermal storage package includes a single tank plus an expansion tank, tank insulation kit, tank aquastat, Grundfos Alpha variable speed circulator, Automix control and Termomix three-way valve. This package is intended for installation according to the "**Automix - Single Tank**" drawing found in our "**Wood Boiler Plumbing Schematics**" document.

		Price
ALPHA400PAK	Single 400 Gallon tank - for use with 30kW boilers	\$ 5,202
this thermal storage system consists of:		
one each - 400JWSTP	400 Gallon ASME steel tank - uninsulated 96"H x 36"D	\$ 3,250
one each - ETSX90	expansion tank (accommodates up to 600 gallons system volume)	\$ 500
two each - KTANKINSU	Tank Insulation Kit for SHST tanks (R18) (2 x \$250 each)	\$ 500
one each - L4008A	Tank Aquastat	\$ 125
one each ALPHA1555FR/LC	Grundfos Alpha 15-55 variable speed circulator pump	\$ 160
one each - LK181256	Automix outdoor reset control	\$ 500
one each - LK180856	1-1/2" brass three-way mixing valve kit (including unions and gaskets)	\$ 167