TARM 500 SERIES

Central Heat from Wood, Coal, Gas, Oil, or Electricity

The TARM 500 Series boilers are heating systems designed to meet the challenge of your future energy needs.

As the political and economic climates of the world change, so do fuel supplies and prices. Today, gas is replacing fuel oil in many parts of the country; in others, wood, coal and solar power are replacing both oil and gas.

If you're buying a heating system for your new home or wish to replace your present system, can you afford one that commits you to burning just one fuel? A fuel that may be too expensive or completely unavailable in just a few years?

The TARM 500 boilers can burn *any* conventional fuel—wood, coal, gas, oil or electricity—and can serve as an integral part of a solar heating system as well. Buying a TARM 500 is like getting an insurance policy for your home. Because, regardless of changes in the price or supply of any fuel, you are protected. You'll stay warm.

TARM 500 boilers are compatible with all hot-water heating systems. When fired on wood or coal, your TARM 500 will heat your whole house and all the tap water you need. When you're away or if you forget to add fuel to the fire, your TARM 500 will automatically switch to oil, gas or electric operation to keep your home warm.

Sixty years of design and production know-how go into every TARM 500 boiler. They're built to last. And built so they're easy for you to operate and maintain. With features like a large, solid-fuel firebox with no obstructions to get in your way. Durable cast-iron doors and grates. A heavily insulated jacket, finished in a brilliant orange-red enamel. And, for maximum efficiency when you're not using coal or wood, a completely separate firebox and heat exchanger for burning oil or gas.

There's a tankless coil for heating tap water. And if you live in an area where electricity is inexpensive or little back-up heat is required, there's an optional electrical elements package.

combustion

TARM 500 Series boilers operate as cross-draft burners when fired on wood and as updraft burners when fired on coal—ensuring the most complete combustion of either fuel.

Cross-draft systems give the most efficient wood combustion possible with a natural draft chimney. In the TARM 500 Series boilers, primary air enters the area below the grates through a flap on the ash door.

This primary air flow is controlled precisely by the SAMSON draft regulator, a non-electric device that regulates boiler temperature automatically, even during power failures. As the fire burns, smoke and hot gas pass through the hot coals on the grates to the rear of the firebox. Secondary air, admitted through the air dial on the firing door and through a tube in the rear of the firebox, mixes with these hot gases,

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encouraging further burning and minimizing creosote formation.

The vertical firetube heat exchanger extracts the maximum amount of heat from these gases before they are vented up the chimney. Less heat up the chimney means more heat in your home—where you want it.

Even when burning conventional fuels, TARM 500 boilers outperform many modern, conventional boilers. Oil or gas is burned in a completely separate firebox and heat exchanger so that no deposits from the wood or coal fire can compromise combustion efficiency.

construction

For durability, all TARM 500 Series boilers are constructed of ¼" steel plate. The doors and grates are cast and machined from the finest gray iron.

For maximum flexibility of installation, the flue outlet may be mounted either on the right side of the boiler or at the rear. If desired or if required by law, the oil/gas fire may be vented separately from the solid-fuel fire.

For ease of maintenance, both firetube heat exchangers, accessible when the cleanout cover is removed, may be cleaned quickly and easily with the round flue brush supplied with the boiler.

Note: TARM 500 Series boilers are available constructed in accordance with the ASME Boiler and Pressure Vessel Code and National Board-registered.

controls and accessories

Each TARM 500 Series boiler is shipped with the following:

- cast-iron doors and shaker grates
- copper tankless coil for heating domestic water
- Automatic Draft Regulator
- High Limit Aquastat (overheat control)
- ASME Boiler Pressure Relief Valve
- ASME Coil Pressure Relief Valve
- cleaning tools
- oil or gas burner

The following accessories may be ordered with the boiler or ordered separately for installation at a later date:

- cast-iron baffle plate for burning anthracite coal
- electrical elements package (for adding electrical back-up heat to the TARM 500)

20-year limited warranty

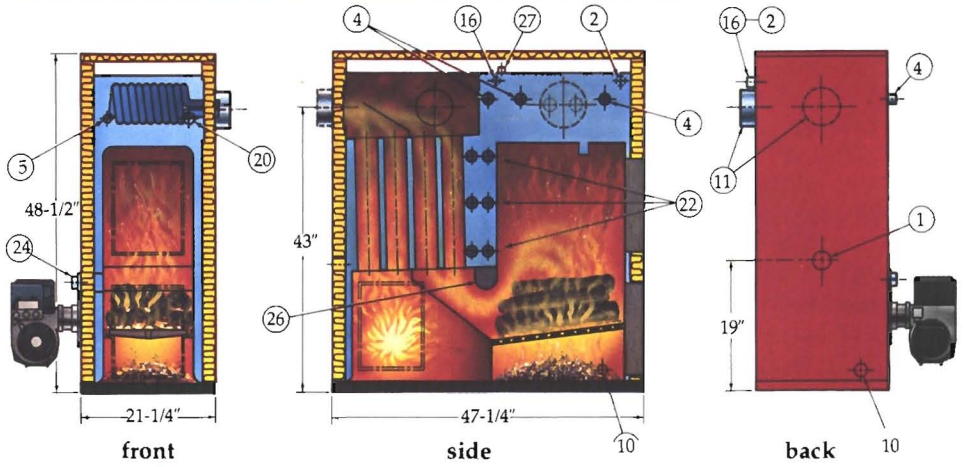
All HS TARM boilers carry a 20-year limited warranty, a copy of which is provided with the boiler and is available from your HS TARM Dealer or from TARM USA, INC.

ALL TARM 500 Series boilers are ETLM-approved.
All specifications are subject to change without notice.
The responsibility for determining compliance with local and state codes is the obligation of the dealer.
Note: Adequate chimney draft is required for proper operation of all wood-fired boilers. Please observe minimum chimney requirements in the table above.

specifications

		TARM 502	TARM 504
Maximum Gross Output-Wood	Btu/hr	110,000	150,000
Burn Time	hr	5	6
Minimum Gross Output-Wood	Btu/hr	25,000	37,000
Burn Time	hr	14	16
Maximum Gross Output-Coal*	Btu/hr	120,000	168,000
Burn Time	hr	12	12
Minimum Gross Output-Coal*	Btu/hr	30,000	42,000
Burn Time	hr	24+	24+
Maximum Gross Output-Fuel Oil	Btu/hr	160,000	184,000
Maximum Combined Output	Btu/hr	280,000	352,000
Maximum Output with Six	Btu/hr	102,000	102,000
Electrical Elements	KW	36	36
Domestic Hot Water Output — Wood	GPM	2.2	3.0
Boiler Body			
Width	in	21¼	24½
Depth	in	47¼	60
Height	in	48½	48½
Firebox			
Length	in	18¾	27¼
Width	in	13¼	16¼
Height	in	27½	27½
Volume	cu ft	4	7
Height to Center of Flue	in	43	43
Tapping(s) for:			
1 Return	in	1½	1½
2 Supply	in	1½	1½
3 Fusible Plug	in	¾	¾
4 Aquastats	in	¾	¾
5 Tridicator	in	½	½
10 Drain and Fill	in	1	1½
11 Flue Outlet	in	6	8
14 Tankless Coil	in	¾	¾
15 Tankless Coil	in	¾	¾
16 Pressure Relief Valve	in	¾	¾
20 Draft Regulator	in	¾	¾
22 Electrical Elements	in	1	1
24 Preheated Secondary Air Control	–	–	–
26 Preheated Secondary Air Manifold	–	–	–
27 Air Vent	in	¾	¾
Water Volume	gal	49	76
Weight of Boiler Body	lbs	1,167	1,870
Weight of Jacket	lbs	99	121
Pressure Test	psi	60	60
Minimum Flue Size	in	8 x 8	8 x 12
Minimum Chimney Height	ft	20	20
Minimum Draft Required	in/WG	.05	.05

*** with optional coal baffle installed**



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