

"Having just completed the third full year of operation of the HS TARM, I am still amazed at the simplicity of operation. We have recovered the furnace cost twice.

L.T. Grant  
Upstate New York



**TARM 500 Series**  
State-of-the-art design  
Firetube heat exchangers  
Maximum efficiency on  
all fuels

"I am most impressed with its ability to maintain our house (three-bedroom raised-ranch) at 74° all winter using a reasonable supply of wood."

J. Lawrence Rustici  
Connecticut

"An excellent, excellent unit. My boiler was underwater from a flood on Feb. 14, 1981. As soon as the water went down in the river, I was able to start my MB-Solo 55 and have heat in my house. My oil burner was damaged - \$200 worth - but not my HS TARM."

Jeffrey A. Lanfear  
Eastern New York State

"Before purchasing, we looked at several different makes. The quality of construction and the ease of cleaning were the major factors for buying the TARM."

Donald A. Warren  
Maine

**SPECIFICATIONS**



504



OT-50



MB-55



402



303



202



HS-20

**Multifuel Systems**

	502**	504**	OT-28	OT-35***	OT-50***	OT-70***	HS-20**
<b>Max. Gross Output* (Btu/hr)</b>							
Max. Combined	280,000	352,000	112,000	140,000	200,000	280,000	
Wood	110,000	150,000	72,000	112,000	140,000	196,000	120,000
Coal	120,000	168,000	72,000	112,000	140,000	196,000	
Oil/Gas	160,000	184,000	112,000	140,000	200,000	280,000	
Electric	102,000	102,000	62,000	82,000	82,000	82,000	
<b>Max. Domestic Hot Water Output, (GPM)</b>	5.6	6.0	2.2	2.8	4.0	5.6	2.4
<b>Water Volume (Gal)</b>	49	76	73-1/2	76	91	130	21
<b>Firebox</b>							
Width (in)	13-1/4	16-1/4	7-3/4	10-1/2	13-1/4	13-1/4	17-1/2
Length (in)	18-3/4	27-1/4	15-1/2	21-1/2	21-1/2	31	17-1/2
Height (in)	27-1/2	27-1/2	30	30	30	30	21-1/4
Volume (ft <sup>3</sup> )	4.0	7.4	2.2	4.1	4.9	7.0	2.5
Coal Capacity (lbs)	135	220	100	165	180	275	unlimited
<b>Boiler Body</b>							
Width (in)	21-1/4	24-1/2	35-3/4	39-1/2	46-3/4	46-3/4	42
Length (in)	47-1/4	60	24-3/4	30	30	39-1/2	29
Height (in)	48-1/2	48-1/2	49	49	49	49	75-3/8
Weight w/Jacket (lbs)	1266	1991	946	1089	1444	1860	1045
<b>Min. Flue Size (in)</b>	8 x 8	8 x 12	8 x 8	8 x 8	8 x 8	8 x 12	8 x 8
<b>Height to Center of Flue (in)</b>	43	43	38-1/2	38	37-1/2	37-1/2	71-3/8

**Add-On Systems**

	402**	404**	MB-30***	MB-40***	MB-55	MB-75***	202**	303**
<b>Max. Gross Output* (Btu/hr)</b>								
Wood	110,000	150,000	72,000	100,000	140,000	180,000	80,000	120,000
Coal	120,000	168,000	72,000	100,000	140,000	180,000		
Electric	102,000	102,000						
<b>Domestic Hot Water Output, (GPM)</b>	2.4	3.4	1.5	2.0	2.9	3.7	NA	2.4
<b>Water Volume (Gal)</b>	41	62	29	36	55	55	24	21
<b>Firebox</b>								
Width (in)	13-1/4	16-1/4	12-1/2	12-1/2	15-1/2	15-1/2	12-1/2	17-1/2
Length (in)	18-3/4	27-1/2	15-1/2	15-1/2	27-1/2	27-1/2	14	17-1/2
Height (in)	27-1/2	27-1/2	26	26	26	26	16-1/4	21-1/4
Volume (ft <sup>3</sup> )	4.0	7.4	3.2	3.2	7.1	7.1	1.5	2.5
Coal Capacity (lbs)	135	220	100	100	200	200	80	135
<b>Boiler Body</b>								
Width (in)	21-1/4	24-1/4	17-3/4	17-3/4	21	21	18	23
Length (in)	38-1/2	49-1/4	25-1/4	28-1/4	41-1/2	41-1/2	19-3/4	23
Height (in)	48-1/2	48-1/4	50-1/2	50-1/2	50-1/2	50-1/2	37	51
Weight w/Jacket (lbs)	1056	1529	594	770	1100	1177	450	645
<b>Min. Flue Size (in)</b>	8 x 8	8 x 12	8 x 8	8 x 8	8 x 12	8 x 12	8 x 8	8 x 8
<b>Height to Center of Flue (in)</b>	43	43	40-1/2	40-1/2	40-1/2	40-1/2	NA	47

\*Your HS TARM dealer is the best judge of the proper size boiler for your home. Sizing will depend on your primary fuel source, the length of burn you desire from a given fuel, and, of course, the actual heating requirements of your home and family. Burn times can range from several hours to overnight under different conditions.

\*\*ASME Models Available \*\*\*Available by special order only.

All HS TARM boilers are tested and approved to ETLM 78-1 and CSA B366M1979 standards by the Energy Testing Laboratory of Maine.

ALL HS TARM boilers require a minimum chimney height of 20 ft. and a minimum draft of .05 in/WG for proper operation.

All HS TARM boilers are pressure-tested at the factory to 60 psi, twice the pressure encountered in normal service.

**20-Year Limited Warranty**

All HS TARM Quality Home Central Heating Systems offer you the protection and peace of mind of a rock-solid 20-Year Limited Warranty.

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# HS TARM

## Quality Wood/Coal Central Heating Systems



# HS TARM Energy-Saving Central Heating Systems

Everyone knows that you can save money on fuel by burning wood or coal. But you may not know there's a way you can have the comfort and convenience of your present central heating system and still burn these economical fuels. If you're seriously committed to energy independence, you should know about HS TARM's complete line of wood- and coal-burning central heating systems for your home.

## You'll Start Saving Money—Immediately!

HS TARM makes two types of central heating systems: "add-on" boilers that burn wood or coal and install alongside your present boiler, and complete "multi-fuel" boilers that burn wood, coal, oil or gas, and electricity. Whatever fuel you choose, your TARM boiler will burn it efficiently, plus offer you the security of automatic "no hands" switchover to the backup fuel of your choice. That adds up to automatic cost savings. This fuel flexibility allows you—as an HS TARM owner—to "play the market" of fuel availability and price, and to keep your family warm, even if conventional fuels become unavailable.

## Clean, Comfortable Central Heat

The money you'll save on fuel and the security you'll enjoy are the best reasons to install a TARM boiler. But comfort and convenience alone are two very good reasons to put a TARM in your home. If you have a hot-water heating system, you're already familiar with its advantages. If you don't, your family will immediately notice the difference—hydronic central heat is draft-free, dust-free and quiet (It's ideal for in-door plants and greenhouses, too). No more stuffy, dry air. No more of the cold rooms and hot spots associated with wood stoves. And no more mess from dragging wood or coal into the living area. And, because you can run your TARM without electricity, you'll be protected against freeze-ups during power failures.

With clean, even and convenient hot water central heat, your entire house will be comfortable and enjoyable, and it will stay that way. Add a domestic hot water coil to your HS TARM boiler and you'll also be getting hot tap water virtually FREE.

*"(We get) unlimited hot water. We have ten kids—so we need water for 12 baths every day."*

Albert Ferrell  
Eastern Pennsylvania

## A Name You Can Rely On

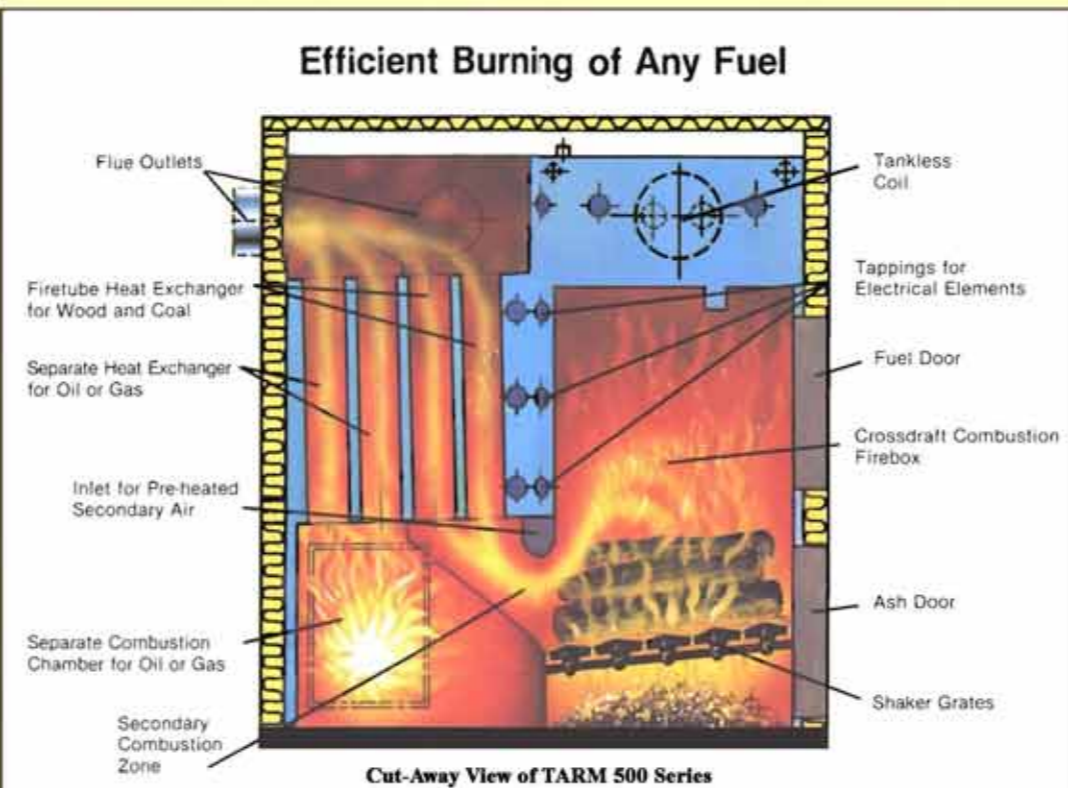
For over fifty years, the HS TARM Company has been designing and building solid, dependable, high quality home heating systems. In Europe, the United States, and Canada, families like yours have enjoyed the savings, comfort, security, and convenience of TARM hydronic (hot water) wood- and coal-fired central heating. In recent years, this traditional TARM emphasis on quality construction and design has been translated into *significant energy—and money—savings*. The respected consumer publication, *Popular Mechanics*, did an unsolicited cover story and test on HS TARM titled "NEW FURNACE THAT BURNS 5 FUELS." Take a look at it and see what they say about HS TARM. Now, more than ever, HS TARM is *the* investment your family should consider. With the fuel it saves, your TARM can pay for itself in 1-3 years, even at today's interest rates. And because TARM boilers are built to last, they are an investment that will increase the resale value of your home in years to come.



*"Based on my experience, if you're considering putting in a multifuel unit, it would be safe to assume a 60 percent reduction of your normal fuel consumption."*

*"The potential savings are even greater."*

Joseph R. Provey  
HS TARM Owner  
Assistant Home and Shop Editor  
*Popular Mechanics*



TARM boilers are not just designed to burn different fuels; they're designed to burn each fuel—wood, coal, oil or gas—as efficiently as possible.

Whatever the heating demand, the primary air supply to the wood or coal fire is precisely controlled by the Samson draft regulator. This automatic control operates independently of electricity, and burns fuel at the correct rate, even during power failures.

## A Unique Combustion System

All TARM woodburning boilers feature a cross-draft baseburning combustion system unique in the wood-burning industry. This system gives maximum fuel efficiency with minimal creosote formation. In conventional wood-burning systems, a high percentage of the heat available in the wood is lost up the chimney in the form of unburned gases, which can also condense in your chimney to form creosote. In a TARM, all gases must pass through an intensely hot bed of coals at the bottom of the firebox before entering the heat exchanger. Here, the proper amount of secondary air is added, and the gases are burned. This unique combustion system is only half of story of TARM's superior fuel efficiency. The other half lies in TARM's sophisticated heat-exchanger, typified

by the firetubes of the TARM 400 & 500 Series. The heat exchanger extracts the maximum amount of heat possible from the flue gas, giving you the most heat for your fuel dollar.

## Designed For Coal

HS TARM makes two boilers strictly for anthracite coal. Both boilers feature updraft combustion, a compact firebox, and are small enough to be installed in almost any home. While these boilers represent the ultimate for the full-time coal-burner, all TARM boilers burn anthracite coal efficiently and cleanly. And all TARM wood/coal boilers can be converted from crossdraft to updraft combustion for maximum convenience.

## High Efficiency With Oil or Gas

For efficient combustion, oil or gas must be burned in a separate combustion chamber from wood or coal. Otherwise, the soot and other residue which collect on the sides of the solid-fuel firebox will give poor heat transfer from the oil or gas flame. All TARM multi-fuel boilers have separate combustion chambers for oil or gas, and the 500 Series features a completely separate heat-exchangers as well. With combustion efficiencies of 84% or better, the TARM multi-fuels burn oil or gas better than most conventional systems!

## Auto-Mix II for Optimum Efficiency

By adding an AUTO-MIX II Mixing Valve to your HS TARM, you are taking that extra step for maximum comfort and savings. In conventional heating control systems, the thermostat turns water circulation either on or off. No matter how warm or cold it is outside, the hottest water available is used for heating. That's like regulating the speed of your car by alternately depressing and releasing the accelerator! Fuel is wasted, just as it would be in a car. And because wood or coal fires constantly produce heat, more fuel is wasted when water circulation is "off".



Auto-Mix II for Optimum Fuel Efficiency

In the AUTO-MIX system, the circulation of heated water is continuous, and the *temperature* of the water is precisely regulated according to heating demand. You always get water that's the right temperature for the job. What you don't get is: poor fuel economy; clanks and rattles caused by sudden water temperature changes in radiators; and uneven, inefficient burns with wood or coal.

## A Tradition of Quality

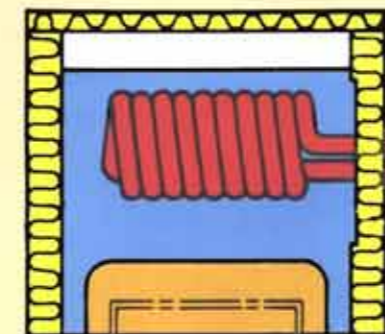
At HS TARM, quality has been a tradition for over 50 years. You'll see this quality reflected in each component of every TARM boiler. For durability, all boilers are manufactured to industrial-quality standards. This makes them the finest available for residential use. Welding is a true craft in Europe, and the Danish welders who construct TARMs are master craftsmen. You may not fully appreciate the beauty of their work inside your TARM, but you will appreciate the results—years of trouble-free performance and comfort for your family.

## Safe, Efficient, Easy-To-Maintain

TARM boilers are fully-insulated to prevent "stand-by loss" (the uncontrolled release of heat from the surface of the boiler). Insulation also ensures that your HS TARM jacket surface will never be hot. This makes it much safer than a woodstove, and safer for children and pets. The steel outer jacket is coated with a brilliant orange-red baked enamel that is as attractive and durable as the finish on a fine automobile.

All TARMs are comfort-engineered for ease of maintenance and operation. On the new 300, 400, and 500 Series, for example, the firetube heat exchangers are easy to inspect and easy to clean. All controls on the boiler are easy to operate and simple to adjust. You may enjoy using your TARM as much as you'll enjoy the money you'll save on fuel!

TARM doors are carefully cast and machined from the best Scandinavian iron, for years of trouble-free and airtight service. Each boiler is equipped with a large fuel door and a large ash door for easy loading and cleaning.



All-copper Tankless Coil

TARM boilers are available with a tankless coil for heating your hot tap water. The savings you'll realize from heating your tap water with wood or coal will astonish you. But even more amazing is the amount of water a TARM can heat. You'll have oceans of hot water for baths, showers, kitchens and laundry.

*"After two complete heating seasons, the HS TARM boiler has saved more in oil costs than the cost of the unit plus installation...not a bad payback period!"*

Kenneth Blaisdell  
Western Massachusetts

## 15 Different Models

Whatever your home's size or description, we have a model to meet your needs. If you want to add wood- or coal-burning capability to your present system, you'll have nine different TARM add-on boilers to choose from. And if you're building a new home or replacing an older boiler, one of TARM's six different complete multi-fuel systems—all of which give you your choice of five different fuels—will be just right for your needs. You'll find complete specifications on all models—from the compact TARM 202 coal burner to the "state-of-the-art" TARM 500 Series multifuel—on the back of this brochure. Contact the authorized HS TARM Dealer nearest you to learn more about these fuel-efficient, money-saving, high quality TARM models:

**TARM 202** Designed for coal. A solid value in a coal add-on. TARM's smallest model, yet holds 24 gallons of water!

**TARM 303** The mid-sized coal boiler. Easy installation, excellent performance.

**TARM 400 Series** Super-efficient wood/coal add-on boilers. May be converted to complete multifuel systems with addition of electric heating elements.

**TARM 500 Series** The Ultimate Multifuels. 12 firetubes, 2 separate fireboxes, shaker grates standard equipment, maximum efficiency on any fuel.

**Type MB Series** High performance wood/coal add-on boilers. Unusually large fireboxes. Ideal for use with any oil- or gas-fired system.

**Type OT Series** The classic HS TARM multifuels, the model written up in *Popular Mechanics*.

**HS 20 Stoker** The most convenient of all solid fuel-burning systems. Unique stoker feeds coal automatically.

## Parts and Service Readily Available

HS TARM maintains a complete professionally-trained Distributor/Dealer network to meet all your service and installation requirements. These hand-picked home heating professionals are experts at helping you enjoy the benefits of HS TARM central heating. In addition, complete parts and accessory inventories are available at all times.

## Twenty Year Limited Warranty—It's Built In

Every HS TARM central heating system that goes into a home is backed by our reputation for quality and dependability...and comes with a 20-Year Limited Warranty for your peace of mind. Compare that with any other heating system on the market. And all HS TARM models are tested for safety by a nationally-recognized laboratory. In addition, most models are available constructed to ASME code standards, should this be required in your area.

*"Christmas morning it was -10°, and we had no trouble keeping the house at 74°. I am heating my hot water with my HS TARM all this summer."*

Carl R. Schuttis, Sr.  
Northern New Jersey

*"My TARM 202 frankly exceeded my expectations. I couldn't be more pleased with it. It is efficient and produces all the heat and hot water I need, and we have a large house."*

Charles F. Bernhard  
Connecticut



**TARM 202**  
The Coal Specialist  
Rugged, air-tight construction  
Fully insulated  
24 Gallon Water Volume!