The boiler body is shipped on a pallet and has a lifting ring on top for ease of handling. The jacket and controls are packaged separately from the boiler body.

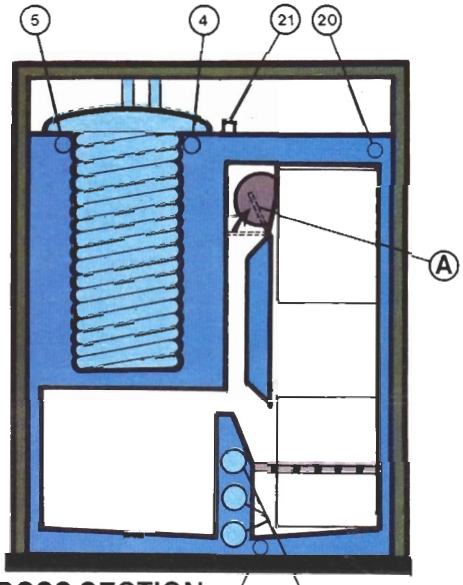
Construction

The steel plate used in the Type OT boiler is unusually heavy. All plate that is exposed to flue gasses is over ¼" in thickness. Insulation fully lines the jacket, which is finished in an attractive orange-red baked enamel.

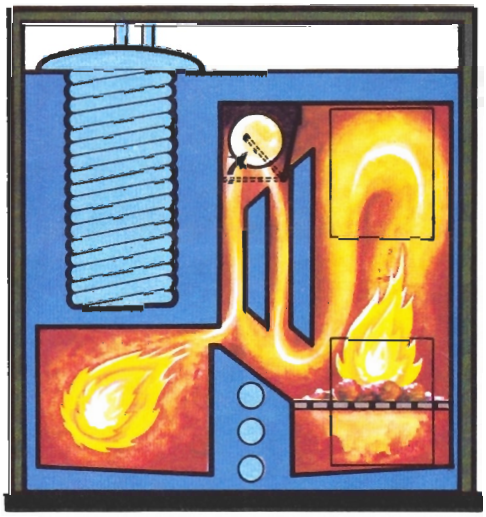
5-Year Limited Warranty

This boiler has a limited warranty, a copy of which is provided with the boiler and is available from your dealer.

For specific information in connection with the OT Series boilers, read the OPERATING AND INSTRUCTION MANUAL that accompanies the boiler and is available from your dealer.



CROSS SECTION
TYPE OT-35S



CROSS SECTION TYPE OT-50S, OT-70S

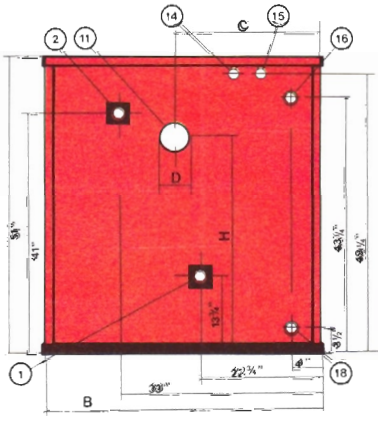
Specifications

TYPE		OT-28S	OT-35S	OT-50S	OT-70S
Gross Output—Oil	Btu/hr	112,000	140,000	200,000	280,000
Gross Output—Wood	Btu/hr	72,000	112,000	140,000	196,000
Max. Hot Water Output	GPM	2.3	2.8	4.0	5.7
Output with 3 Elect. Heaters	KW	15	21	21	27
Width (B)	in	35 ¾	39 ½	46 ¾	46 ¾
Depth	in	24 ¾	30	30	39 ½
Length of Wood Chamber	in	15 ½	21 ½	21 ½	31
Width of Wood Chamber	in	7 ¾	10 ½	13 ¼	13 ¼
Wood Loading Door	in	7X10	10x12	10x12	10x12
Height up to Middle of Flue Outlet (H)	in	38 ½	38	37 ½	37 ½
Distance (C)	in	24	24 ½	25	25
1 Return	in	1 ¼	1 ¼	1 ¼	1 ½
2 Flow	in	1 ¼	1 ¼	1 ¼	1 ½
4 Tapping Triple Hot Water Control	in	¾	¾	¾	¾
5 Tapping for Tridicator	in	¾	¾	¾	¾
10 Extra Tapping	in	½	½	½	½
11 Flue Outlet (Outer Diam.) (D)	in	6	6	6	8
14 Hot Domestic Water	in	¾	¾	¾	¾
15 Cold Domestic Water Supply	in	¾	¾	¾	¾
16 Extra Tapping	in	1 ¼	1 ¼	1 ¼	1 ½
18 Boiler Drain Tapping	in	1	1	1	1
20 Tapping for Draft Regulator	in	¾	¾	¾	¾
21 Vent Tapping	in	½	½	½	½
22 Electric Element Tapping	in	2	2	2	2
Water Capacity—Boiler w/Coil	Gal	73 ½	76	91	130
Weight Boiler with Jacket	lb	946	1089	1444	1800
Pressure Test—Boiler	psi	72	72	72	72
Pressure Test—Hot Water Coil	psi	250	250	250	250
Minimum Flue Size	in	8X8	8x8	8x8	8x12
Minimum Chimney Height	ft	20	20	20	20

All specifications are subject to change without notice.

The responsibility for determining compliance with local and state codes is the obligation of the purchaser.

Note: Adequate chimney draft is required for proper operation of all wood-fired boilers. Please observe minimum chimney requirements in the table above.



REAR VIEW

HS·TARM Tekton Corporation
Conway, MA 01341 (413) 369-4367

The Type OT-Solo boiler is approved by the Energy Testing Laboratory (Portland, Maine) and the Massachusetts Fire Marshal's Office.

HS·TARM TYPE OT Multi-Fuel Boiler

General Information

The HS Tarm Type OT is a new energy-conserving steel plate boiler for modern residential hydronic heating and domestic hot water supply. The Type OT boiler is manufactured in Denmark, a country known throughout the world for its excellent heating products. Designed primarily for efficiency and flexibility, the Type OT provides heat and hot water year 'round from a variety of fuels. Wood can be used in combination with oil, gas, or electricity. On the left side of the Type OT is the combustion chamber for oil or gas, and on the right, a large firebox for wood. The three center tappings are for the optional installation of electrical heating elements. An automatic draft regulator controls the wood fire. Should the wood fire die down or be allowed to go out, the control system automatically switches on the back-up unit — oil, gas, or electric — to maintain boiler temperature. In addition, the Type OT can be supplied with shaker grates for burning coal or coke.

Combustion

The large firebox employs a base-burning arrangement to maximize efficiency. As wood is heated in any fire, it emits gases, which, when burned, yield heat. When they are not burned they can represent a significant loss of efficiency. In a boiler they can also cause tar-like deposits commonly called creosote. These deposits are formed by the condensation of some flue gases when they are cooled. The Type OT's base-burning principle encourages burning of these gases. Much of the smoke leaves the firebox at its base, where flammable gases are drawn over the fire's hot coals. Additional air for this combustion is provided by the secondary air inlet in the upper door of the firebox. Due to the fact that the wood firebox is surrounded by water, the firebox walls are maintained at a relatively cool (200°F.) temperature. The low temperature of these walls precludes the use of wood at a moisture content of greater than 20%. Use of such "green" wood will result in poor burning and excessive formation of creosote and soot. Well-seasoned wood is required for proper boiler operation. A flap-like damper ("A" in the cross section drawings) controls the relative amount of smoke leaving the top and bottom of the firebox. The damper is operated through the cleaning door in the center of the boiler.

When the damper is in the vertical position, much of the smoke will be drawn out at the base. Poor chimney draft conditions and some fuels require an intermediate damper position, which causes a greater proportion of smoke to leave from the top of the firebox. An oil or gas burner works well with the damper in the vertical or an intermediate position.

When an oil or gas burner is used exclusively, as in the summer, the damper should be in the horizontal position. This will slightly increase efficiency by causing the flue gases to travel a longer path through the solid-fuel fire box before leaving the boiler.

The oil-gas combustion chamber is similar to that of other modern boilers. It is surrounded by water on all sides, including the bottom. This "wet base" design allows for greater heat transfer to the water. Equipped with a flame retention oil burner, this boiler will operate at an efficiency of up to 84%.

Domestic Hot Water

OT boilers have a tankless system for the production of domestic hot water. They can supply ample hot water for large homes with several bathrooms. The tankless coil is ¾" copper tubing and can convert the entire output of the boiler to hot domestic water.

Controls & Accessories

HS Tarm Type OT boilers are manufactured for use with standard American central hot water heating systems. All threaded tappings accept standard American controls and equipment.

All boilers are supplied with the following:

—Automatic draft regulator for the wood fire
—Cast iron grates
—Cleaning tools
—Built-in glass-lined tank for domestic hot water
—Insulated jacket with orange-red baked enamel finish
—ASME pressure relief valve for boiler
—ASME pressure relief valve for hot water coil
—High limit (overheat) control

In addition, a complete package of controls and accessories including an oil or gas burner is available with the boiler.