

Williams Oil-O-Matic Heating Corporation

Manufacturers of Automatic and Manually Controlled Fuel Oil Burners
Bloomington, Illinois

Chicago, Ill., 641 N. Michigan Avenue

Service to Architects and Builders

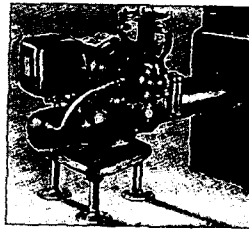
New York, N. Y., 2014 Graybar Building

For Williams Ice-O-Matic Refrigeration Equipment, see File Index

A Complete Line

Williams Oil-O-Matic offers six Oil-O-Matic burner models—a genuine Williams Oil-O-Matic for every size and type of house, for every apartment, public building or commercial structure. Also, the new Williams HP-3 (high pressure) model.

Complete boiler burner and furnace-burner units; a new type of oil-burning automatic water heater; an oil-burning range burner for heavy duty ranges are available.



**WILLIAMS
OIL-O-MATIC
HEATING**

Oil-O-Matic Water Heaters

Made in 3 sizes covering ordinary home use, large home or commercial use, and heavy duty requirement. The Oil-O-Matic oil burner, combustion chamber, water reservoir, and all automatic controls are combined in one compact unit. Horizontal tank permits the use of a unique triple flame travel which transfers all possible heat to the water. See specifications lower left.

Heating Capacities of the Various Williams Oil-O-Matic Burners

Model	Domestic Shipping Weight Lb.	Length, in.	Width, in.	Height, in.	H.P.	R.P.M.	Gals. Fuel Oil per Operating Hour	Mini- mum	Maxi- mum
K-150	125	29	15 1/2	19 1/2	1/10	1800	1 1/2	1 1/2	
K-3	145	30	15 1/2	20 1/2	1/10	1800	1	3	
K-4/5	170	33 1/2	20 1/2	22 1/2	1/5	1800	2 1/2	4 1/2	
K-7	175	32 1/2	22 1/2	21 1/2	1/5	1800	4	7	
J-1800	255	45	20	24	1/2	1800	8	15	
HP-3	295	50	32	24	1	1800	12	25	
HP-3 (high pressure)	115	30	17	18	1/10	1800	1.35	3	

Standard draft pipe 18 in., 12-in. length draft pipe optional.

Standard electric current is 110-volt, 60-cycle. In case odd frequency motors are used, the maximum capacity of the burner will be reduced in direct proportion to the rpm of the motor. The minimum capacity remains the same.

Water Heaters

Model	Capacity, Gals. per Hour	Length, in.	Width, in.	Height, in.	H.P.	R.P.M.	Gals. Fuel Oil per Operating Hour	Mini- mum	Maxi- mum
WHA*	600	57	22 1/2	28	1/10	1800	1 1/2	1 1/2	
WHB†	885	75	23	28	1/10	1800	1 1/2	1 1/2	
WHC‡	1385	90	29	34	1/10	1800	1	1 1/4	

*Output: 90 F rise, 60 gal per hour. †Output: 90 F rise, 120 gal per hour. ‡Output: 90 F rise, 210 gal per hour.

How to Decide Size of Burner

For low pressure domestic boilers, 1 gal of fuel oil per hour (140,000 Btu) is required for approximately:

300 sq ft of steam radiation or its equivalent.

480 sq ft of hot water radiation or its equivalent.

70,000 Btu when using hot air furnace ratings.

24 sq ft steam boiler heating surface (or 2.2 hp).

For exact detail data, see Oil-O-Matic Installation and Service Manual.

Complete Boiler-Burner and Furnace-Burner Units

Oil-O-Matic burners are also used as an integral part of the following boiler-burner and furnace-burner units:

Abram-Cox Oil-O-Matic, Evans Oil-O-Matic, International Oil-O-Matic, Kruse Oil-O-Matic, Orr & Sombrow Oil-O-Matic, Waterman-Waterbury Oil-O-Matic.

Boiler-burner units automatically provide domestic hot water supply the year 'round. Indirect heating coils may be included for either instantaneous or storage tank systems. Furnace-burner units provide winter air conditioning.

Horizontal Boiler-Burner Unit

A complete Oil-O-Matic product, consisting of a boiler and Oil-O-Matic oil burner. It is furnished for both steam and hot water systems. The welded steel tank used meets A.S.M.E. code specifications for operating up to 15 lb pressure. Boiler capacities are: 610 sq ft equivalent direct steam radiation; 980 sq ft equivalent direct hot water radiation.

Underwriters' Listing

Listed as standard by Underwriters' Laboratories, Inc. Also approved by all important codes and governing bodies.

Fuel Oil Range Burners

Williams Oil-O-Matic fuel oil burner for use with heavy duty ranges in restaurants, hotels, hospitals, steamships, dining cars, resorts and clubs. Furnished as an integral part of the Oil-O-Matic South Bend Heavy Duty Range.

Engineering Service

Available to architects. See A. I. A. File No. 30 G-1.

Oakite Products, Inc.

22 Thames Street, New York, N. Y.

Branch Offices and
Representatives in
All Principal Cities
of the U. S.

**OAKITE
AIREFINER**

Established
1909

A new material that prevents corrosion, controls bacteria growth, prevents slime and algae accumulations. Materials also available for rust and scale removal, cleaning and deodorizing.

Bacteria, Slime and Algae Control

Does your air conditioning equipment use a recirculating water supply? Increase the efficiency of it by preventing the growth of bacteria, slime and algae in the circulating water. This is accomplished easily, inexpensively with a new development of the Oakite Research Laboratories, known as Oakite Airefiner. It is a dry, non-volatile white powder, completely soluble in water to provide safe, odorless, non-toxic solutions. Used in extremely low concentrations, one pound to 300 to 500 gal of water, this powerful bactericidal agent controls the growth of bacteria, slime and algae. Equipment is kept free of these accumulations, and from the unpleasant odors which they create.

Preventing Corrosion

Oakite Airefiner has been specially compounded to also incorporate sufficient alkalinity to counteract the development of acidity in the water due to extraction of sulphur dioxide and carbon dioxide gases from the air. If not prevented, this acid condition causes rapid corrosion of eliminators, air wash chambers and other metallic surfaces with which the untreated water comes in contact.

Cleaning and Deodorizing

Users of Oakite Airefiner enjoy a number of other definite advantages. Increased wetting power of water containing Oakite Airefiner has resulted in actual removal of more dirt from the washed air. Eliminators, spray heads and water feed lines are kept free of scale and similar corrosion as well as of bacterial accumulations, slime and algae. The washed air is freed of practically all the matter which is responsible for objectionable odors in re-used air.

Cleaning Filter Screens

Where filters are of the re-usable and washable type, Oakite cleaning methods provide a quick, safe, complete removal of the accumulated dust and dirt. No injury is done to the glass, metallic or similar material which comprises the filtering surface.

Rust and Scale Removal

Removal of rust and scale from feed water pipes, water cooling chambers or on other metallic surfaces can be accomplished safely and economically with Oakite Compound No. 32. This is an acidic material especially prepared to provide absolutely uniform scale and rust dissolving action without having any harmful effect on the sound underlying metal. Specific recommendations on work of this type will be sent upon request.

Nation-Wide Service

Oakite materials are supplied through a nation-wide group of service representatives who are thoroughly experienced in their application. Users are thus assured of employing the materials in the way to get the full benefits they provide.

Write for FREE, interesting fact-filled booklet on the use of Oakite Airefiner and the other Oakite materials designed specifically for helping you get the maximum life and performance from your air conditioning equipment. No obligation, of course.

