

Williams Oil-O-Matic Heating Corporation

Manufacturers of Automatic Oil Burners

Bloomington, Illinois

NEW YORK, N. Y., 420 Lexington Avenue

CHICAGO, ILL., 185 N. Michigan Avenue

Authorized Dealers and Factory Trained Installation and Service Organization in all Principal Cities of the United States and Canada, also in 75 other large Cities throughout the Civilized World.

Williams Oil-O-Matic Heating is 10 Years and 90,000 Installations Beyond Experiment

Williams Oil-O-Matic heating for domestic or commercial installations can be safely recommended by heating engineers, contractors and architects. Today more than 90,000 Williams Oil-O-Matic installations in every state and province, from Alaska to Australia, are automatically and satisfactorily maintaining predetermined temperature in any weather.

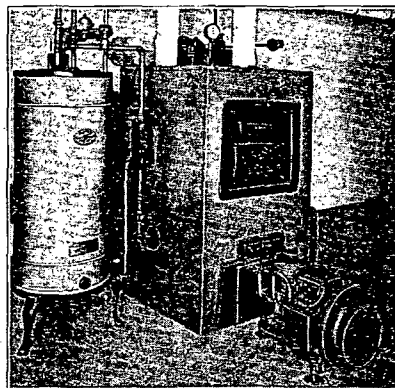
In many instances Oil-O-Matic fuel costs are no higher than for hard coal—thousands of enthusiastic owners even claim savings—and the work of hand firing coal, removing ashes and cleaning dust and smudge is eliminated.

Advantages—To burn oil efficiently: (1) Oil must be atomized, not vaporized. (2) Oil must be mixed with a fixed minimum quantity of air. (3) Oil must burn in suspension. (4) Oil must burn in the presence of a refractory material.

Oil-O-Matic operation complies strictly with these well-known natural laws governing the combustion of liquid fuel, as outlined in Dyson's "Naval Engineering," and the reference works of Harding and Willard Kent, and other like authorities.

The patented exclusive Oil-O-Matic metering pump permits burning cheap 28 to 30 deg. Baume fuel oil, but will handle equally well, all lighter furnace oils. Change in fuel does not necessitate a change in burner adjustment. Oil-O-Matic method of atomization eliminates all high pressure and needle valve atomization. Oil-O-Matic air control permits use of a low velocity air blast, adjustable over a wide range of service, to meet the requirements of all existing types of heating plants. Continuous gas pilot is not used. Automatic intermittent spark ignition operates for about ten seconds only, when burner starts. Room thermostat controls on and off operation of burner. Controls safeguard heating plant temperatures and pressures. Wear is automatically adjusted. Fuel pump may be had with oil level switch or stack safety control.

Domestic Hot Water Supply—The mechanically fired, automatically con-



trolled heating plant has permitted the development of a practical and inexpensive, fully automatic domestic hot water supply system, which provides an inexhaustible supply of hot water at a very low cost.

Complete description will be found in "Oil Heating—What It Means to the Architect." (See Catalogues).

Operating Efficiency—Combustion efficiency in domestic heating systems, the equal of industrial power plant operation, is obtainable with Oil-O-Matic. A test run by A. H. Hansen, Engineer, Metropolitan Utilities, Omaha, reads:

"Burner was tested for fuel consumption, gas consumption for ignition, and flue gases were analyzed for combustion efficiency.

"Atmosphere was 29 deg. fahr., house was maintained at 72 deg. fahr. Burner operated 22 per cent of the time. Flue gas analysis—CO₂ 12.2 per cent; O, 4.4 per cent; CO, none. Flue and combustion chamber was entirely free of soot."

Details of this and many other tests on request.

WILLIAMS OIL-O-MATIC HEATING

More Than 90,000 Satisfactory Installations

Models—Oil-O-Matic Model J Type 1200 is designed for steam heating system serving 1500 sq. ft. direct steam radiation or less; hot water system serving 2500 sq. ft. direct hot water radiation or less; hot air furnace of 36 in. grate diameter or less.

Model J Type 1800 is designed for heating systems larger than the model 1200. Will handle up to maximum of 4000 sq. ft. direct steam radiation; 6400 sq. ft. direct hot water radiation, or hot air furnace with maximum grate area of 14 sq. ft.

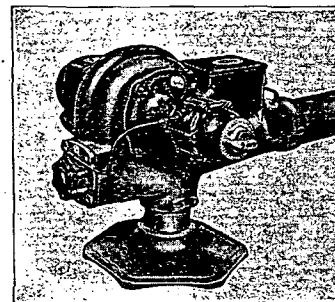
New Oil-O-Matic Junior

The recently announced Oil-O-Matic Model JR provide the most satisfactory heating for small residences and buildings. At lower first cost and operating cost it provides typical Williams satisfaction for 750 sq. ft. direct steam radiation. It will easily handle 1250 sq. ft. direct hot water radiation or a hot air furnace with a 30-in. grate. Oil-O-Matic JR has a maximum oil capacity of 3 gallons per hour as compared to the 5-gallon maximum of the Model J 1200.

All Oil-O-Matic models may be installed in any type furnace or small boiler.

All Oil-O-Matic oil burners operate on standard 110- and 220-volt 60 cycle A.C. or D.C. current as specified by you.

Installation—Grates and ash pit door are removed. Ash pit door is closed with fire brick after Oil-O-Matic draft pipe is inserted, as illustrated.



Williams Oil-O-Matic Model JR

Contractor should also figure oil storage, consisting of 60-gallon tank, or other capacity, installed to comply with local ordinance; to be installed in basement; or a 1000 or 2000-gallon outside tank, buried not less than 3 ft. below grade and not more than 100 ft. from Oil-O-Matic; bottom of tank to be not more than 12 ft. below suction pump on burner.

Installation must be made in accordance with Fire Underwriters' rules, city ordinances and fire department regulations.

Operation—Owner need only set room thermostat to desired temperature, turn on electricity—and forget all heating problems. Factory trained Williams service men are available most everywhere.

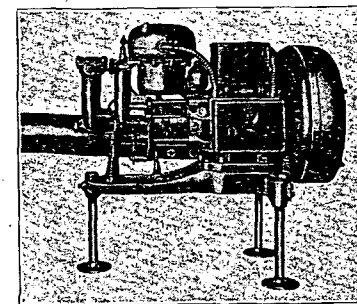
Range of Service—Oil-O-Matic oil burners are heating every type of building:

Houses	Garages	Hospitals
Banks	Schools	Churches
Stores	Theaters	Clubs
Hotels		Apartments

Members of the engineering and architectural professions are offered authoritative and practical counsel on installations and specifications. Look under "Oil Burners" in local classified telephone directory or wire or write to our New York, Chicago or Bloomington offices for prompt information.

Catalogues

"Oil Heating—What It Means to the Architect."
"Oil Heating at Its Best."



Williams Oil-O-Matic Model J