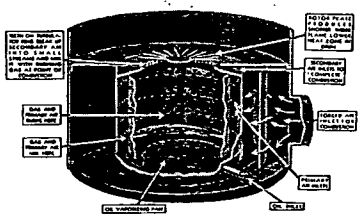
The Quincy Stove Manufacturing Co.

Quincy, Illinois—U. S. A.

MONOGRAM Automatic Oil Burning Furnaces

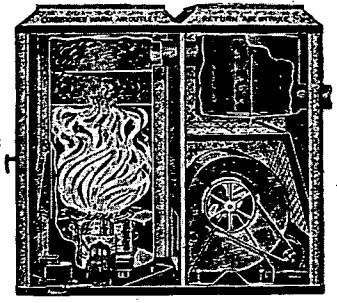


MONOGRAM Turbulent-Flame Vaporizing Oil Burner

An important factor in the high efficiency of all MONOGRAM Heating Equipment is the MONOGRAM Turbulent-Flame Vaporizing Oil Burner—a new method of oil burning. No moving parts, nor frequent cleaning or servicing. Products of combustion are confined to the heating drum, and oil vapors, gas, or products of combustion can not escape into the building. The burner is continuously in operation—either on low or high flame, and maintains sufficient burner temperature to completely vaporize oil so that combustion occurs immediately when oil enters the burner—quick, efficient.

The cycle of operation from low fire to high fire and again reducing to low fire is gradual and without puff or explosion. In case of electric power failure the burner operates on low fire without danger of flooding, and can be operated manually by adjusting the oil flow and the draft regulator as required. Burner approved by the Underwriters' Laboratories, Inc.

Ten Furnace Models



Three sizes of Booster Gravity Units for quick and inexpensive change from coal to automatic oil heating, equipped with limit control, mechanical draft, and thermostat—these three models may be equipped with blowers for Full-Forced Circulation. Three sizes of Full-Forced Winter Air Conditioning units complete with air filters, automatic humidifiers, blowers, economizers, mechanical draft, limit control, blower switch and thermostat. An upright Full-Forced Winter Air Conditioner for basement or utility room installation equipped with separate blower for draft and air, limit control, blower switch and thermostat. Heating drum 12 to 14 gauge—all cabinets insulated with one inch fibreglas. Mechanical draft only on high fire. Low fire operates on .02 inch draft.

Special oil service station models from 50,000 to 72,000 Btu at bonnet—efficiency obtainable 80 to 81.7 per cent cfm 550 to 850.

Specifications for MONOGRAM Oilfire Furnaces

Type of Furnace	Booster Gravity			Full-Forced Warm Air			Full-Forced Winter Air Conditioner			Upright
Model No.	75	100	200	76	103	203	125	150	250	102
Btu Rating at Bonnet	75,000	90,000	125,000	75,000	90,000	125,000	90,000	120,000	150,000	75,000
Per Cent Efficiency Obtainable	80	82	82	80	82	82	84	84	84	80
Air Delivery—cfm				400-700	800-1400	1000-1600	800-1400	800-1400	1000-1600	800-1400
Cabinet Floor Size—In.	26¼x25¼	30x30	36x36	26¼x52¼	30x56	36x66	26¼x49½	30x56½	36x68½	27x27
Cabinet Height—In.	50¼	60	60	50¼	60	60	50¼	60	60	71
Height With Bonnet	64½	74¼	74¼							
Max. Gal. Oil per Hr.	0.69	0.81	1.12	0.69	0.81	1.12	0.80	1.05	1.32	.69
Min. Gal. Oil per 24 Hr.	1.50	1.00	1.50	1.50	1.00	1.50	1.50	1.00	1.50	1.50

New MONOGRAM Patented Burner vaporizes oil quicker—more completely, then induces both primary and secondary air in proper relation to oil, producing the highest known operating efficiency. Double baffle heat unit made possible by shorter, wider flame, stops rush of heat out the flue, creates a lower heating zone which combined with the clean, perfect combustion produces unheard of operating efficiencies.

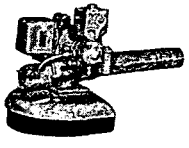
Williams Oil-O-Matic Heating Corporation

Manufacturers of Automatic and Manually Controlled Fuel Oil Burners, Year 'Round Air Conditioning Systems, Williams Ice-O-Matic Compressors

Bloomington, Illinois — WILLIAMS OIL-O-MATIC HEATING COOLING PRODUCTS — 2014 Graybar Building, New York, N. Y.

OIL BURNERS

Williams Oil-O-Matic Lo-Pressure oil burners are offered in 6 sizes ranging in capacity from ½ to 25 gallons of fuel oil per operating hour. Oil-O-Matic Lo-Pressure burners can be installed in any type or size heating plant within this range, or larger where multiple units are used.



Williams Oil-O-Matic Lo-Pressure oil burners feature exclusive patented Thrift Meter fuel control. This device actually measures oil drop by drop to fit the exact requirements of any heating plant.



Williams designed, precision-built Hi-Pressure burners were developed for those jobs where first cost is most important. Three sizes range from .65 to 7 gallons 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.

Heating Capacities of Oil-O-Matic Burners

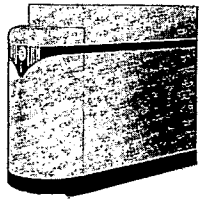
Model	Domestic Shipping Weight, Lb	Length, in.	Width, in.	Height, in.	HP	RPM	Gals. Fuel Oil per Operating Hour	
							Minimum	Maximum
K-150	126	29	15¼	19¾	1/10	1750	.50	1.50
K-3	180	30	15⅝	20¾	1/10	1750	1.00	3.00
K-4.5	190	33½	20¼	22¼	1/5	1750	1.35	4.50
K-7	200	26½	22¼	21¾	1/5	1750	4.00	7.00
J-1800	220	45	19½	23½	1/2	1800	8.00	15.00
JJ	295	50	32	24	1	1800	12.00	25.00
HP-1	90	20¼	14⅞	X	1/16	1725	.65	1.00
HP-3A	90	22¾	16½	X	1/12	1730	1.35	3.00
HP-7	150	26½	20	21¾	1/5	1750	3.50	7.00

X—Adjustable.

Standard draft pipe 11 in. 17-in. length draft pipe optional.

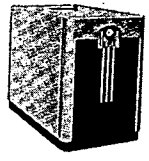
Standard electric current is 110-volt, 60-cycle.

WINTER AIR CONDITIONERS



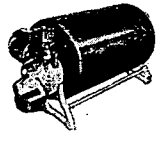
Williams Oil-O-Matic Winter Air Conditioners automatically clean, freshen, ventilate, humidify, heat and circulate air throughout the house. Electrically welded heat exchangers preclude possibility of air or gas leaks. Exclusive Anti-Pulsator eliminates starting vibration. Triple Thrift Lo-Pressure operation. Also available with Hi-Pressure burner. Built in 5 sizes to meet every heating load.

BOILER BURNER UNITS



Williams Oil-O-Matic oil-fired boilers are available in 3 models. The Lo-Boy (illustrated), in 3 sizes for steam, 3 for hot water; Residential Steel—4 sizes for steam, 4 sizes for hot water; and the Water Base—3 sizes for steam, 3 for hot water. Oil-O-Matic oil-fired boilers furnish low cost winter heating and economical year 'round domestic hot water. These complete units furnished with either Oil-O-Matic Lo-Pressure or Williams Hi-Pressure burners.

WATER HEATERS



Williams Oil-O-Matic horizontal type water heaters are compact, completely automatic, self-contained units. Lo-Pressure operation makes it possible to burn heavy domestic fuel oil for utmost economy. Unique Triple Flame Travel combustion chambers aids still further in economy. Where home is already heated with oil, fuel may be drawn from the same tank.

Water Heaters

WHA*	600	57	22½	28	1/10	1800	....	½
WHB†	885	75	23	28	1/10	1800	½	1
WHC‡	1385	90	29	34	1/10	1800	1	1¼

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