

Williams Oil-O-Matic Division

EUREKA WILLIAMS CORPORATION, BLOOMINGTON, ILLINOIS

Manufacturers of Auto-matic and Manually Controlled Fuel Oil Burners

WILLIAMS **OIL-O-MATIC** PRODUCTS

Manufacturers of Year Round Air Conditioning Systems, Ice-O-Matic Compressors

OIL BURNERS

Williams Oil-O-Matic Lo-Pressure burners are offered in 5 sizes ranging in capacity from ½ to 15 gallons of fuel oil per operating hour. Easily installed in any type heating plant. Patented Thrift Meter pre-meters oil to exactly meet heating plant needs. Wide, non-clogging orifice handles even the heaviest oils.

Williams Hi-Pressure precision-built burners are available for those who want high quality at minimum cost. 3 sizes with capacities 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, or for 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 data, see Oil-O-Matic Installation and Service Manual.

Oil-O-Matic Lo-Pressure Burners Leg or Flange Mt.

Model	Oil Capacity		Motor		Atom. Pressure
	Min.	Max.	Hp	Rpm	
K-150	.50	1.50	1/10	1800	2 lbs
K-3	1.00	3.00	1/10	1800	2 lbs
K-4.5	1.35	4.50	1/5	1800	2½ lbs
K-7	4.00	7.00	1/5	1800	3 lbs
J-1800	8.00	15.00	1/2	1800	4 lbs

Williams Hi-Pressure Burners Leg or Flange Mt.

Model	Oil Capacity		Hp	Rpm	Atom. Pressure
	Min.	Max.			
HP-1	.65	1.50	1/16	1725	100 lbs
HP-3A	1.35	3.00	1/12	1725	100 lbs
HP-7	3.50	7.00	1/5	1800	100 lbs

WINTER AIR CONDITIONERS

Williams Oil-O-Matic Winter Air Conditioners automatically draw in air, filter, heat and humidify it, and gently circulate the conditioned air to all rooms. 3 sizes fill all needs. Choice of Lo-Pressure or Hi-Pressure Burner.

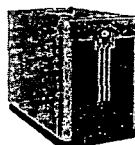
Ice-O-Matic Compressor Units: All temperature ranges. Capacities ¼ hp through 5 hp. Air or water cooled. Air-O-Matic Absorption Units: 10 and 15 ton nominal capacities. Low pressure steam, water-chilled type, hermetically sealed units.

Oil-O-Matic Winter Air Conditioners

Model	Btu at Bonnet	C.F.M. (a) ½" S.P.	Oil Input G.P.H.	Filters Sq In	Blower Motor
10	100,000	1300	1.00	1000	½ hp
15	150,000	1800	1.50	1920	¾ hp
25	250,000	2400	2.50	2400	¾ hp

BOILER BURNER UNITS

Williams Oil-O-Matic Boilers are available in 3 models: Lo-Boy (illus.) in 4 sizes for steam, 4 for hot water; Water Base in 3 sizes for steam, 3 for hot water; Residential Steel in 4 sizes for steam, 4 for hot water. All units furnished complete with either Lo-Pressure or Hi-Pressure burners.



Oil-O-Matic Cast Iron Boiler Burner Units

Model	Net Load Ratings I.B.R.			Gross I.B.R.	
	Steam Sq Ft	Water Sq Ft	Btu	Oil Input G.P.H.	Output Btu
LB-35 or 5W	360	580	86000	1.35	130000
LB-65 or 6W	450	720	108000	1.65	162000
LB-85 or 8W	620	990	149000	2.20	222000
LB-105 or 10W	780	1250	187000	2.75	278000

Oil-O-Matic Cast Iron Water Base Boiler Burner Units

Model	Net Load Ratings I.B.R.			Gross I.B.R.	
	Steam Sq Ft	Water Sq Ft	Btu	Oil Input G.P.H.	Output Btu
16S or 16W	290	460	69000	1.05	105000
20S or 20W	350	560	83000	1.25	126000
24S or 24W	410	660	98000	1.50	147000

Oil-O-Matic Steel Boiler Burner Units

Model	Net Load Ratings I.B.R.			Gross I.B.R.	
	Steam Sq Ft	Water Sq Ft	Btu	Oil Input G.P.H.	Output Btu
320S or 320W	320	510	76800	1.10	118000
400S or 400W	400	640	96000	1.40	146500
540S or 540W	540	860	129600	1.90	195000
680S or 680W	680	1090	163200	2.30	244000

WATER HEATERS

Oil-O-Matic Water Heaters compact, completely automatic, self-contained units. Lo-Pressure burner handles even heaviest oils for utmost economy.

Oil-O-Matic Water Heaters—Horizontal Type

Model	Storage Capacity	Heating Capacity Per Hr 90° Rise	Oil Input Per Hour		Atom. Pressure
			Min.	Max.	
W.H.A.	35 gal	60 gal	1/2 gal	1/2 gal	2 lbs
W.H.B.	35 gal	120 gal	1/2 gal	1.00 gal	2 lbs
W.H.C.	100 gal	210 gal	1.00 gal	1½ gal	2 lbs

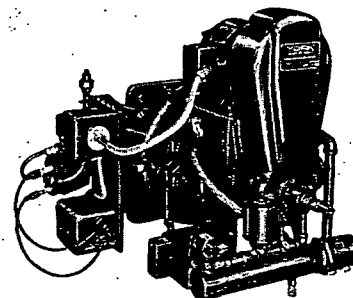


York-Shipley, Inc.

York, Pa.

YORK HEAT OIL-BURNING EQUIPMENT

INDUSTRIAL DIVISION



Model AHPBDM Pump-Type Burner for Bunker C oil, belt-driven, with fully-automatic and full-modulating firing control.

YORK HEAT INDUSTRIAL HORIZONTAL ROTARY TYPE OIL BURNERS

A range of sizes is available from 45 Boiler hp to 400 Boiler hp. These burners are built in both direct-drive and belt-driven motor applications. Models for using No. 5 and No. 6 oils are available for manual, semi-automatic, and full modulating control.

The basic frame sizes are listed as follows:

- A Frame— 45 hp to 60 hp
- B Frame— 60 hp to 125 hp
- C Frame— 125 hp to 225 hp
- D Frame— 225 hp to 400 hp

York Heat Horizontal Rotary Burners are equipped with many exclusive and patented advancements, designed to insure high efficiency and superior operation. Outstanding among these exclusive York Heat features are:

(a) The Iris Shutter, which gives absolute control of the burner air. It causes the metered volume of air to remain constant, insuring perfect combustion.

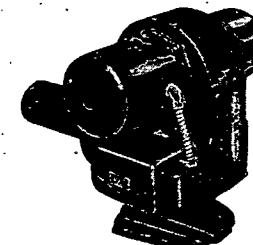
(b) The York Heat Flame Former, which makes possible accurate flame-adjustment, to suit the combustion chamber.

(c) The torch-type pressure igniter, for smoother and positive automatic starting.

DOMESTIC DIVISION

YORK HEAT SELF-CONTAINED BOILER-BURNER UNITS FOR FUEL OIL

A complete line of fully-automatic self-contained boiler-burner units is available, in capacities of 4 hp to 100 hp. These are constructed for both 15 lb and 100 lb steam operation. Larger sizes are equipped with an oil-burner for No. 5 or No. 6 fuel oil.



Model N-15 York Heat Domestic Oil Burner.

YORK HEAT DOMESTIC OIL-BURNERS

This complete line of pressure, atomizing-type burners carries the Underwriters' and Bureau of Standards approval for liquid fuels up to and including No. 3 fuel oil.

Models and capacities are listed as follows:

- C-5 0.7 to 2.25 gph of oil
- N-15 1½ to 4½ gph of oil
- N-25 3 to 5½ gph of oil
- N-35 5 to 10 gph of oil
- T-45 8 to 18 gph of oil
- T-55 16 to 30 gph of oil

YORK HEAT DOMESTIC HEATING UNITS

York Heat offers a complete line of domestic heating units, in a full range of capacities. These can be furnished for steam, hot water, and forced warm air applications.



York Heat Domestic Boiler-Burner Heating Unit.