

Combustion Equipment Division

TODD SHIPYARDS CORPORATION

81-16 45th Avenue, Elmhurst, Queens, N. Y.

NEW YORK, BROOKLYN, ROCHESTER,
CHARLESTON, S. C., CHICAGO, BOSTON,
WASHINGTON, DETROIT, GRAND
NEW ORLEANS, LOS ANGELES, SAN
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SPRINGFIELD, MASS., BALTIMORE,
RAPIDS, TAMPA, GALVESTON, MOBILE,
FRANCISCO, SEATTLE, MONTREAL,
BUENOS AIRES, LONDON.

THE TODD HEX-PRESS REGISTER in combination with the TODD "VEE-CEE" VARIABLE CAPACITY BURNER... makes possible increased combustion efficiency under almost any type of boiler of 100 hp. capacity or larger, operating at 50 lb. steam pressure or higher.

It provides equal efficiency under either forced or natural draft conditions. The Hex-Press Register assures the most intimate mixture of oil and air as well as quicker, more complete combustion...

with minimum draft loss at high capacity... effecting great economy in maintenance and materially reducing fuel costs.

Through the exclusive "variable range" feature of the "Vee-Cee" Burner, practically unlimited firing range is assured... without change of burner tips, oil delivery pressure or angle of spray.

Constant steam pressure can be maintained regardless of demand... changing load requirements are met instantly under manual or fully automatic control.

COMBINATION GAS AND OIL BURNERS

For Natural or Refinery Gas and/or Fuel Oil. Available in wide range of capacities. Quickly adjustable for the combustion of either fuel alone, or both in combination. Of special value where fluctuating comparative costs of these fuels call for equipment suited to change-over without time-consuming structural changes.

Maintenance and operation are reduced to a minimum by compactness and simplicity of design... accessibility of all

parts... rugged construction and positive overall efficiency.

Design features eliminate possibility of escaping gas due to structural distortion... prevent stratified combustion resulting from improper air distribution and high gas pressure.

Providing sufficient flexibility to care for varying loads, these units assure high furnace temperature and radiant heat transfer with low stack temperature... thorough mixture and optimum air-fuel ratio with utmost ease of adjustment.

ROTARY FUEL OIL BURNERS

For firing high or low pressure steam or hot water boilers of all types... in smaller factories and industrial plants, laundries, dryers and cleaners, office buildings, hotels, apartment houses. Also applicable to industrial ovens, kilns, etc., where furnace and general physical conditions permit.

Available with manual, semi-automatic or fully automatic control... in varying sizes and types... for burning light or heavy oil.

Horizontal atomizing cup is rotated by

direct-connected electric motor, assuring constant firing as long as motor is in operation. Motors are of extra large frame size, air-cooled and built to withstand long, hard service. Positive air-oil interlocking device automatically shuts off oil supply following any burner stoppage.

Of rugged construction... with all parts easily accessible for cleaning or renewing... these burners provide a flexible capacity range, with complete and efficient combustion under widely fluctuating loads.

TODD MANUFACTURES: Mechanical Pressure Atomizing Oil Burners—VEE-CEE Variable Capacity Burners—Horizontal Rotary Oil Burners—Oil Burning Air Registers for Natural, Assisted, Induced or Forced Draft—Inside Mixing Steam Atomizing Oil Burners—Combination Gas and Oil Burners—Furnace Doors and Interior Castings for Converting Howden Type Furnace Fronts to oil firing—Oil Burning Galley Ranges—Oil Heating, Pumping and Straining Equipment—Heated Air Generators.

All installations of Todd Equipment are always *individually engineered* to fulfill specific requirements. *Send for descriptive literature.*

Todd engineers are always available for consultation and analysis of combustion problems—without obligation.

Williams Oil-O-Matic Division

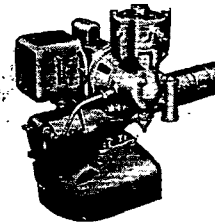
EUREKA WILLIAMS CORPORATION, BLOOMINGTON, ILLINOIS

WILLIAMS **OIL-O-MATIC** PRODUCTS

Manufacturers of Automatic and Manually Controlled Fuel Oil Burners

OIL BURNERS

Williams Oil-O-Matic Lo-Pressure burners are offered in 4 sizes ranging in capacity from 1/2 to 7 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 1.00 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.

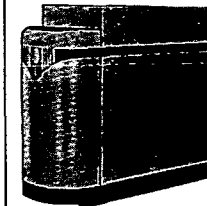
Oil-O-Matic Lo-Pressure Burners Leg or Flange Mt.

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	2 1/2 lbs
K-7	4.00	7.00	1/5	1800	3 lbs

Williams Hi-Pressure Burners Leg or Flange Mt.

Model	Oil Capacity	Motor	Atom. Pressure
HP-1	1.00	1/5	100 lbs
HP-3A	1.35	1/2	100 lbs
HP-7	3.50	1/2	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. 2 sizes fill all needs. Choice

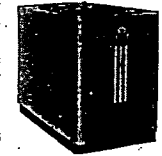
of Lo-Pressure or Hi-Pressure Burner.

Oil-O-Matic Winter Air Conditioners

Model	Btu at Bonnet	C.F.M. (a) 3/4" S.P.	Oil Input G.P.H.	Filters Sq In	Blower Motor
10	100,000	1300	1.00	1000	1/4 hp
15	150,000	1800	1.50	1920	1/4 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-5S or 5W	360	580	86000	1.35	130000
LB-6S or 6W	450	720	108000	1.65	162000
LB-8S or 8W	620	990	149000	2.20	222000
LB-10S or 10W	780	1250	187000	2.75	278000

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

Model	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	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