Petroleum Heat & Power Company

Makers of Oil Burners Since 1903

PETRO

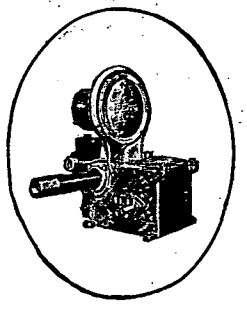
DOMESTIC AND INDUSTRIAL OIL BURNERS

Main Office—511 Fifth Avenue, New York, N. Y.
Factory—110 Davenport Street, Stamford, Conn.

Branch Offices at

Boston San Francisco Seattle Providence Los Angeles Portland, Ore.

National Sales and Service Organization



PetrO Burners are all of the mechanical atomizing type and are built in such a number of models and sizes as to cover the heating field from the smallest residence to the largest commercial or industrial heating plant. PetrO Burners are adaptable to any standard type of boiler or heater and can handle from a small heating load of 200 sq. ft. of steam radiation to 375 b.hp. with one burner.

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PetrO Domestic Burners are of the air turbine driven rotary cup type and are fully automatic and of the intermittent firing type. Standard Minneapolis-Honeywell controls are used throughout. PetrO Domestic Burners are designed to burn commercial fuel oils having a gravity of not less than 24 degrees Baumé and a viscosity of not more than 50 seconds Saybolt Universal at 100 deg. fahr. Ignition is accomplished by means of either an electric spark or by means of a gas-electric type of ignition.

The PetrO Burner is designed and built to operate with a minimum of mechanical and combustion sound. It consists essentially of a centrifugal fan constructed with a shrouded aluminum runner, completely balanced and housed in a cast aluminum fan case. Mounted on the fan case and direct connected to the fan runner is an electric motor. Also driven from the motor shaft either through reduction gearing or by direct connection is a rotary gear oil pump. This assembly is mounted on a base built of grey cast iron in which is built a float chamber. Inserted through the base directly under the fan outlet is the burner gun, the forward end of which terminates in the air register which is installed flush with the boiler ashpit opening. The gun comprises the atomizing

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cup which rotates in ball bearings, oil connection from float chamber to atomizing cup, lubricating device for ball bearings and air connection for conveying air from fan through the cup turbine and past vanes for mixing the air with the atomized oil in the combustion chamber.

Oil is drawn from the storage tank by the pump through a brass suction line and delivered into the float chamber where a constant level of oil is maintained. The pressure of the fan is communicated to the float chamber and acts to lift the oil to the atomizing cup. The air is delivered past the turbine blades of the cup for atomizing the oil and finally into the combustion chamber for supporting combustion.

The standard installation includes a thermostat for controlling building temperature, a combustion safety control and a boiler or furnace control for limiting temperature or pressure conditions at the boiler or furnace.

Service hot water may be heated from the main heating boiler through standard indirect heaters during both summer and winter.

PETRO Domestic Oil Burners are manufactured in the following models and capacities:

Burner Model	Gallons of Oil per Hour	Maximum Square Feet Steam Radiation	Maximum Square Feet Water Radiation	Boiler H. P.	Motor H. P.
LD-00	¾ to 1½	625	995	....	⅛
LD-0	½ to 2½	1,025	1,650	....	⅛
LD-1	2½ to 5	2,075	3,325	....	1/6
LD-2	5 to 10	4,150	6,650	....	⅓
LD-3	10 to 20	8,300	13,275	65	½
*LD-4	20 to 42	17,425	27,900	140	1

*Gas-electric Ignition only.

The PETRO Domestic Oil Burner is:

Listed as Standard by The Underwriters' Laboratories, Inc.
Approved by the Board of Standards and Appeals, New York City, New York.
Approved by The Commonwealth of Massachusetts, Department of Public Safety.
Approved by State of Connecticut, Department of State Police.
Approved by the Investigating Committee of Architects and Engineers.