

Ray Burner Co.

Since 1872

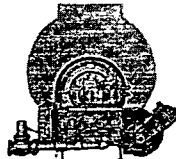
1301 San Jose Avenue
San Francisco 12, Calif.



Atlantic Seaboard Division
629 Grove Street
Jersey City 2, N. J.

There is a RAY Burner for every Heating Purpose.

RAY FORCED DRAFT PACKAGED BURNER



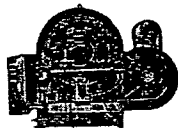
Scotch Marine
application

A factory assembled unit readily applied to any type of boiler designed for forced draft operation. Fully automatic operation on oil, gas or combination gas-oil.

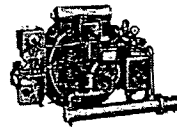
The combination gas-oil unit includes a rotary oil burner, integrated ring type gas burner, secondary air control with a forced draft fan, windbox, refractory support ring, completely wired control cabinet and pre-piping completely factory assembled for quick and easy installation to the boiler.

Oil components may be selected to burn any grade of oil with the secondary air control providing increased efficiency even with the difficult-to-burn catalytic residual #6 fuel oils. Sizes 3-5 to 10. From 90 to 750 developed output horsepower.

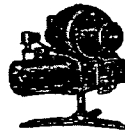
RAY COMBINATION OIL-GAS BURNERS



Type for water tube
boilers



ARC-144 Model 50 for
heavy oil and Low Pres-
sure Gas



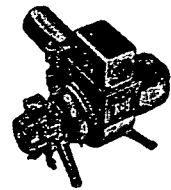
Type PC for #2 oil or
lighter and Low Pressure
Gas

ARC-MODEL 50. Consists of a rotary type oil burner of Ray conventional design coupled with a gas housing for low pressure gas, from 2 in. WC to 10 in. WC. The gas burner parts provide for the introduction of gas in a manner which fully utilizes the energy in the high pressure air supplied by the rotary burner fan. Gas and primary air are intimately combined, in two stages, before mixing with the secondary air which is introduced through a vane annular opening concentric with the nozzle. Change-over requires less than one minute. Available to burn any grade of oil in 9 sizes with capacities to 31,500,000 Btu/hr.

TYPE PC. Fully automatic combination gas-oil burner of the pressure atomizing type. Available in three sizes with capacities from 140,000 to 2,500,000 Btu/hr. New ignition system eliminates conventional gas pilot substituting U. L. approved system igniting main gas flame from momentary oil firing cycle. This constitutes a pre-purge of oil nozzle minimizing coking during extended gas firing seasons. Gas pilot available where local codes require. High speed 3450 rpm models available for forced draft operation.

RAY DOMESTIC AND MARINE BURNERS

RAY PRESSURE ATOMIZING OIL BURNERS. Fully automatic for #2 oil or lighter. 4 sizes with capacities from 1 to 18 gph. All types have intermittent or constant electric ignition, a-c or d-c. Stack switch control is standard, electronic flame safe-guard controls optional. High speed 3450 rpm models available for forced draft operation.



Fully Automatic, Type
JP, #2 or lighter oil



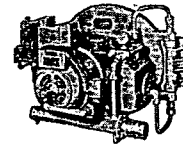
Steam Turbine Drive,
Type TG, all grades oil.
Tested and approved for
U. S. Navy Service.

Ray Burner Co.

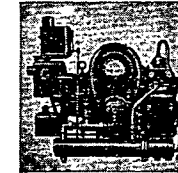
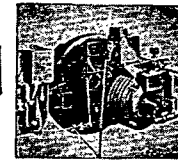
Distributors in
All Principal Cities of the World

Consult your local
Telephone Directory
A complete line of gas, oil and combination gas-oil burners for domestic, commercial, industrial and marine applications.

RAY HORIZONTAL ROTARY OIL BURNERS



Type AR-144 Size 10 for Fully Automatic Type
No. 6 oil. Available in AR-134, for No. 5 oil.
10 sizes from 8 to 210 gph.
Fully automatic.



Type BR-144, Belt Drive,
Fully Automatic, Avail-
able in 8 sizes. Capacities
from 8 to 110 gph.



Type ARJP, Fully Au-
tomatic for heavy oil
where gas for ignition not
available.

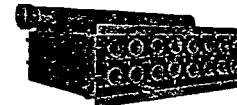
Built in fully automatic, semi-automatic and manual types; in sizes from 1 to 1000 Boiler hp; to burn all grades of fuel oil.

Standard models include both direct and belt drives—the latter being recommended for use where other than 50 or 60 cycles a-c, or only d-c is available. Types for diesel electric or gas electric ignition; pump or gravity feeds. Direct drive types include a steam turbine driven model.

Most fully automatic types for heavy oil incorporate the Ray Dual Pump and Reservoir, with the Ray VISCOSITY Valve, a patented, exclusive feature which automatically meters the correct amount of fuel at all times, regardless of changes in viscosity of the oil due to temperature variations. All larger sizes employ dual ignition system, consisting of dual high-voltage transformers, dual electric ignitors and dual gas valves. Fully automatic sizes 9 and 10 include as standard equipment electronic pilot and flame failure control.

RAY INSHOT GAS BURNERS

Multi-jet atmospheric type gas burners with high flexibility in nozzle number, arrangement and capacity, permitting high input ratings in limited space. For commercial and industrial application with natural or induced draft. Available in 36 different jet arrangements with capacities from 99 to 7512 chf.



Size 8, 1G-89.

RAY BURNER HOURLY CAPACITY RATINGS

Burner Size	Motor H. P.	Oil Capacity U. S. Gallons		Equivalent Boiler HP		Equivalent Lbs. Steam Generated*		Heat Capacity Input Thous. Btu Oil or 1000 Btu Gas		Equivalent Sq. Ft Steam Radiation	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
JP	1/4	1	3	3	9	110	325	140	420	440	1300
0-P	1/4	1	4	3	12	110	430	140	560	440	1750
1-P	1/4	3	8	9	25	325	860	420	1120	1300	3500
2-P	1/4	8	18	25	55	860	1950	1120	2500	3500	7900
0	1/4	2	5	7	16	230	580	300	750	938	2340
1	1/4	4	11	13	35	460	1270	600	1650	1830	5160
2	1/4	5	15	17	50	580	1740	750	2250	2340	7030
3	1/4	8	25	27	83	930	2900	1200	3750	3750	11720
5	1	10	35	33	116	1160	4050	1500	5250	4690	16400
6	1 1/2	12	50	40	165	1400	5800	1800	7500	5620	23500
7	2	15	70	50	230	1740	8100	2250	10500	7030	32800
8	3	25	110	83	365	2900	12700	3750	16500	11700	51500
9	5	35	150	116	500	4050	17400	5250	22500	16400	70500
10	7 1/2	50	210	165	700	5800	24400	7500	31500	23400	98300
12	7 1/2	75	320	250	1000	8700	37000	11250	48000	35100	149800

NOTE: These ratings are predicated upon specific conditions of draft and furnace volume. It may be permissible, under desirable conditions, to operate at higher rates, or advisable under restricted conditions, to operate at reduced rates. Heating capacities are based upon 150,000 Btu per gal of oil for rotary burners and 140,000 Btu per gal of oil for pressure atomizing burners and upon an overall boiler efficiency of 75 percent.

* Steam capacity based on steam F and A 212 F.