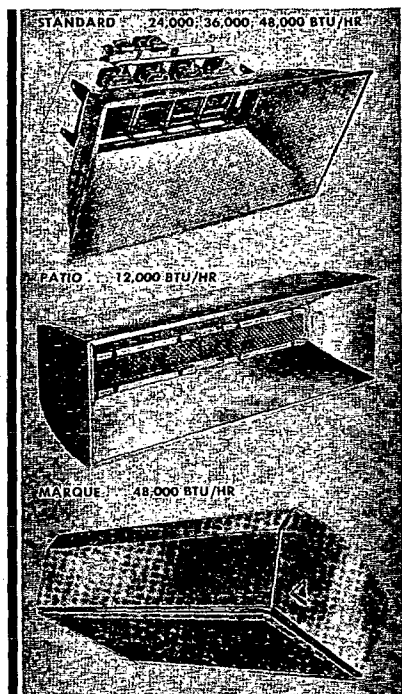


PERFECTION 1135 Ivanhoe Rd., Cleveland 10, Ohio
division of Hupp Corporation / licensee of American Infra-Red Radiant Co.



PERFECTION SCHWANK GAS INFRA-RED HEATERS

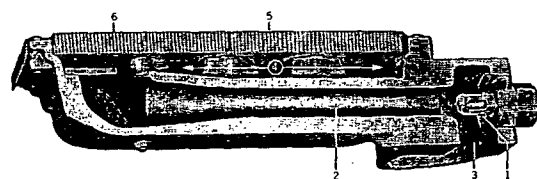
fired by natural, L.P., mixed or manufactured gas
**FOR COMFORT HEATING, CONDENSATION
PREVENTION AND PROCESSING**

STANDARD UNITS—For comfort heating in industrial buildings. Ideal for ceiling and side wall mountings from 12 ft. to 50 ft. high. These infra-red units prevent condensation and corrosion in the warehousing of metals. Since moisture has an affinity for infra-red, these units are ideal for all types of process operations such as drying and curing.

PATIO UNITS—Specifically designed for heating patios, swimming pool areas, loading docks, grandstands, outdoor restaurants and other areas that are semi-protected.

THE MARQUE—Designed for heating marquee-covered areas like station platforms, shopping centers, drive-in banks, theater fronts. Prevents snow accumulation. Weatherproofed with architectural gray porcelain enamel finish.

WARM THE MAN AND THE JOB—FIRST!
Perfection Schwank Gas Infra-Red Heaters produce energy rays which, like the rays of the sun, are transformed into heat only when they strike objects. This characteristic allows the user to economically heat equipment, floors, fixtures, people—before heating the surrounding air.



OPERATING PRINCIPLES

Gas is metered through an orifice (1) at the opening of the mixing tube or venturi (2). The gas and air are mixed in the venturi and evenly distributed to the chamber (4). The mixture is burned at the outside surface of the ceramic mat (5) where temperature reaches 1600 degrees F. After a few minutes operation, the small flame at each of the holes (6) in the ceramic becomes practically invisible.

ADVANTAGES

- Fuel costs are greatly reduced
- Electrical power is negligible
- Average installation can be written off in 4 to 5 years
- Maintenance at an absolute minimum—no moving parts
- Heat without air movement
- Installations approved by major insurance companies
- Close to 100% utilization of heat energy

- Only A.G.A., C.G.A., C.S.A. and Underwriters approved industrial units on the market today (at an efficient generator temperature of 1600 degrees F.)
- Over 35,000 satisfied users
- Backed by Perfection's 70 years of gas combustion and control experience
- Perfection engineers all installations based on heat loss method

PIONEERS IN GAS INFRA-RED HEATERS



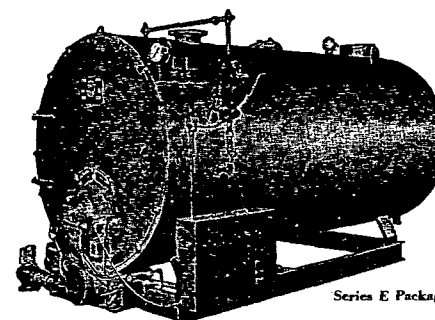
RAY OIL BURNER COMPANY

1301 SAN JOSE AVENUE, SAN FRANCISCO 12, CALIF.

Manufacturers and Combustion Engineers Since 1872
Distributors in all principal cities

Plants in:
San Francisco, Calif.
Lancaster, Pa.
Toronto, Canada
Neu-Isenburg, Germany

BOILERS



Series E Packaged Boiler

Ray packaged boilers provide the ultimate in compact 3-pass and 2-pass boiler design. Models are available for both high and low pressure operation, for steam or hot water. Capacities range from 20 to 600 hp to fire natural gas, all grades of fuel oil or combination gas-oil. VISCOMATIC controlled air atomized firing on sizes 20 to 600 horsepower with exclusive viscosity control system and dual pump and reservoir assures constant fuel delivery regard-

less of fluctuations in oil temperature or viscosity. Wide turn down ratio provides equal efficiency at all firing rates. Enclosed control cabinet contains complete operating and programming type flame safeguard controls and circuit breakers. Units are factory assembled and test fired leaving only service connections to be made at the job site. Husky Series packaged boilers to fire light oil, gas or combination gas-oil available in sizes 20 to 150 HP.

BURNERS

(Oil, Gas and Combination for Domestic, Commercial, Industrial and Marine Uses)

Horizontal Rotary-Direct Drive. Automatic, semi-automatic or manual. Models to fire any grade fuel oil, gas or combination gas-oil. 11 sizes with max. capacities 5 to 320 GPH.	Horizontal Rotary-Belt Drive. Automatic, semi-automatic or manual. Models to fire any grade fuel oil, gas or combination gas-oil. 5 sizes with max. capacities 5 to 150 GPH.	Forced Draft Packaged Burner. Automatic for oil grades fuel oil, gas or combination. Factory piped, wired and tested. 9 sizes with max. capacities 40 to 150 output hp.	Pressure Atomizing Burner. Automatic for light oil or light oil and gas. Flange or pedestal mounting. Electronic controls. 100% air through burner. 5 sizes. Max. capacities 3 to 45 GPH.
Type IC, Inlet Gas Burner. Multi-jet atmosphere type gas burners. Great flexibility. High input ratings. 36 jet arrangements with capacities from 99 to 7512 cfh.	Power Pressure Gas Burner. Automatic for natural gas. Electronic control. 100% air through burner. Excellent flame stability. 4 sizes. Max. capacities 1000 to 6500 cfh.	High Pressure Gas Burner. Multi-jet for high pressure natural or manufactured gas. No power needed for mixture of air and gas. 10 sizes. Capacities to 42,000 cfh.	Steam Turbine Driven Horizontal Rotary Burner. Fires any grade of fuel oil. Operated by high pressure steam. 5 sizes with maximum capacities of 25 to 320 GPH.