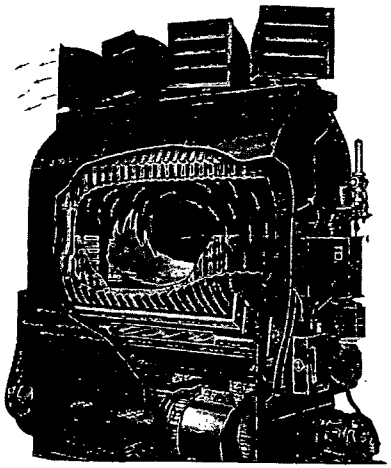
DRAVO CORPORATION

HEATER DEPARTMENT

300 Penn Avenue, PITTSBURGH 22, PA.

Sales Offices in Principal Cities



Cut away view showing combustion chamber principles as applied to gas, oil, or combination gas and oil burning units. Note corrugated combustion chamber with fins and deflectors welded thereto for maximum heat transfer efficiency. Economizer tubes utilize part of the heat of the flue gases. Heated air is discharged at top, return air taken in at floor level, a practice that concentrates heated air at working levels.

Savings of critical materials and fuel, plus lower costs for maintenance and operation are factors influencing favorable acceptance of Dravo Heaters.

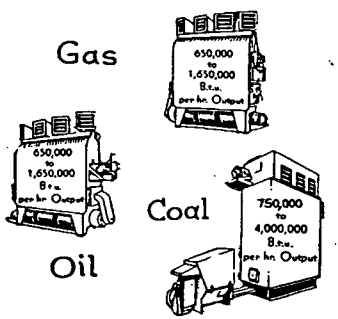
War conditions demand speed of installation and curtailment in the use of critical materials. Dravo Heaters are shipped with refractory and firewall in place, are installed by simply connecting to fuel and power supply, and their construction represents a saving in critical metals of 30 to 40 per cent over conventional steam plants with distributing systems.

Each heater is a self-contained unit, operated individually. A heating system for any size structure may be formed with a combination of one or more heaters. Dravo Direct-Fired Heating Systems save man-hours, money, transportation — all essential to the war effort.

Dravo Direct-Fired Heaters are used for permanent installation and also often used to supply temporary heat in new construction or plant expansion.

The exceptionally high heat transfer efficiency is the result of two fundamental design features—first, accurately controlled combustion of fuel and air, and second, highly effective transfer of heat to air. Standard stock sizes are obtainable with hourly Btu outputs as shown in drawings below. Dravo Bulletin No. 505 with detailed description mailed on request.

Specification Data Sheets for any type or capacity are furnished on request.



GAS . . . Floor Set . . . Top Discharge . . . Rear Fired . . . Standard V-Belt Drive—Wide variety of applications using either natural or manufactured gas.

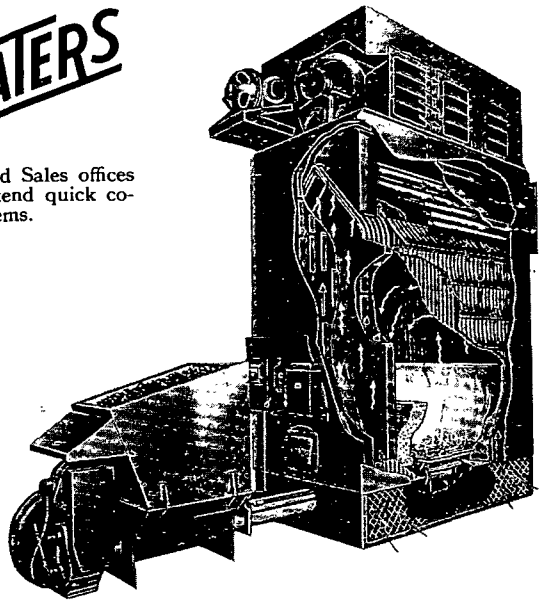
OIL . . . Floor Set . . . Top Discharge . . . Front Fired Standard V-Belt Drive—Economical fuel consumption obtainable in models for light oil or heavy oil.

GAS-OIL COMBINATION . . . Separate burner and controls for each fuel.

COAL . . . Equipped with either hopper or bin feed stoker—750,000 to 4,000,000 Btu convertible to gas or oil.

DRAVO DIRECT FIRED HEATERS

There are 47 Branch and Sales offices strategetically located to extend quick cooperation on heating problems.



Right. Hopper feed model, capacities 750,000 to 4,000,000 Btu output per hour. Also available for bin-feed, Anthracite or Bituminous coal.

COAL FIRED SERIES —the Dravo coal-fired, self-contained Heater is particularly adaptable in areas where coal is the cheapest or easiest fuel to obtain. Coal fired heaters may be converted to either gas or oil firing should conditions change. The entire series of Dravo Direct-Fired Heaters has the utmost flexibility. Enough applications, combinations and adaptations are available to meet any set of reasonable conditions. The same unique principle of corrugated, welded combustion chamber, with its multiplicity of welded fins and deflectors, is employed. The entire series has the DRAVO non-clinkering air-cooled setting incorporated in the design. Available for either bituminous or anthracite coal; equipped with either hopper feed or bin-feed stoker, installed under either end of the heater. Capacities: 750,000 to 4,000,000 Btu per hour output.

There are two models of Dravo Direct-Fired Coal Heaters specially designed for large unit applications which can be used as central heating plants. Overhead or underground duct systems may be installed when necessary. These large models are available in ratings from 4½ to 10 million Btu output per hour.

Specification Data Sheets for any type or capacity are furnished on request.

CENTRAL HEATING SYSTEMS

. . . Dravo Heaters of any type can be set and used in series to perform as a central heating system to meet most demanding conditions.

Non-metallic ducts are used to convey warm air to all points desired. The advantages over a central steam plant and distributing system are; saving considerable amounts of critical materials, economy of fuel consumption, lower first cost, and lower operating costs. When not needed for heat, they can be used as a ventilating system, either for the removal of fume conditions or supply of fresh air to increase work production in summer time.

A Typical Case Pictured at Right.

Problem—To provide 32,000,000 Btu.
Solution—2 Dravo direct fired Heaters set tandem for each of several buildings. Temperatures maintained satisfactorily.

