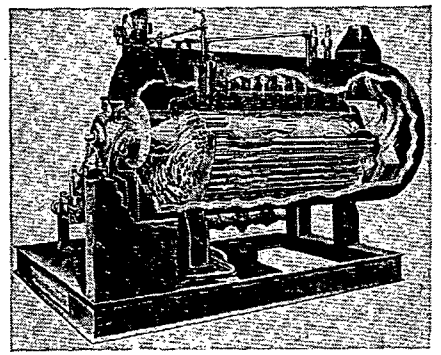
Orr & Sembower, Inc.

Established 1885

Morgantown Road, Reading, Pa.

Powermaster® PACKAGED AUTOMATIC BOILERS



Powermaster boilers are modern, compact, self-contained, completely automatic units with an outstanding record for highly dependable and efficient performance. Standard sizes range from 15 hp to 500 hp for steam generation to 250 psi and for hot water to 30 psi. *Powermasters* are designed and built to *ASME* Boiler Code requirements, approved by *Underwriters' Laboratories, Inc.* and fully guaranteed by Orr & Sembower, Inc. All units are thoroughly factory tested under fire and supplied with a complete test report. As delivered, *Powermasters* are fully equipped and completely wired for quick installation and operation. Thousands of *Powermasters* are now serving industrial plants, dairies, hospitals, laundries, schools, institutions, and public buildings all over the U. S. and in many other countries.

Low-Cost, Compact Installation—No foundation or costly breeching and stack are required. All necessary fittings supplied for readily completing fuel, water, electric, steam and vent connections.

Fuel Economy—Guaranteed 83 per cent minimum efficiency with No. 6 oil. Efficiency actually increases at less than full load. Automatic control prevents fuel waste with fluctuating steam load.

Clean, Quiet Operation—Complete, efficient combustion at all loads assures smokeless operation. Piped-in fuels and leak-tight construction aid cleanliness.

Completely Automatic Operation—Full complement of finest up-to-date operating and safety controls provides maximum operating dependability and protection with least possible attention from operator.

Maintenance-Saving Accessibility—Water and fire sides completely accessible for easy cleaning and inspection without disturbing burner or accessories.

Three-Pass Gas Travel—Successive parallel passes maintain most efficient flue gas velocity, provide maximum maintenance convenience, and eliminate complex front end baffling.

Staggered Tubes—Freedom from ineffectual boiler water eddies assures quicker heating, faster steaming, and high quality dry steam. Scrubbing action of rising water prevents corrosive gas deposits on tube surfaces.

Forced Draft—Provides more accurate control of combustion air supply; permits use of smaller lower-cost fan and motor; requires less fan maintenance—no hot products of combustion pass through fan.

Modulating Combustion Control—Insures proper fuel-air mixture for most efficient firing at all loads. Instantly responds to load swings from 20 per cent to 100 per cent of firing capacity, assuring constant steam pressure and temperature.

VORIFLOW Burners—Air-atomizing oil burner and pre-mix gas burner, designed and built by O & S, provide complete, clean combustion over full firing range. Simple, sturdy construction and absence of moving parts minimize maintenance. Combination burner permits quick change from one fuel to another.

KEWANEE-ROSS CORPORATION

Division of American Radiator & Standard Sanitary Corporation

KEWANEE, ILLINOIS

SBI MEMBER

Branches in Principal Cities

Consult local telephone book for telephone numbers.

APPLETON, WISCONSIN
ATLANTA, GEORGIA
BALTIMORE, MARYLAND
BIRMINGHAM, ALABAMA
BOSTON, MASSACHUSETTS
BUTTE, MONTANA
CHATTANOOGA, TENNESSEE
CHICAGO, ILLINOIS
CINCINNATI, OHIO
CLEVELAND, OHIO
COLUMBUS, OHIO
DALLAS, TEXAS
DENVER, COLORADO
DES MOINES, IOWA
DETROIT, MICHIGAN
EL PASO, TEXAS
ERIE, PENNSYLVANIA
GRAND RAPIDS, MICHIGAN
GREEN BAY, WISCONSIN
GREENSBORO, NORTH CAROLINA
GREENVILLE, SOUTH CAROLINA
HOUSTON, TEXAS
INDIANAPOLIS, INDIANA
KANSAS CITY, MISSOURI
KEWANEE, ILLINOIS
LOS ANGELES, CALIFORNIA
LOUISVILLE, KENTUCKY
CAPE ELIZABETH, MAINE
MEMPHIS, TENNESSEE
MILWAUKEE, WISCONSIN
MINNEAPOLIS, MINNESOTA
NEW HAVEN, CONNECTICUT
NEW ORLEANS, LOUISIANA
NEW YORK, NEW YORK
OKLAHOMA CITY, OKLAHOMA
OMAHA, NEBRASKA
PHILADELPHIA, PENNSYLVANIA
PITTSBURGH, PENNSYLVANIA
PORTLAND, OREGON
RICHMOND, VIRGINIA
ROANOKE, VIRGINIA
SAGINAW, MICHIGAN
ST. LOUIS, MISSOURI
SALT LAKE CITY, UTAH
SAN ANTONIO, TEXAS
SAN FRANCISCO, CALIFORNIA
SCHENECTADY, NEW YORK
SEATTLE, WASHINGTON
SPOKANE, WASHINGTON
TAMPA, FLORIDA
TOLEDO, OHIO
TULSA, OKLAHOMA
WASHINGTON, D. C.
WICHITA, KANSAS
WILKES-BARRE, PENNSYLVANIA

KEWANEE PRESENTS A PRINCIPLE OF RATING TO AID ENGINEERS IN SIZING BOILERS

KEWANEE Reserve plus RATING guarantees dependability—high efficiency—low cost—long boiler life because it means operating at nominal capacity.

Engineers everywhere know that operating a boiler continuously at maximum capacity lowers efficiency, increases operating and maintenance costs, shortens boiler life and is conducive to expensive breakdown.

The proper sizing of a boiler for a specific job is all important. The Kewanee Reserve Plus Rating Plan presents a safe way of judging boilers for proper sizing.

Here are the principles of the Kewanee Reserve Plus Plan:

1. Compare like examples when judging boilers. Know whether ratings are based on maximum capacity or nominal capacity.

2. Nominal rated boilers with built-in reserve safely provide for fluctuating loads — emergencies — expansion — permit "cruising speed" operation.

3. Kewanee Reserve Plus Rating certifies 50 per cent or more extra power for pick-up and additional capacity. This means the boiler can be operated at "cruising speed" for greater efficiency, low maintenance, dependability and longer boiler life.

4. Kewanee Reserve Plus Rating is based on the approved code of the *Steel Boiler Institute*.