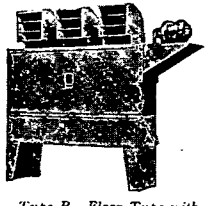
DUNHAM TYPE OTS HEATING ELEMENT



An extended surface heating element made entirely of steel. Light in weight, and has unusual heating capacity. Each element is made up of 1¼ in. steel pipe with No. 22 gage heavy fins mechanically attached, eliminating the use of a solder bond without sacrifice of heat transfer. Each fin, when pressed on the pipe, interlocks with the preceding fin—forming an exceedingly tight and permanent mechanical joint. The complete unit is painted with heat-resisting zinc chromate black enamel. Lengths from 18 in. up to 144 in. can be supplied in 6 in. increments. Standard units are threaded at each end with standard pipe threads.

DUNHAM UNIT HEATERS



Type R—Floor Type with mixing damper also furnished with elongated nozzles

Types C and R are essentially industrial type units designed for heating large spaces. Type C, discharging large volumes of heated air downward to working levels, distributes heat evenly over large areas.

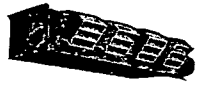
Type R is available in various types of mounting as shown. All units have belt driven centrifugal type fans using constant speed 1750 rpm motors. Complete heating element and complete fan and shaft assembly can be removed through either end of casing. Heating element is replaceable copper tube type.



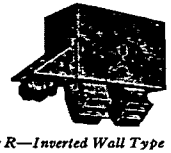
Type V—Horizontal propeller fan type. Built in various sizes from 65 up to 1500 sq ft EDR.



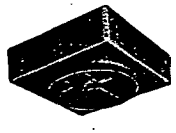
Type R—Wall Type



Type R—Ceiling Type



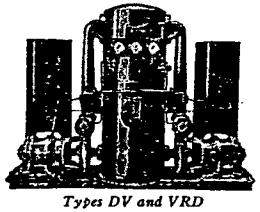
Type R—Inverted Wall Type



Type C—Built in various sizes up to 2000 sq ft EDR.

DUNHAM PUMPS

Tested and Rated with A.S.H.V.E. Code and Code of Vacuum Return Line Heating Pump Manufacturers' Section of Hydraulic Institute.

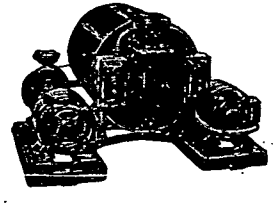


Types DV and VRD

Vacuum Pumps

Types DV and DVD—Capable of maintaining whole systems under vacuums as high as 25 in. Built in 9 sizes. Capacities 2500 to 65,000 sq ft EDR.

Types VR and VRD—Meets all code tests for air and simultaneous air and water handling capacities. No moving parts or close clearances in exhauster unit. Built in 9 sizes. Capacities 2500 to 65,000 sq ft EDR.



Condensation Pumps

Pump and motor assembled on rigid cast iron base. Bronze fitted centrifugal pump has non-corrosive shaft. Enclosed type Impeller. Liberal size ball bearings.

Type CH-Model B, Single and Duplex—Capacities 2000 to 50,000 sq ft EDR; 60 cycle d.c. or a.c. 1750 rpm; 25 or 50 cycle a.c., 1450 rpm.

Type CHH-Model B, Single and Duplex—Capacities same as type CH. Discharge pressures 20 lb for pumps 15,000 sq ft and larger; 20, 30, 40, 50 and 70 lb discharge in all sizes. 60 cycle d.c. or a.c. 3450 rpm; 25 or 50 cycle a.c., 2850 rpm.

GRINNELL COMPANY INC.

Heating, Industrial and Power Plant Piping, Fittings, Hangers, Valves, Pipe Bending, Welding, Piping Supplies, Etc.

Executive Offices: **Providence 1, R. I.**

National Distributors of Thermoflex Traps and Heating Specialties

For data on other Grinnell Products, see pages 981, 1112, 1113

Thermoflex Specialties

The heart of all Thermoflex Traps is the Hydron Bellows.

The Hydron Bellows is formed under hydraulic pressure. This powerful internal pressure locates any weakness of any nature in the tubing. Such hydraulic pressure is many times more severe than any pressure the Trap will ever be called upon to control. Every Thermoflex Trap, therefore, is practically indestructible.

Thermoflex Traps have an exceptionally large orifice. This large orifice combined with high lift, insures fast action and freedom from clogging.

We supply Thermoflex Traps guaranteed for steam pressures of 25 lb, to 50 lb and to 125 lb. Complete information and details of typical installations will be gladly sent on your request.

Thermoflex Low Pressure Line

The Thermoflex line of low pressure specialties offers a wide selection of sizes, types and capacities designed for working steam pressures up to 25 lbs.

All of the specialty items which are regular components of Vacuum, Vapor, and Vented Return heating systems, are available in postwar models, including

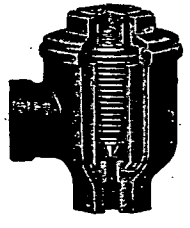
Thermostatic Traps
Modulating Packless Radiator Valves
Float and Thermostatic Traps
Vapor system Return Traps and Vents

Construction and finish are of the highest quality throughout.

Thermoflex Medium Pressure Traps

Thermostatic type traps, and Combination Float and Thermostatic type traps are furnished for working steam pressures in the range from 25 to 50 lbs.

Thermoflex High Pressure Traps



The No. 100A Thermoflex Trap is guaranteed for steam pressures from 50-125 lb. Must not be used where the steam temperature exceeds 400 F.

For use with all types of process work, Laundry Machinery, Kitchen Equipment, Hospital Sterilizers, Vulcanizers, Dry Kilns, Unit Heaters, Street Steam Service, etc., in fact any place that a trap is desired for service at the above pressures.

Small, compact and inexpensive.

Extra heavy body. Renewable nickel steel seat and disc. Bellows made from special bronze tubing and encased in brass sleeve to prevent distortion due to pressure.

Regularly furnished without unions.

Thermoflex Streamlined Strainers



Pipe line strainers of the self-cleaning Y-type are furnished for pressures up to 250 lbs, and in sizes ⅜ in. to 2 in. These are heavy duty strainers with semi-steel body and brass screen, which are suited to a wide field of use in removing harmful substances from pipe lines carrying steam, air and fluids.