

## INTERNATIONAL HEATING & VENTILATING EXPOSITION THE AIR CONDITIONING EXPOSITION

Permanent Address—480 Lexington Ave., New York 17, N. Y.

### EXPOSITIONS HELD

Chicago, 1953; Philadelphia, 1951; Chicago, 1949; New York, 1948; Cleveland, 1947-1940; New York, 1938; Chicago, 1936; New York, 1934; Cleveland, 1932; Philadelphia, 1930.

### FUTURE SCHEDULE

The 12th Exposition is scheduled for Commercial Museum & Convention Hall, Philadelphia, Pa., January 24 to 28, 1955.

### UNDER AUSPICES OF A.S.H.V.E.

These Expositions have been and will be held co-incident with the annual meetings of The American Society of Heating and Ventilating Engineers and under their auspices. Management is by International Exposition Company with permanent headquarters at 480 Lexington Ave., New York 17, N. Y.

### EXHIBITORS

Comprise leading firms in each phase of the industry; number has varied from 150 to more than 400 exhibitors.

### EXHIBITS

These range from and comprise all the types of articles discussed or advertised in this copy of THE A.S.H.V.E. GUIDE.

1. **The COMBUSTION Group:** Furnaces, burners (coal, oil and gas), grates, stokers, boilers, radiators (various types), refractories and auxiliaries.

2. **The OIL BURNER Group:**

3. **The HYDRAULIC Group:** Water feeders, water heaters, pumps, traps, valves, piping, fittings, expansion joints, pipe hangers, etc.

4. **The STEAM HEATING Group:** Vapor heating, steam specialties.

5. **The HOT WATER HEATING Group:**

6. **The AIR Group:** Warm Air furnaces and stoves, registers and grilles, cooling towers, air filters, motors, fans, blowers, conditioning equipment, ventilators (room and industrial types), unit heaters, etc.

7. **The AIR CONDITIONING Group:** Equipment which circulates and filters the air, in summer dehumidifies and cools; in winter heats and humidifies, and does all these in proper season for complete, all year-round air conditioning.

### 8. The CONTROL Group:

Instruments of precision for indicating, controlling or recording temperature, pressure, volume, time, flow, draft or any other function to be measured.

### 9. The REFRIGERATING Group:

Compressors, condensers, cooling apparatus, contingent apparatus and refrigerants.

### 10. The CENTRAL HEATING Group:

Apparatus and materials especially designed or adapted to the uses of central heating and central heating station supplies.

### 11. The INSULATING Group:

Structural insulators (refractory and cellulose materials), asbestos, magnesia clays and combinations thereof, pipe and conduit covering, etc., weather-stripping, etc.

### 12. The MISCELLANEOUS Group:

Electric Heaters, boiler and pipe repair alloys, liquids and compounds, tools of all kinds, and equipment not specifically included in the above groups, but related thereto.

### 13. The MACHINERY AND GENERAL EQUIPMENT Group.

### 14. BOOKS AND PUBLICATIONS.

### VISITOR ATTENDANCE

Attendance is by invitation and registration only, thereby presenting a selected audience. Included are contractors, dealers, jobbers, supply houses, home owners, industrial users, professional and service organizations, public utilities, real estate management concerns, etc. A detailed analysis of registered attendance is available on request.

Industrial Expositions in America lead the expositions of the world in style, business effectiveness, industrial influence and educational value. This Exposition stands among the leaders in Industrial Expositions in America. It is an educational institution which brings together the research developments and improvements in equipment and materials for use in heating, ventilating and air conditioning all types of buildings.

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Heating Systems • Hot Water Service

## Aerco Corporation

214 Lafayette Place, P.O. Box 428  
Englewood, N. J.

A Compact Storage Water Heater with Internal Compensator (to anticipate and control heat transfer rate) having instant recovery of outlet temperature after peak demands, which:

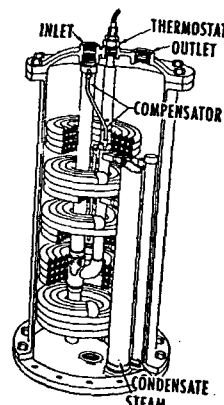


Figure 1—Sectional drawing of Aerco Compact Storage Water Heater.

- Anticipates changes in required steam flow before the actual heat transfer takes place.
- Meters the steam flow accurately in direct proportion with load.
- Prevents surges in steam flow, eliminating need for large storage.
- Maintains ACCURATE control of outlet water temperature.
- Prevents OVERRIDE of outlet temperature on sudden interruption of water flow.

For uniformly varying loads (i.e. Hospital General Water Supply), because of the ability of the above heater to prevent surges of steam input, it eliminates the need for large storage.

For non-uniformly varying loads or periodic high peak flows and low average demands (i.e. Small Commercial Laundry), the AERCO COMPACT STORAGE WATER HEATER with an Accumulator and Recirculating Pump (as shown in Figure 2) gives a low cost combination which also permits:

- Minimum storage volume for peak demands.
- Minimum steam input for required load.
- Accurate controlled outlet water temperature under all load conditions.

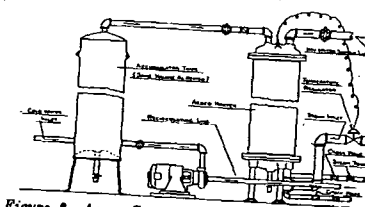


Figure 2—Aerco Compact Storage Water Heater in combination with Accumulator and Recirculating Pump.

### CONSTRUCTION

Shell fabricated to ASME Code Standards, of Flanged Quality Steel with plastic or copper lining. Shell ends Cast-iron or Bronze. Internal parts of Copper or Brass. Tested for 125 psig operating pressure. Capacities, 5 to 438 gpm.

### OPERATION

Cold water enters top, flows down through the Compensator, then up across steam coils to discharge at top. Steam feeds into coils through Steam Riser and leaves through Condensate Return.

Compensator anticipates and controls heat transfer rate by sensing changes in flow or incoming temperature before water passes over the heating coils. It accomplishes this by causing variations of temperature to occur at the Regulator bulb which are definitely related to changes in flow and incoming temperature as well as the final temperature.

Ask for Bulletin #22 for complete capacity data and sizes.

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