Worthington Pump and Machinery Corporation

WORTHINGTON — **Carbondale Division** — **CARBONDALE**

General Offices: HARRISON, NEW JERSEY

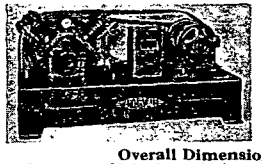
Atlanta	Cincinnati	Detroit	Los Angeles	Pittsburgh	Seattle
Boston	Cleveland	El Paso	New Orleans	St. Louis	Tulsa
Buffalo	Dallas	Houston	New York	St. Paul	
Chicago	Denver	Kansas City	Philadelphia	San Francisco	Washington

Representatives in Principal Cities of Foreign Countries CAO-1

REFRIGERATION SYSTEMS FOR AIR CONDITIONING IN COMFORT COOLING OR INDUSTRIAL PROCESS

Complete refrigerating systems for use with "Freon-12," Methyl Chloride, Ammonia, or Carbon Dioxide, either direct-expansion or water cooling applications. A complete line of refrigeration compressors, permitting impartial recommendations. A nation-wide organization of Distributors in major cities to provide sales and engineering service and plan complete air conditioning systems of the central or unit type. Architects, Engineers, and Contractors are invited to consult with us. Write to Harrison, N. J., or any branch office, for bulletins on these products.

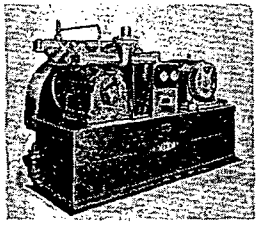
Small Self-contained Units



"Freon-12" or methyl chloride condensing units; motors up to 25 hp; ratings up to 25 tons.

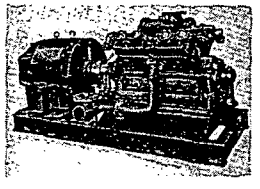
Overall Dimensions
Smallest: 22 in. long, 16 in. wide, 17 in. high
Largest: 98 in. long, 40 in. wide, 41 in. high

Medium Self-contained Units



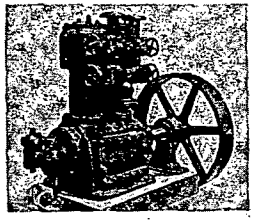
"Freon-12" or methyl chloride units, equipped with capacity control; patented Feather Valves; motors of 30, 40 and 50 hp.

Large Self-contained Units



"Freon-12" refrigeration units utilizing the new, modern eight-cylinder V-type compressor built into a compact unit. V-belt or direct motor drive. Variable capacity control. Motors of 75, 100, and 125 hp.

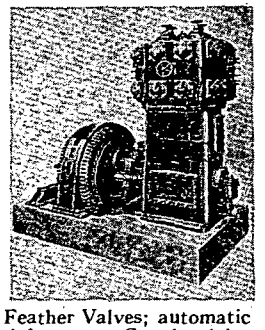
Vertical Ammonia Compressors



Pressure-lubricated; roller main bearings; safety heads; patented Feather Valves; belt drive, or direct-connected to electric motor, Diesel or gas engine; ratings from 2 to 160 tons in one unit.

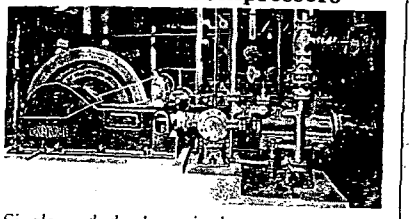
Overall Dimensions (Without Motor)
Smallest: 2 ft 3 in. long, 2 ft ½ in. wide, 3 ft 3¼ in. high
Largest: 6 ft 7½ in. long, 5 ft wide, 7 ft 7½ in. high

Vertical Duplex Double-acting Compressors



"Freon-12" or ammonia; large tonnage compressors; force-feed lubrication; roller main bearings. Crankcase sealed from cylinders, preventing contamination of oil by refrigerant. Equipped with patented Feather Valves; automatic capacity control features. Crosshead incorporated in enclosed crankcase. Capacities up to 400 tons.

Horizontal Ammonia Compressors



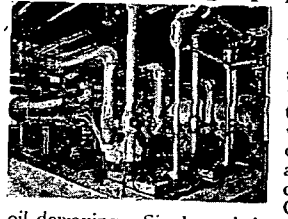
Single and duplex; single-stage and two-stage; belt drive, or direct-connected to electric motor, Diesel, gas or steam engine; patented Feather Valves; ratings from 60 to 750 tons. Automatic capacity control features are easily applied. Space requirements vary depending upon type and drive.

Carbon Dioxide Compressors



A series of convenient types and sizes for every requirement is available.

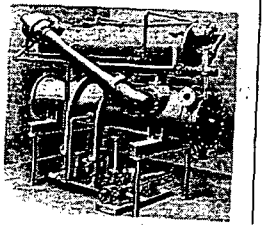
Liquid Cooling Equipment



Various designs of horizontal single and multi-pass types, for a wide range of services; also vertical types. Chillers for oil dewaxing. Single and double-pipe for milk, wort, chemicals, etc. Cold liquid circulating systems.

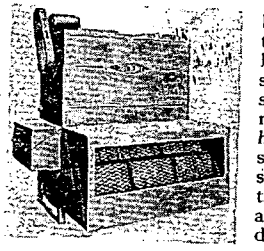
Steam Jet Water Cooling Systems

15 to 600 tons. Either surface or barometric condenser may be furnished.



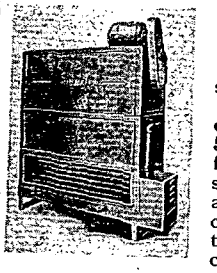
Air Conditioning Units

For Direct Expansion or Water Circulation



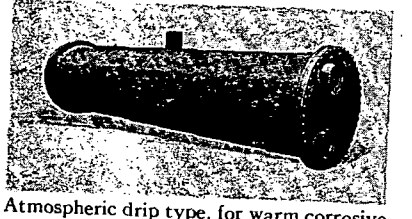
Vertical and horizontal; 500 to 15,000 cfm; large air passages; slow speed, quiet rugged fans; heavy welded steel frames; separable sections; readily accessible. The design permits a wide degree of flexibility in installation arrangements.

Shower Condensers



A combined condenser, receiver, and modified cooling tower, in one assembly, for "Freon-12" or methyl chloride systems; 5 to 50 tons refrigeration; built in separable sections; all parts easily accessible. Saves 90 to 95 per cent in cost of water.

Horizontal Condensers



Atmospheric drip type, for warm corrosive waters. Double-pipe for closed systems, can be retubed without shutting down. Multi-pass for closed systems and space saving.

Vertical Condensers

The Carbondale "Spira-Flo" possesses the advantages of both the atmospheric and double pipe types. Usable with any kind of water. Compact; installed indoors, outdoors, or on the roof. Easily cleaned.

Miscellaneous

High and low side equipment for every purpose.