Replaced REGISTER, APRIL, 1973

Chapter Ind 45

MECHANICAL REFRIGERATION

History: Chapter Ind 45 as it existed on March 31, 1963 was repealed and a new chapter Ind 45 was created effective April 1, 1963.

Ind 45.01 Scope; purpose; application. (1) The application of this code is intended to insure the safe design, construction, installation, operation, and inspection of every refrigerating system employing a fluid which is vaporized and is normally liquefied in its refrigerating cycle, when employed under the occupancy classifications listed in Wis. Adm. Code section Ind 45.03. The provisions of this code are not intended to apply to the use of water or air as a refrigerant nor to refrigerating systems installed on railroad cars, motor vehicles, motor drawn vehicles or on shipboard.

(2) This code is intended to provide reasonable safeguards to life, limb, health, and property; to correct certain practices which are inconsistent with safety; and to prescribe standards of safety which will properly influence future progress and developments in refrigerating systems. Equipment listed by an approved, nationally recognized testing laboratory, as defined in Wis. Adm. Code section Ind 45.02 is deemed to meet the design, manufacture, and factory test requirements of this code or equivalent, for the refrigerant or refrigerants for which such equipment is designed.

(3) The provisions of this code shall apply to refrigerating systems installed subsequent to its adoption and to parts replaced or added to systems installed prior or subsequent to its adoption. In cases of practical difficulty or unnecessary hardship, the commission may grant exceptions from the literal requirements of this code or permit the use of other devices or methods, but only when it is clearly evident that equivalent protection is thereby secured.

History: Cr. Register, March, 1963, No. 87, eff. 4-1-63.

Ind 45.02 Definitions. (1) ABSORBER *(adsorber)* is that part of the low side of an absorption system used for absorbing (adsorbing) vapor refrigerant.

(2) ABSORPTION SYSTEM. See *Refrigeration system (43) (a).*

(3) APPROVED means acceptable to the Wisconsin industrial commission.

(4) An APPROVED NATIONALLY RECOGNIZED TESTING LABORATORY is one acceptable to the Wisconsin industrial commission that provides uniform testing and examination procedures under established standards, is properly organized, equipped, and qualified for testing, and has a follow-up inspection service of the current production of the listed products.

(5) BRAZED JOINT, for the purpose of this code, is a gas-tight joint obtained by the joining of metal parts with alloys which melt at temperatures higher than 1,000 F. but less than the melting temperatures of the joined parts.

(6) BRINE is any liquid, used for the transmission of heat without a change in its state, having no flash point or a flash point above 150 F.

(7) CHECK VALVE is a valve that permits a fluid flow in only one direction.

(8) COMPANION or BLOCK VALVES are pairs of mating stop valves, valving off sections of systems and arranged so that these sections may be joined before opening these valves or separated after closing them.

(9) COMPRESSOR is a specific machine, with or without accessories, for compressing a given refrigerant vapor.

(10) COMPRESSOR UNIT is a condensing unit less the condenser and liquid receiver.

(11) CONDENSER is a vessel or arrangement of pipe or tubing in which vaporized refrigerant is liquefied by the removal of heat.

(12) CONDENSING UNIT is a specific refrigerating machine combination for a given refrigerant, consisting of one or more power-driven compressors, condensers, liquid receivers (when required), and the regularly furnished accessories.

(13) CONTAINER is a vessel for the transportation of refrigerant.

(14) DESIGN WORKING PRESSURE is the maximum allowable working pressure for which a specific part of a system is designed.

(15) DUCT is a tube or conduit used for conveying or encasing purposes as specifically defined below:

(a) *Air duct* is a tube or conduit used for conveying air. (The air passages of self-contained systems are not to be construed as air ducts.)

(b) *Pipe duct* is a tube or conduit used for encasing pipe.

(c) *Wire duct* is a tube or conduit used for encasing either moving or stationary wire, rope, etc.