

CONFOREMPRESARIAL LATINOAMÉRICA

The 22 Basic Concepts for Beginners in Transport Refrigeration

- 1) In transport refrigeration, you can work with refrigerants other than R134A. Substances associated with the commercial and industrial refrigeration sector, such as 404A, are also used.
- 2) In transport refrigeration, the maintenance culture must change. In other words, faults must always be detected before their effect, because the economic losses can be very considerable.
- 3) The best-known brands of transport refrigeration equipment are: Thermo king and Carrier Transicold.
- 4) Refrigeration equipment can have the refrigeration system compressor directly coupled to the transport motor.
- 5) The refrigeration equipment, can have the independent compressor to the transport motor.
- 6) There are refrigeration equipment, capable of working with an electric power source, while the transport motor is stopped.
- 7) Hybrid transport refrigeration systems exist, with a comfortable exchange between diesel and electric operating modes.
- 8) The E-200 refrigeration units are fully electric, and powered by an inverter from the company Thermo King.
- 9) Transport refrigeration unit compressors can have two pistons with an unloader system to regulate the capacity.
- 10) It can be counted in several models, with spiral type compressors.
- 11) The tendency of the manufacturers is to improve the reliability of the equipment, with the decrease of the mechanical parts.
- 12) The trends of the designers of refrigerated units, the elimination of unnecessary mechanical parts, and the increase of electronic and electrical components.
- 13) Electronic sensors allow proper control of the thermal load, and also bring the thermal load closer to the ideal storage conditions.
- 14) Transport refrigeration equipment is NOT used to achieve the ideal conditions of the load, but rather to preserve the entry conditions of the product, that is, the product must be previously refrigerated.
- 15) The transport refrigeration unit should not replace the task of the refrigerated warehouse.
- 16) Transport refrigeration equipment can be multi-temperature, this is achieved with the division of the refrigerated room, and the selection of the appropriate unit.
- 17) Multi-temperature equipment has several evaporators and expansion valves, all connected to the same compressor.
- 18) The conditions of the load inside the refrigerated transport unit can be monitored through the mobile.
- 19) Transport refrigeration equipment can be work in heating mode
- 20) Transport refrigeration units may have a hot gas by-pass defrost system.
- 21) Transport refrigeration units may have a defrost system for heating resistors.
- 22) The evaporator defrost process must be fast and efficient, to avoid damage to the refrigerated load.

