

# Course Content 2 days

(preliminary)

## Introduction

- Basic refrigeration technology
- Why carbon dioxide is a superior refrigerant
- Impact of various refrigeration technologies on the environment and why environmental issues are possibly our biggest challenge
- Performance and Coefficient of Performance (COP) measurement
- Comparisons with other refrigerants
- Introduction to the technology behind CO<sub>2</sub> systems

## Practical operation with CO<sub>2</sub> as a refrigerant

- Handling of gas, cylinders, couplings, hoses, etc.
- Draining and filling the system
- Safety aspects and safety equipment
- Pressure testing

## Commissioning and adjustment of CO<sub>2</sub> systems

- Refrigerators and freezers

- How the control system works and the benefits of using the full range of control system features
- Commissioning report
- Checklists

## The Pressure Equipment Directive and general rules for using CO<sub>2</sub> as a refrigerant

- Introduction
- Equipment
- Exercises

## CO<sub>2</sub> systems

- Refrigerators and freezers
- How the control system works and the benefits of using the full range of control system features

## Knowledge of materials and brazing technology for CO<sub>2</sub> systems

- Main components and their properties

## Course Details

### Duration

4 days

### Location

Aeres Tech, Zandlaan 29  
Ede, Holland

*Närmaste flygplats är Schiphol, Amsterdam*

### Starting point

The importance of understanding CO<sub>2</sub> refrigeration technology and the essential role of the consultant/engineer in contacts with end users and contractors.

### Focus

Awareness of the role of the consultant/engineer as the linchpin between end users and contractors/suppliers of materials etc.

### Motto

Learning by doing, learn things today – do things tomorrow, in your own professional situation.

### Approach

1. Explanation of the subject by the instructor.
2. Discussion and exchange of knowledge and experiences between participants and instructor.
3. Personal approach – present and wanted/desired.
4. The participants practise the new behaviour
5. Personal action plan for each practised subject.

### Size of the group

7-12 participants

**co<sub>2</sub>Academy**