

# REFRIGERATION APPRECIATION

A 2 day introductory course into the world of refrigeration/air-conditioning designed for personnel new to the industry. The objective is to give a basic understanding of refrigeration principles, refrigerants and their environmental impact, and an appreciation of the range of systems and the various components of the simple circuit.

## ***Syllabus includes:***

### **Basic Principles**

- Definitions
- Heat transfer
- The simple circuit and the state of the refrigerant throughout the circuit

### **Refrigerants**

- Development of refrigerants
- Health hazards
- Alternative refrigerants.

### **Environmental Impact**

- Ozone depletion and Global warming
- Montreal Protocol – Kyoto Protocol
- EU F-Gas & ODS Regulations (2079)

### **System Components**

- Types of condensers, evaporators, compressors and expansion valves
- Other system components

### **Systems**

- Evaporator systems; Flooded & Dry expansion
- Compound compression systems
- Use of Intercoolers
- Cascade systems