## Cool Concerns Training | Consultancy | Technical Support

## Cool Concerns News R744 Specialist Condensing Unit Course Extended!

Here at Cool Concerns we are extending our CUBO<sub>2</sub> Smart R744 training to incorporate the new LT CUBO<sub>2</sub> Smart two stage condensing unit. Our existing sub critical cascade rig (below left) is to be decommissioned to make way for the new transcritical condensing unit (below right). We have provided R744 training since 2008 and installed the original rig in 2011. It



has been used to train over 1,000 engineers. The new LT transcritical system should be up and running by June to complement the already operational HT system - this has already attracted over 60 trainees interested in installing the equipment in small retail and coldroom installations.



When the UK industry started using R744 in retail applications there was a range of systems – pumped secondary, cascade, transcritical, booster and a mix of two or three different types. That has now settled down primarily to transcritical for HT and transcritical booster for LT, hence our new systems reflect that development.

We provide two one day R744 training sessions:

- C14, R744 CUBO2 Smart Specialist Training for D & W and HRP;
- C15, R744 Introduction and Safe Handling (this replaces the BRA two day RAC Industry Short Course).

The course are run at our training centre a few minutes from junction 8 of the M5. We provide joining information with directions, start time and a list of local hotels.

Our training is developed and delivered by the working directors Jane Gartshore and Stephen Benton. We are engineers and have a wide and varied range of practical and theoretical experience within the refrigeration and air conditioning industry. We provide training which is up to date, informative and fun with the emphasis on practical 'hands on' mixed with high quality presentations and supported by relevant documentation and notes. All our training is designed to use trainees' time as efficiently as possible to minimise expensive down time. We draw on our wide range of experience to prepare and deliver industry leading training sessions. We limit numbers on each session to ensure an effective trainer to trainee ratio.

### Details of our R744 courses are included on the following pages.

Email info@coolconcerns.co.uk or call 01684 290333 for more information.



# C14, R744 CUBO<sub>2</sub> Smart Condensing Unit Specialist Training

This one day course is for installers and maintainers of the SCM CUBO<sub>2</sub> Smart range of condensing units and associated equipment supplied by Dean & Wood & HRP. It is also suitable for anyone who needs to know more about small R744 transcritical systems.

The following theory and practical topics are included:

- Basics of R744 including hazards and safe handling;
- Explanation of transcritical operation;
- Key installation and service tool differences;
- Overview of the SCM CUBO<sub>2</sub> Smart condensing unit range;
- Explanation of SCM operation and Carel control;
- Key installation differences including K65 pipework and pressure testing;
- Pre-commissioning and set-up including electronic control overview;
- Processing, charging and running the system;
- Service & maintenance.

The course is a mix of theory, practical, discussion sessions and "toolbox talks" with the emphasis on active participation. Numbers on the course are usually limited to eight. Trainees are provided with high quality course notes.



### Cost

The course cost is £325 per person excluding VAT. The cost includes course notes, lunch and certification. If you are a Beijer Ref customer you will receive a discount if you book with your Dean & Wood or HRP branch.











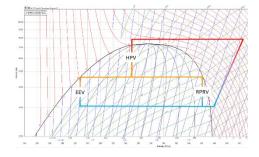
## C15, R744: Introduction and Safe Handling

This one day course covers the basics of carbon dioxide (CO<sub>2</sub>, R744) as a refrigerant and explains how it should be safely handled. It is aimed at experienced service engineers.

The following theory and practical topics are included:

- Basics of refrigerant R744;
- Explanation of critical point, trans critical operation and other key definitions;
- Hazards associated with R744;
- How to handle R744 safely;
- Installation, service and maintenance procedures for R744 systems;
- Explanation of transcritical booster systems (packs and condensing units) with an overview of other R744 systems if needed;
- Examples of CO<sub>2</sub> systems;
- Piping and components;
- Practical and theory assessments.

The course is a mix of theory, videos, hands on practical, discussion sessions and "toolbox talks" with the emphasis on active participation. Numbers on the course are usually limited to eight. Trainees are provided with high quality course notes. The course can be tailored to suit individual RAC sectors, businesses and equipment types.



### Cost

Each course is £325 per person excluding VAT. The cost includes course notes, lunch and certification.

