

R717 System Optimisation, Energy Efficiency & Trouble Shooting 20th & 21st September 2016 – Tewkesbury GL20 6BY

Cool Concerns in association with Cool Partners offers this two day course which covers the fundamentals of energy efficient R717 systems. It is suitable for refrigeration engineers who need a better understanding of the factors which commonly effect R717 system optimisation and gives insight into advance trouble shooting. The first day is also a useful overview for end users and specifiers of R717 equipment.

The following topics are included but we are very happy to modify content to suit your requirements:

Day 1

- What is using the energy in an industrial refrigeration system.
- How to reduce the energy consumption and what is COP (Coefficient of Performance).
- What does 1°C higher suction pressure and 1°C lower condensing pressure mean for power consumption and COP?
- Air in the refrigeration system - what are the symptoms and what does it mean.
- Correct piping around the condensers and receiver.
- Condenser size and what is good enough.
- Water in ammonia systems - where is it and what does it mean.
- Oil in ammonia refrigeration systems what does it mean for the running conditions.

Day 2

- Valves and pressure losses in suction lines what does it mean.
- Hot gas defrost how do we do it energy efficiently.
- Closing times for hot gas operated solenoid valves, why and what to be aware of.
- What is liquid hammer, why it is so dangerous and what it can do to valves, pipes and assemblies?
- How do you control the evaporators to energy optimize the system.
- Can the systems be divided into different and more effective temperature levels.
- When are Screw compressors most efficient and when are reciprocating compressors.
- Heat recovery by using a de-superheater, water cooled oil coolers and water cooled condensers - what is possible and where to be careful.
- Ammonia heat pumps on ammonia refrigeration systems, how can it be done.

Cost

The cost of this two day course is £495 plus VAT. This includes comprehensive course notes, refreshments and lunches.

Trainer

The training is carried out by Per Nielsen – a highly experienced ammonia refrigeration engineer. He has decades of industrial experience in contracting and has worked for Danfoss, Sabroe and with the Danish Technology Institute and Danish Maintenance Society providing training in Denmark. He has provided similar training all over the world including Vietnam and Mexico for industrial refrigeration engineers. He has significant expertise in system operation, optimisation, energy efficiency and trouble shooting.

He has worked with a large dairy food processor in Denmark to provide savings of up to 60 % energy on their installations and can provide a unique approach to system operation and improvements.

Contact Cool Concerns for more information: info@coolconcerns.co.uk