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Training | Consultancy | Technical Support

Cool Stuff

Cool Stuff from Cool Concerns provides practical information for refrigeration engineers about a wide range of topics.

Reference	Topic	Outline
CS1	Connect then Purge	How to avoid contaminating a system with air (or other contaminants) when connecting gauge line to a system
CS2	How to Use Your Comparator	A comparator gives the pressure temperature relationship at saturation conditions for common refrigerants and is useful for setting up systems and diagnosing faults. This guide shows you how to use it
CS3	Pressure Testing for Strength and Leak Tightness	Why systems are pressure tested, and how to safely pressure test using nitrogen. How to calculate the test pressures in accordance with EN378
CS4	Effective Evacuation	Evacuation of systems to remove contamination prior to charging with refrigerant
CS5	Setting TEV Superheat	How to measure and adjust the superheat setting on thermostatic expansion valves. The correct superheat makes sure the performance of the evaporator is as good as possible whilst ensuring liquid refrigerant cannot return to the compressor and cause damage
CS6	HP Switch Setting	How you decide what the high pressure (HP) switch setting should be. How you check and adjust HP switches
CS7	LP Switch Setting	How you decide what the low pressure (LP) switch setting should be. How you check and adjust the LP switch
CS8	Subcooling	What subcooling is, why it is important to the performance of a system and how to measure it
CS9	Recovery Cylinders	Recovery cylinders used for refrigerant removed from a system during service or decommissioning
CS10	Recovery of Hydrocarbon Refrigerants	Key points you should follow to ensure you recover hydrocarbon (HC) refrigerant safely
CS11	Schrader Torque Tool	Why it is important to use a torque tool when tightening Schrader valves
CS12	Replacement Certificates	How to obtain replacement City and Guilds certificates
CS13	Revised F Gas Regulation	The key changes in the revised Fluorinated Gas regulation
CS14	Safe Isolation	How to safely isolate electrical equipment prior to working (working dead)
CS15		
CS16		

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CS17	Gas laws and pressure testing	How to apply ideal gas laws to pressure testing with OFN
CS18	Temperature glide for design engineers	An explanation of temperature glide and the implications of glide when selecting compressors, evaporators and condensers
CS19	Temperature glide for service engineers	An explanation of temperature glide, how to set superheat and measure subcooling, liquid charging and differential leakage
CS20	Basic Science for Refrigeration Engineers	An explanation of the rules which are the basis of how refrigeration works
CS21	PS Maximum Allowable Pressure	An explanation of PS and calculating system test pressures
CS22	Control Definitions	A list of common control definitions with basic explanations
CS23	Pressure Equipment Directive (PED)	General overview of the PED / PER
CS24	A2L Refrigerants and the Pressure Equipment Directive (PED)	The implications of using an A2L refrigerant on the PED category of a system
CS25	R32 and the PED	The implications of using A2L R32 in split air conditioning / heat pump systems on the PED category of a system