

Refrigerants at the ACR Show

Literally the life blood of all mechanical air conditioning and refrigeration systems, refrigerants were promoted from a number of stands at the ACR Show and were the focus for several technology seminars.

Low GWP refrigerants – today and tomorrow

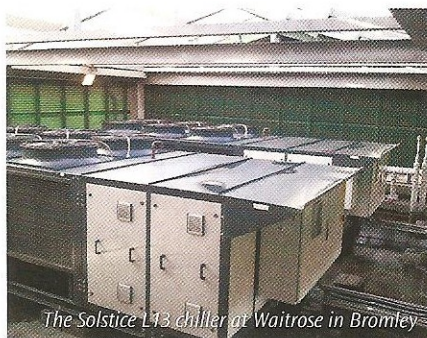
With the conclusions coming soon from the review of the F Gas Regulation, all UK supermarkets are continuing to look for low GWP refrigerants to replace R134a and its blends. A well-publicised field trial undertaken at ASDA's Hunt Cross store compared Honeywell's Genetron Performax LT refrigerant with popular refrigerants R404A and R407A. The trial concluded that Genetron Performax LT delivered up to 15% savings in energy bills, up to 40% reduction in system CO₂ emissions and up to 10% improvement in system running costs.

Nacer Achaichia, Technical Manager at Honeywell Fluorine Products stressed the importance of delivering a low GWP refrigerants within a range of hfc products. "Industry should be free to choose the best refrigerant for each application," he said. "There is no such thing as a natural refrigerant, all refrigerants are man-made. What is important is its impact on the environment, which means GWP and energy efficiency."

Reducing GWP even further are the so-called 4th generation, HFO-based refrigerants. These were designed primarily to find a substitute for R134a in the automotive industry, with HFO 1234yf likely to be widely used. However, HFO 1234ze – marketed by Honeywell as Solstice L13 – is soon to be produced in commercial quantities and has already been used very successfully in a chiller on field trial at a Waitrose store in London.

"HFO 1234ze is available today," confirmed Nacer Achaichia. "But capacity is being increased to make commercial quantities available from 2013 onwards."

Editor's opinion Genetron Performax LT is obviously a great alternative to higher GWP refrigerants but I believe the demand for HFO's and HFO blends could grow significantly. Those production facilities need to come on line soon otherwise customers may be disappointed.



The Solstice L13 chiller at Waitrose in Bromley

A-Gas promotes low GWP refrigerants

A-Gas is a preferred supplier of Honeywell's Genetron Performax LT refrigerant. This is part of A-Gas's extensive portfolio which also includes a CO₂ filling station and dedicated cylinder fleet, along with hydrocarbon (HC) refrigerants.

In addition, A-Gas' unique refrigerant separation technology enables the re-processing of much larger quantities of used refrigerants and boosts supplies of reclaimed refrigerants. This technology allows A-Gas to reclaim gases even from a cocktail of returned refrigerants.

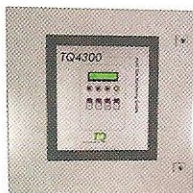
Editor's opinion

The ability to separate and re-use mixed up hfc blends is a great trick and should be used much more rather than to incinerate reclaimed gases.



Leak detection from TQ

TQ Environmental plc is based in Wakefield, West Yorkshire, and manufactures a wide range of single and multi-point leak detection systems.



Top of the range, the TQ4300 Refrigerant System is a compact, low cost solution to multipoint, multi gas leak detection, specifically designed for dual gas applications. With proven reliability and minimal maintenance, the TQ4300 is designed for both industrial and commercial use. It is suitable for all refrigerant monitoring, carbon dioxide, hfc's or both. Ammonia detection is also available.

Editor's opinion Manual and automatic leak detection are still mandated within the F Gas Regulation. The onus is on the end-user to ensure systems do not leak.

IDS Refrigeration now trading as Climalife

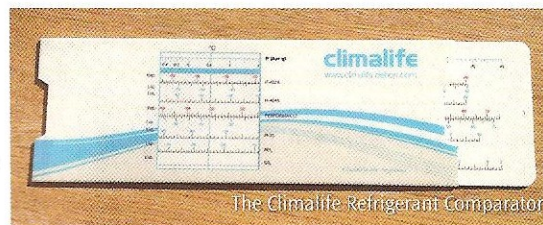
As of 1st January 2012, IDS Refrigeration has changed its logo to Climalife. IDS Refrigeration has remained as the legal entity but as part of the Dehon group strategy, all Climalife subsidiaries throughout the world will promote their products and services under the trademark of Climalife.

Allan Harper, Managing Director of Climalife UK said: "Whilst we will still offer the same quality service, a common visual identity, product specification sheets and labelling will be of benefit to our customers as well as access to the latest technical information and legislation updates."

As well as stocking the Honeywell's Genetron Performax LT refrigerant, Climalife UK stocks the Isceon direct replacement range of refrigerants from DuPont.

At the show, Climalife launched the new Climalife Refrigerant Comparator, suitable for all of the most commonly used refrigerants currently available. This pressure/temperature relationship comparator enables temperatures to be checked at saturation, including liquid and vapour states for non-azeotropic fluids and in relation to the pressure taken in an installation.

Editor's opinion There are plenty of well documented case studies to show that an Isceon direct replacement for R22 is much cheaper and easier to carry out than a full system replacement.



The Climalife Refrigerant Comparator