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Welcome to the June/July edition of ACR Journal.

It's remarkable to think we're already halfway through 2025. The first half of the year has flown by, and it's been fantastic to see the HVACR industry so energised, especially with the recent ACR Exhibition at Villa Park in May. It was great to catch up with so many of you, both longstanding contacts and new faces, and to witness the level of engagement and interest in the latest equipment and innovations on display.

Now, all eyes turn to InstallerSHOW, which returns to the NEC in Birmingham from 24-26 June. If you're planning to attend, we'd love for you to drop by and say hello - **the ACR team will be on stand 5B70.**



In this issue, we hear from Manuel Swärd at IV Produkt, who discusses how regional-specific requirements in air handling unit design have driven innovation, particularly for markets where heating takes precedence. We also feature the NACRA award-winning CO₂ plant installation at Wilkin & Sons, the historic jam manufacturer in Essex, supported by Beijer Ref UK & Ireland. In addition there's more on how Carrier is stepping up its commitment to skills and training, with a growing suite of industry-recognised courses to support professional development. I hope you enjoy the issue, and we look forward to seeing many of you at the NEC later this month.

Andy

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Warners Group Publications Plc

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PE10 9PH

01778 391000

01778 394748

www.warnersgroup.co.uk

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CDL leads industry support for NeuroMuscular Centre

Five teams from the HVAC industry helped raise £7,655 at the NeuroMuscular Centre (NMC) charity golf day at High Legh Park Golf Club in Cheshire.

The event attracted 12 teams in total, with the players enjoying outstanding weather on a day featuring 18 holes of golf, longest drive and nearest the pin competitions, followed by dinner and silent auction.

Among the contributions was a £520 donation from HVAC wholesaler Cool Designs Limited (CDL), representing the total raised from vending machine sales across its offices. CDL's Chris Beech has a direct connection to the NMC, attending the centre regularly for treatment of an ongoing neuromuscular condition, and it was his experience with the centre's dedicated team that inspired backing from industry colleagues.

Funds raised will go directly towards supporting the NMC's services, which include specialist physiotherapy, employment and training programmes, young people's support and community initiatives.

Established in 1990, the NMC is the only facility of its kind in the UK, offering a comprehensive range of services to individuals affected by muscular dystrophy and related conditions. Operating costs for the centre exceed £1.2 million annually, with fundraising events playing a vital role in sustaining its operations.

The charity continues to welcome donations. Contributions can be made via the official fundraising page:

<https://www.justgiving.com/nmcentre>



Chris Beech, centre, presents the CDL cheque to Bill Duckworth, Chair of Trustees for the NMC, right, and NMC CEO Ben Edson

Ken Macedo RIP

Family, friends and colleagues have said a fond farewell to LG Technical Support Manager Ken Macedo, who died in March at the age of 66.

Born in India in 1958, Ken's family moved to the UK in 1965. He was a keen sportsman, representing his school at basketball, football and judo, as well as competing in the British amateur weightlifting championships.

Ken joined LG in 2007 following 10 years at wholesaler Dean & Wood. His industry journey also included a decade at Risby Air Conditioning and shorter spells at both McAlpine Mead and Interact.

Some of his work took Ken overseas to South Korea and Italy, but he was always glad to return home to wife Denise and children



James and Emma. Family always came first for Ken and he was delighted by the arrival of grandson Louie in 2023.

Ken was diagnosed with blood cancer in 2015 and underwent a stem cell transplant in 2016. He continued to work at LG until his death, which followed a short illness.

The eulogy at his funeral service in Wokingham said: "He was not really a materialistic person but when it came to family and friends he had generosity in spades. And that is how we would like to remember Ken, who despite some tough times throughout his life was always positive, kind and helpful. We will all have our special memories to keep and cherish of a genuinely lovely man who did not expect to leave us so soon."



The Birdsall team at the company's Holborn Hub in London



A toast to founder Barry Birdsall

Birdsall begins 50th anniversary celebrations

Engineering group Birdsall has kicked off a year of celebrations to mark its 50th anniversary.

The company welcomed staff and clients at an Open Day at the company's Holborn Hub in London to launch the 50th celebrations.

Originally formed as Birdsall Air Conditioning by founder Barry Birdsall in May 1975, the group today comprises three successful trading companies: Birdsall Decarbonisation, Birdsall Networks and Birdsall Technical Services. These three specialist companies deliver building, HVAC, heat network and decarbonisation services.

Presentations were delivered throughout the day, charting the organisation's future plans as well looking back over half a century to tell the Birdsall story.

Birdsall takes pride at being at the forefront of environmental developments, from delivering CFC-free air conditioning in the 1980s and 1990s through to the present day where its networks and decarbonisation businesses specialise in providing environmental solutions.

DW delivers with valve station upgrades

Wholesaler DW called on its industrial refrigeration expertise to help deliver a project to replace 11 industrial valve stations as part of a major overhaul for a leading distribution company.

Working alongside customer GEA Heating & Refrigeration Technologies (HRT) and manufacturer Danfoss, DW supplied all components at the Manchester site, alongside technical support, order processing and delivery scheduling, demonstrating its ability to offer a full package of support services for industrial projects.

The Warrington service office of GEA HRT has serviced and maintained the facility since inheriting the site from a third-party contractor in 2002. For over 90 years, the distribution company has been a strategic partner to some of the world's leading brands and has consequently become a global leader in supply chain logistics. It operates across 18 countries, with 78 distribution points, including 8 multi-temp distribution centres in the UK.

A major system component failure on the older non-Danfoss valves in Manchester resulted in a substantial loss of product and it was decided to replace the existing ammonia valve stations on all the freezer, chill and loading bay coolers.

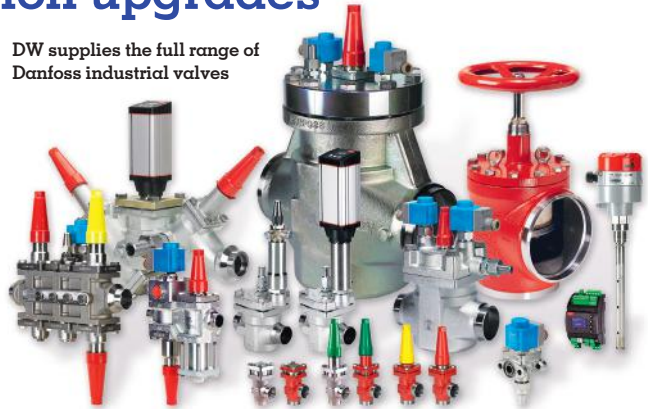
The installation brief was to provide a full change-out of all industrial valves on 11 valve stations for the LT/HT systems with no disruption to day-to-day operations. A further requirement was that all work had to be completed within an 8-week period and in line with strict Health & Safety protocols.



11 valve stations were replaced at the distribution facility

The GEA HRT team had to take all these requirements into consideration in the selection of industrial ammonia valves and associated products as the constant movement of product through the centre meant they had to be both energy-efficient and reliable.

DW supplies the full range of Danfoss industrial valves



The solution

The modular Danfoss ICF Flexline™ is designed to offer significant savings by replacing a string of valves with a single valve station in a complete plug-and-play solution.

It was chosen for the Manchester project based on performance, reliability, versatility and reduced installation times due to factory pre-configuration and just two weld connections required. Four basic configurations cover 90% of all applications.

Ben Kennedy, Head of Service at GEA HRT in Warrington, said: "The project represented multiple technical challenges but the partnership between DW, Danfoss and ourselves ensured that the right valves were selected to meet the performance criteria, and that deliveries of the Danfoss products came in on time.

"We chose the Danfoss industrial product range as we are well versed and confident in their quality and reliability, and believe they are the best option currently available."

Darren Ditchfield, National Sales Manager, Industrial Refrigeration, at DW, said: "Using us as a one-stop-shop streamlined the entire process for the customer, resulting in lower freight costs, simplified ordering and direct communications, because we work with our partners as part of their team.

"The valve stations were a great choice for a number of reasons and independent tests show that they provide a much lower pressure drop than comparable valves, increasing overall system efficiency."

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More refrigerant bans possible, says government

The government could tighten up the rules that restrict the use of global warming refrigerant gases, including speeding up phase out programmes and introducing new bans, according to a spokesman from the Department for Environment, Food and Rural Affairs (DEFRA).

Jacob Andresen told a briefing event hosted by F-Gas register Refcom that the government “was still listening to the industry” and looking for ideas to help it meet increasingly demanding safety and environmental targets, including potentially speeding up the removal of HFC gases from the market.

Andresen, who leads the department’s F-Gas policy team, said the government was planning to consult the sector later this year on reforming its approach as it seeks to meet its obligations of remaining in step with the EU on refrigerant management and contribute to the UK’s own Net Zero targets.

“Do we need a new HFC phase down... do we need new bans?” he asked, adding that DEFRA was also keen to hear from the industry about barriers to wider uptake of lower global warming potential (GWP) alternative refrigerants including technology and safety issues.

During wider discussions at the event, which was held at the headquarters of Refcom’s parent body BESA in London, members said the flammability of alternative gases was a growing concern and called for the government to provide an information campaign and ensure more people undertook training.

BESA Technical Director Kevin Morrissey told the meeting that alternative refrigerants were one of the most common technical queries raised by callers to his department, along with issues linked to the phase down of HFCs.

Refcom, which carries out regular audits to help companies remain compliant with the F-Gas regulations, found that the most common issues identified by its auditors included businesses not



Kevin Morrissey, Technical director of BESA

having their own environmental policies, failing to provide full records of reclaimed refrigerant, and not ensuring job sheets were uploaded and included refrigerant returns.

“This is a tough and challenging industry and there is now much greater focus on competence and compliance,” added Morrissey. “However, the fact that there are around 9,000 businesses in Refcom helps us to address the big issues that many have in common. More companies and individuals are also taking advantage of the F-Gas training courses available through the BESA Academy.”

He added that Refcom was also updating its widely used design specification for DX air conditioning and heat pumps (RAC80) to help the industry remain compliant with the latest standards and best practices for safe refrigerant use.

Software provider Joblogic, which sponsored the event and provides a tailored software solution for REFCOM members, said that staying compliant with F-Gas regulations “is getting tougher” and companies that still rely on paper records were putting themselves at risk of fines and legal actions.

“Manual processes make it harder to maintain accuracy and audit readiness,” said business development manager Vishal Bedi. “Your engineers and office teams waste time duplicating data, and customers don’t get the full transparency [of records] that they now expect.”

The event was also supported by the Institute of Refrigeration (IOR) which is celebrating its 125th anniversary. Chief executive Miriam Rodway reminded the audience of the importance of collaboration between industry bodies to support the profession and represent its views to the government. Institute Fellow Ian Fisher also pointed out that membership of the IOR provided free access to more than 300 technical papers and best practice guides to help individuals keep their knowledge up to date and improve their career prospects.

TF Solutions opens first Welsh branch

RACHP wholesaler TF Solutions has opened its first Welsh branch in Cardiff.

Located at Units 3A and 3B, Stuart Close, Penarth Road, CF11 8QF, the move takes the TF Solutions branch network to 16. Boasting approximately 11,500 sq ft of space, it will offer a range of products from suppliers including Samsung, Fujitsu and Mitsubishi Electric.

Branch Manager Nick Coates said: “We’re really proud of the new branch and all the work that’s gone into it. Our goal is to become the first choice in Cardiff with a fantastic range of stock, reducing any hassle or delays. We’re building a team of amazing people with the knowledge and experience to deliver the best service and customer experience in South Wales.”

Newly-appointed Managing Director James Boswell added: “Our Cardiff branch opening is another positive step towards TF Solutions’ continued growth and commitment to serving the

RACHP industry. We provide our customers across the UK with top quality products and expert support, and this new location will allow us to better serve the region.”

The Cardiff branch is open Monday-Thursday (07:00-17:00) and Friday (07:00-16.30).



The TF Solutions Cardiff team

RS-53 (R470A)

THE ONLY NON-FLAMMABLE DROP-IN REPLACEMENT FOR R410A ON THE MARKET

- R410A split air-conditioning unit converted to RS-53 & operating satisfactorily without any problems
- Low direct GWP (less than half) Drop-in replacement for R410A in existing equipment
- Non-flammable & low toxicity
- Similar energy efficiency to R410A
- Minimal changes to hardware during retrofitting
- Close match for R410A in cooling capacity
- Similar discharge pressure & temperature to R410A
- Compatible with lubricants commonly used with R410A



R410A split air-conditioning unit converted to RS-53 (R470A) & operating satisfactorily without any problems

RS-51 (R470B)

NEW LOW GWP DROP-IN REPLACEMENT FOR R404A & R507

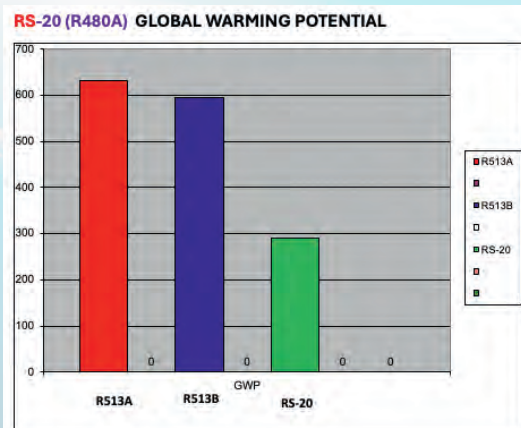
- GWP more than 80% below R404A & ca half R448A & R449A
- Similar performance to R404A
- Lowest GWP replacement for R404a & R507 on the market
- Non-flammable & low toxicity



RS-20 (R480A)

LOW GWP REPLACEMENT FOR R134a

- No changes to equipment required
- GWP below 300 & 80% less than R134a
- Non-flammable & low toxicity
- Similar performance to R134a
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- Similar discharge pressure & temperature
- Equivalent cooling capacity



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Chillventa 2026 adds more space

Trade exhibition Chillventa has announced that next year's event in Nuremberg (October 13-15) will see an extra hall added to increase the available display area.

Daniela Heinkel, Director Chillventa, said: "Chillventa 2024 was a resounding success and was fully booked. The pre-booking phase for 2026 has shown that the original display area does not offer any scope for new exhibitors or larger stands, so we are adding another hall – Hall 1. Therefore the new configuration will provide huge growth opportunities in all segments and makes it easier for all participants to navigate the venue. We are delighted to be developing Chillventa to meet the preferences of our community and reinforcing it as a platform for innovation, dialogue and networking."



The main refrigeration product categories in Halls 8 and 9 will be similar to 2024. AC, ventilation and heat pump technology will now be exhibited in Halls 7 and 7A, offering greater display area and more options for companies in these product categories. The refrigeration technology from Hall 7A will mostly be showcased in Hall 4A, while the refrigeration technology from Hall 7 will be accommodated in Halls 1 and 4. The main product categories in Halls 5 and 6 will be swapped over, with C&I technology housed in Hall 6. Which will therefore be the main link between the product segments refrigeration, AC and ventilation technology. These changes will create more space for diversity and innovations. Hall 1 will also close the visitor circuit through the entrance Eingang Mitte, which helps improve navigation and visitor flow.

IOR issues new coaching guidance

The Institute of Refrigeration (IOR) has published its latest Education Guidance Note, looking at coaching as a way of employers supporting engineering and technician development.

IOR Member Mathew Noon, who drafted the Guidance Note, added: "Writing this was incredibly important to me because I've seen first-hand how powerful coaching can be. My own experience with coaching has played a key role in accelerating my career, helping me strengthen my skills, understand my blind spots, and grow with purpose. This guide shows how engaging with coaching can support professional development, improve communication and leadership, and help everyone unlock their full potential."

IOR CEO Miriam Rodway added: "The IOR Education Committee has over the past few years produced a series of really useful tools to support the development of everyone working in the sector and improve continued professional development. They are continuing this work with even more guides being drafted and are planning an open meeting later this year to share this work and get feedback from members on what topics they want IOR to cover next."

The IOR Education Guidance Notes cover a wide range of topics from skills specifications for technicians to how to become STEM ambassador registered. They are free to download at <https://ior.org.uk/careers>

Winners honoured at BCIA Awards

The Building Controls Industry Association (BCIA) crowned the latest winners of its annual awards at a dinner and ceremony at The Eastside Rooms in Birmingham.

This year's event, hosted by TV magician/presenter Ben Hanlin, brought together industry leaders and key decision-makers to recognise talent and innovation across the building controls and automation sector.

2025 BCIA Awards winners:

- Building Controls and BEMS Installer of the Year: Crown House Technologies
- Engineer of the Year: Kim Spencer, Crown House Technologies
- Young Engineer of the Year: Zoe Dickson, SSE Energy Solutions - Smart Buildings
- Apprentice of the Year: Ricardo Miller, E.ON Control Solutions
- Energy Management Award: 3MSe Ltd, 52 Lime Street Based Demand Control
- Best Service and Maintenance Provider: - SSE Energy Solutions - Smart Buildings (Imperial)
- Technical Innovation of the Year - Products: Passiv UK, Passiv Smart Thermostat (PST)
- Technical Innovation of the Year - Projects: Global Associates, Port of Dover
- Contribution to Training: Group Horizon (BEMS Controls Engineer Apprenticeship)
- Outstanding Contribution: Ray Smith

BCIA President Stacey Lucas revealed the judging had been a real challenge – even more so than in previous years. She said: "It was yet again a superb evening. Every year it's getting harder to choose the winners of the awards and 2025 was no exception. There were some outstanding nominees this year and it really highlights just how the building controls sector is driving innovation and sustainability in the built environment."

Zoe Dickson, of SSE Energy Solutions, described her shock and immense pride at being named Young Engineer of the Year. She said: "There were so many other talented young industry professionals in this category, so it's absolutely incredible to have been nominated, let alone to have won. It really shows the breadth of talent we have in this industry and underlines why this sector is going to be so crucial moving forward."



A winning line-up at the 2025 BCIA Awards

BITZER UK hosts IOR's Women in RACHP Network

BITZER UK welcomed members of the Institute of Refrigeration (IOR) Women in RACHP (WiRACHP) Network to its headquarters in Milton Keynes for their first in-person meeting of the year.

The all-day event brought together eight committee members from across the UK, for a strategic planning session, networking opportunities and a behind-the-scenes tour of the BITZER UK and Green Point UK facilities, led by Managing Director Kevin Glass and Sales Director James Graham.

The group, co-chaired by BITZER UK's Samantha Buckell alongside Astrid Prado of Star Refrigeration, meets monthly, usually virtually, and typically gathers in person at the IOR's Annual General Meeting each November.

The strategy session focused on planning future initiatives, including launching a career profile section on the IOR website, designing practical training days for those outside hands-on engineering roles, and introducing 15-minute Q&A sessions on key topics, such as neurodiversity, public speaking and networking.

The WiRACHP network is open to all working in refrigeration, air conditioning and heat pump-related roles, from service and maintenance to marketing, and you don't have to be an IOR member to take part.

For more information about the Women in RACHP Network, visit: www.ior.org.uk/networking/women-in-rachp.

Stronger together, says FETA Chair

Federation of Environmental Trade Associations (FETA) Chair Neil Roberts has called on the heating, ventilation, air conditioning, and refrigeration sector to take a more proactive role in shaping policy, driving sustainability, and strengthening industry collaboration.

Speaking at the 35th FETA Annual Lunch, Roberts, who also serves as President of the British Refrigeration Association, welcomed the recent shift in political dynamics, noting the improved relationship with the European Union and the removal of the UKCA marking requirement as particularly beneficial developments for UK industry.

However, he urged caution in depending solely on the government for progress. "We should take the lead where we can," Roberts said. "By presenting well-thought-through policy positions supported by the industry, we can help shape a regulatory landscape that provides certainty while supporting the Government's broader ambitions."

Roberts praised the work of the six associations under FETA's umbrella — representing over 500 manufacturers, suppliers, contractors and end users — and highlighted examples of successful collaboration. He also reflected on the growing importance of mandatory training and certification as the industry adapts to regulatory developments such as the revised F-Gas Regulation and safety concerns tied to new refrigerants.

Paying tribute to the late Ian Garvey and David Simmonds, two stalwarts of the British Refrigeration Association, Roberts acknowledged their contributions and extended his thoughts to their families.

The event concluded with a keynote from guest speaker Colin Jackson CBE — athlete, coach, broadcaster and former Strictly Come Dancing runner-up — who delivered an inspiring message to guests.

Exi-tite's pride in Passivhaus school projects

Exi-tite is supplying energy-efficient Helios ventilation solutions with heat recovery for three of the first Passivhaus schools in Scotland, creating a healthy learning environment for a combined total of more than 5,000 students and staff.



A total of 75 Helios Air1 XC ventilation units are being installed across the three sites

The company became the first Passive House Institute (PHI)-certified ventilation distributor in Scotland last year, when Alan Gordon, Regional Director for Scotland, passed the PHI Tradesperson examination.

That has led to Exi-tite delivering ventilation at Perth High School, Dundee East End Community Campus and Monifieth Learning Campus. All three projects can achieve efficiencies of 67kWh/m²/annum to meet stringent government targets.

Passivhaus (or Passive House) buildings deliver high levels of energy efficiency and comfort for users, alongside outstanding air quality through ventilation. Designed to maintain an almost constant temperature, they are constructed, insulated and ventilated in such a way that requires very little additional heating or cooling, other than from the sun and the activities of its occupants.

A total of 75 Helios Air1 XC units of varying sizes have been used across the three sites, all installed with Class 3 rectangular dampers to guarantee acceptable air leakage levels.

Alan Gordon, said: "Exi-tite is proud to be involved in these prestigious projects and contributing to Scotland's target of Net Zero with energy-efficient education sector buildings.

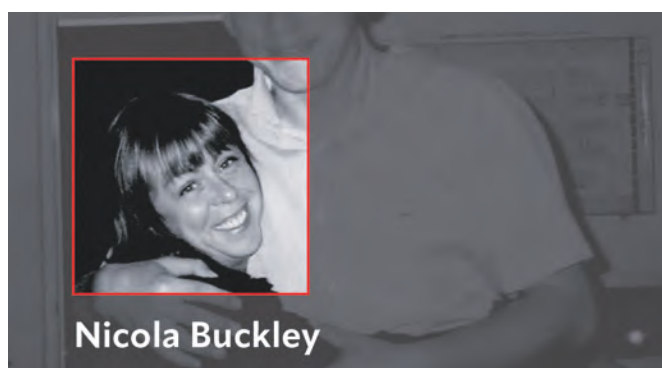
"Becoming a certified member of the PHI was key to understanding the guiding principles and requirements for Passivhaus MVHRs. The units were selected to meet the design requirements for the classroom ventilation design strategy, with the necessary accessories to meet Passivhaus guidelines.

"The equipment was supplied within a 4-month period to meet the projects' construction programmes and we will be carrying out the HRU controls set-up for all projects in 2025/2026.

"Exi-tite is involved in further Passivhaus projects in the UK and we look forward to supporting these projects to continue the progress on the path to Net Zero."

The Helios Air1 XC series as used in all three school projects provides a flow range of 500-3,200 m³/h from an extremely compact footprint using cross counterflow heat exchangers. Even where space is limited, an electric or warm water auxiliary heater battery can be easily integrated into the unit. The external cooling module can be directly mounted to the supply air inlets of the unit and thus also guarantees installation in confined spaces.

The units feature a built-in electric pre-heating coil as standard to protect the heat exchanger against frost at very low outside air temperatures. In case of increased comfort temperature requirements, an electric or hot water auxiliary heating coil can be optionally installed in the unit casing. 



Members of the original line up including one of the original founders, Craig Peebles.

It all started with a condensate pump...

From humble beginnings in Nottingham to becoming a key player in the global HVACR and renewables market, Pump House – now part of DiversiTech International – is celebrating a significant milestone in 2025 as it marks 25 years in business.

It all started in May 2000 with a simple but ambitious idea: to build a better condensate pump distribution company. Founders Craig Peebles and Paul Ludlow recognised a gap in the market for specialist products and service-led support. What followed was the birth of CP Pumps, which later became known as Pump House, and the start of a journey marked by rapid growth, innovation and international expansion.

Pump House quickly moved into its first premises in Lilac Grove, Nottingham, with Peebles taking on the role of Managing Director. A small but dedicated founding team was established, several of whom – including Peebles, Claire Gretton and Nicola Buckley – are still part of the

Evolution of the company branding



business today. Over the next two decades, the company would go on to become a well-known and respected name across the HVACR industry.

In 2016, Pump House was acquired by the DiversiTech Group, North America's largest manufacturer of equipment pads and a major global supplier of HVACR components. The acquisition added greater resources and reach, helping to strengthen Pump House's position in both domestic and export markets. By 2021, the business formally adopted the name DiversiTech International, while retaining "Pump House" as its trading identity – a name still closely associated with quality and customer care.

Today, "Pump House" offers over 2,200 products its HVACR and renewables portfolio, and supplies customers in more than 40 countries. The business

operates from a 30,000 sq ft warehouse in Nottingham, with a move to a new purpose-built facility planned for December 2025 to support future growth.

Shaun Gray, who stepped into the role of Managing Director in 2024 following the change in responsibility for Dave Bass, is now overseeing the next phase of the company's evolution. With a continued focus on best-in-class service, technical expertise and delivery performance, the team remains committed to supporting contractors and distributors across the HVACR and renewables sectors.

Celebrations for the 25-year anniversary began in May with an Employee Appreciation Day at Uttoxeter Racecourse, which brought together staff past and present for a night of hospitality and reflection on a quarter-century of achievement.

hilmor

TOOLS+

Introducing two new tools to the Hilmor fold!

Just when you thought you had everything needed to complete your toolbox, Hilmor have added a vacuum gauge and dual readout thermometer to their first-class line-up.

In the ever-evolving fields of HVAC/R/ASHP and plumbing, the tools used by professionals play a pivotal role in ensuring the efficient and reliable operation of systems. Hilmor, a renowned brand in the industry, has been manufacturing high-quality tools that simplify any daily routine, and deliver exceptional results.



HILMOR DUAL READOUT THERMOMETER
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HILMOR DUAL READOUT THERMOMETER

Measuring system temperature requires multiple tools, and sometimes multiple trips to the installer's van. The Hilmor Dual Readout Thermometer was designed to change all that. This new tool to the Hilmor portfolio is a compact thermometer with dual readings to make calculations simple. This thermometer is handy at maximising efficiency, and comes as standard with two K-style thermocouple clamps.

- **Makes calculations easier**

A compact thermometer with two readings to help simplify the calculation of superheat and subcool.

- **Reads temperatures quickly**

Two easy-to-use k-style tube clamps thermocouples get you to the temperature reading quickly.

These tools feature a Limited 2-year warranty and are sold by all leading wholesalers.

See entire Hilmor range by using the QR code.



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TALK**

GET IN. GET OUT.
GET ON TO
THE NEXT JOB.

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HILMOR COMPACT VACUUM GAUGE

The Hilmor Compact Vacuum Gauge is an all-in-one wireless micron gauge that is durably constructed for everyday use and abuse. It has an easy-to-read backlit display that provides the readings with a two-button operation that simplifies on-the-job use.

- **Easy to read**

The backlit LCD makes reading in the dark easy.

- **Convenient storage**

A protective case keeps the gauge safe and quick to access.

- **Added versatility**

Full range readings enables you see the progress instantly.

- **Superior protection**

This gauge handles 800 PSI momentarily if a mistake is made.



HILMOR VACUUM GAUGE
CVG1200

See more <https://diversitech.global/> or contact our sales team on sales@diversitech.com



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ACR Expo Midlands connects industry at a regional level

The ACR Expo returned to Birmingham to offer a regional opportunity for HVACR professionals to meet suppliers, access product updates and attend technical sessions focused on key industry themes.

Held in association with the ACR Journal and Heat Pumps Today, the event featured 23 exhibitors and a programme of short presentations covering equipment innovation, regulatory developments, and industry support.

Exhibitor and sponsor support

Exhibiting companies included:

UK Cylinders, J & E Hall, RSL Group, Fieldpiece, DiversiTech, Cool Designs Ltd, BITZER, DK Heat Recovery, APJ European, Danfoss, FETA, BRS Heat Pumps, Global Energy Systems, Friga-Bohn & Climate Centre, Lochinvar Ltd, Isentra & Copeland, Thermofrost Cryo, Johnson Controls, Job Logic, and Panasonic.

The event was supported by sponsors Cool Designs Ltd, BITZER, Fieldpiece, DiversiTech, Friga-BOHN, and Climate Centre.

Technical content

The technical programme began with Will Pribyl presenting the services available through BITZER's Green Point network, focusing on diagnostics, service support, and component longevity. Scott Elemer followed with an overview of the BITZER ECOLITE condensing unit range, highlighting its energy efficiency and suitability for a variety of refrigeration applications.

Martyn Cooper from FETA provided a regulatory update and outlined the benefits of trade association membership in helping companies respond to legislative and market changes.



Next event: Leeds

The next ACR Expo will take place at Leeds United Football Club, Elland Road, Leeds LS11 0ES, on 25 September. Stand space is already fully booked, but visitor registration is open now and free of charge.

Register for the Leeds event here:

<https://www.acrjournal.uk/regional-exhibitions-northeast>





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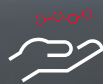


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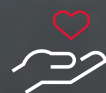


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The **Hydratech Services** division provides specialist engineering and maintenance services to customers installing, commissioning, operating or optimising closed cooling and heating systems. By combining expertise in water treatment chemistry, fluid thermodynamics and mechanical engineering, **Hydratech Services** delivers a fully integrated, holistic approach to process and hydronic systems management. This in-turn maximises the potential for optimised performance, reduced operational costs and significant return on investment gains.



Smarter cooling for a digital world

Mel Summers, Marketing Manager at Climalife, explores the importance of incorporating the latest innovations in every project.

In 2012, there were approximately 500,000 data centres globally.

This number peaked at around 8 million in 2015* but has since declined to approximately 7 million, reflecting a shift toward more efficient co-location and hyperscale data centres. Major technology companies like Microsoft, Google, and Amazon are driving this transition, each planning to invest billions over the next five years to expand their data centres in the support of artificial intelligence (AI) technologies.

Digital consumption has been on the rise for several decades, with AI, social networks, and increasing access to digital technology in emerging countries driving demand exponentially.

Data centres, which can be company-owned facilities including server rooms, co-located facilities, hosts for cloud computing services, or intensive computing centres, are at the heart of this digital expansion. However, they require significant space, water, and energy to operate and cool the machines, while also ensuring security and reliability due to the extreme temperatures these machines can reach.

Regulations and standards, such as EN 50600 and ISO 50001, referenced by the European Directive on energy efficiency, already govern the construction of data centres.

The European Commission's document "Shaping Europe's Digital Future" mandates

that data centres must achieve carbon neutrality by 2030. To make data centres more environmentally friendly, optimising energy efficiency from the design stage is crucial.

Currently, data centres account for 3 to 4% of global greenhouse gas emissions**, a figure that could rise to 14% by 2040. They also consume 3% of the world's electricity, projected to increase to 10% by 2030. Energy costs can constitute up to 75% of a data centre's operating expenses***.

Air conditioning and cooling account for 40-50% of a data centre's energy consumption, making it a key area for improvement.

Integrating data centres into local energy schemes, such as using renewable energy sources like wind turbines or recovering heat for district heating systems, can significantly reduce their environmental impact.

Innovations

Eco-design, energy efficiency, and optimised cooling systems should be incorporated from the project's outset.

There are various cooling technologies available, including conventional cooling, immersion cooling, and on-chip cooling. Conventional cooling systems include CRAC (computer room air conditioning), which uses fans to inject cold air from outside, and CRAH (computer room air handling), which uses a chilled water chiller.



Innovations in conventional cooling, such as using residual heat and bio-sourced heat transfer fluids like Greenway® Neo N from Climalife, can further improve energy efficiency.

Immersion cooling involves submerging servers in a bath with Novec fluids, marketed by the Dehon group. Users can also contribute to reducing environmental impact by using digital technology more responsibly, as highlighted by AGIT (Alliance Green IT). For example, 4G and 5G consume more energy than WiFi.

The energy challenges facing data centres will undoubtedly drive innovation and lead to a re-organisation of market players. 🌐

*International Data Corporation

**Shift Project report

***AGIT- Data Centre KPIs

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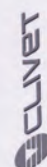
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25 Years of Cool: Thermofrost Cryo's Enduring LG Partnership


Thermofrost Cryo

Celebrating a milestone partnership in a changing HVAC landscape

In the ever-evolving world of HVAC and refrigeration, longevity and loyalty are rare. Yet **Thermofrost Cryo** stands out as a beacon of both, proudly celebrating **25 years of partnership with LG Air Conditioning**. This milestone is not only a testament to consistent performance but to a deep, adaptive relationship with one of the world's leading climate solution brands.

A Legacy Built on Independence and Expertise

While the HVAC market has undergone significant consolidation, Thermofrost Cryo remains one of the few sizeable independent companies still thriving. "It's becoming increasingly rare," says Steve Mace, Joint Managing Director. "We're not just still here—we're still competing and offering something different."

That difference lies in the company's **deep technical expertise**, strong after-sales support, and strategic decision-making. While many competitors have moved toward commoditised sales, Thermofrost Cryo has doubled down on **technical support, capital equipment**, and maintaining extensive stock to ensure **next-day delivery** – a vital advantage in today's time-sensitive market.

The LG Partnership: 25 Years and Counting

The relationship with LG began in 2000, when Thermofrost Cryo changed from a previous supplier to partner with LG just as the Korean giant restructured its UK air conditioning distribution strategy. "It was a convenient and timely match," recalls Steve Mace. "From then, we grew together."



Initially, Thermofrost Cryo specialised in LG split systems—perfectly aligned with their SME installer customer base. Over time, they became LG's **top-selling UK distributor**, benefiting from the brand's rapid innovation and expanding product portfolio.

Despite increased competition and shifts in the market, the partnership has endured. "We've seen other distributors come and go, but we're still proud to represent LG. Their product development has been impressive – reliable, stylish, and now more aligned to European standards than ever before."

Adapting Through Change

The last decade has brought significant industry change. Market conditions have fluctuated, COVID-19 reshaped work habits, and Brexit created **new logistics challenges**, increasing lead times and import costs.

Thermofrost Cryo responded with foresight – leveraging third-party warehousing, stocking aggressively, and investing in adaptable systems that allowed their team to work from home with minimal disruption. "We had the infrastructure in place, and it paid off," Steve Mace explains. "Hybrid working is now the norm for many of our departments."

Service, Not Just Sales

A key differentiator is Thermofrost Cryo's commitment to technical excellence. With a **dedicated team of product managers and technical specialists**, they're known for helping customers source exactly the right parts, fast. This level of support fosters loyalty in a market increasingly driven by price.

"Anyone can sell a unit," says Steve Mace. "But not everyone can help you commission it, support it, or troubleshoot it quickly. That's where we add real value." It's a value that extends to LG customers as well. The company carries its own stock and prides itself on **immediate availability** – a stark contrast to some competitors reliant on back-to-back ordering. "Stock wins orders. Price is important, but next-day delivery often closes it."

Eyes on the Future

Thermofrost Cryo isn't standing still. With a stable leadership team, a long-serving workforce, and a new generation of product managers stepping up, the company is already looking ahead. Their strategy is clear: **stay independent, focus on service**, and **play to their strengths** in refrigeration and small-to-mid-size air conditioning installations. With LG continuing to evolve its product offering – particularly in splits and stylish residential solutions – the alignment remains strong.

"We've built 25 years of shared experience with LG," Steve Mace reflects. "And we're still learning, still improving, still delivering."

As the HVAC world gets bigger, noisier, and faster, Thermofrost Cryo's message is refreshingly simple: **deep knowledge, great products, and a partnership-first approach** – an approach they hope will see them celebrating again in 2050.

www.thermofrostcryo.co.uk



acrjournal.uk

Refrigerant recovery, more than just a regulatory requirement

By the simple act of transferring heat from one place to another, refrigerants cool and preserve food, drink, medicines, and other essential products through refrigeration and freezing.

They are the lifeblood of the air conditioners and heat pumps that keep our homes and workplaces comfortable. As global temperatures continue to rise, the demand for cooling, and therefore refrigerants, is growing worldwide and it is critical that this increased demand is met in an environmentally responsible way.

As an industry, we must transition to lower Global Warming Potential (GWP) alternatives and ensure that potentially harmful legacy refrigerants are carefully managed to prevent their release into the atmosphere. This is known as Lifecycle Refrigerant Management (LRM).

LRM plays a vital role in helping mitigate climate change and its principle is a simple one:

"No kilogram or pound of refrigerant, once produced, should find its way into the atmosphere*.

The recovery and reclamation of refrigerants is a key pillar of LRM and enables circularity across our industry. Adopting a circular approach to refrigerant management makes the most of the gases we already have. It overcomes the traditional linear model of make, use, and dispose which has dominated the way of



business for the past 50 years. This is a particularly wasteful model and one that assumes there will be a never-ending supply of raw materials. As an industry faced with environmental pressures, the move towards a re-use approach is imperative. Recovering and reclaiming refrigerant can reduce raw material usage, energy consumption and unnecessary transport normally associated with virgin production.

Refrigerant recovery and reclamation will continue to play an increasingly important role in the future of the HVAC-R industry. Regulatory pressure, supply limitations, and sustainability goals are driving end users to include the use of reclaimed products as part of its refrigerant management plan.

For over 30 years, our focus on innovative solutions has ensured the lifecycle of refrigerants and other products is maximised. We support our customers in their transition to lower GWP refrigerants and ensure that used refrigerants are carefully recovered and reclaimed for future reuse. As virgin supply declines as part of the F-Gas Regulation, reclaimed refrigerants will bridge the gap between supply and demand imbalances, especially for servicing existing systems that are not yet retrofitted to a lower GWP alternative.

To maximise the rate of recovered and reclaimed refrigerants, the industry needs to ensure we have efficient and effective recovery practices. The A-Gas Rapid

Recovery, F-Gas compliant, on-site recovery service, is a good example of how having the right equipment can make a real difference when it matters.

A-Gas Rapid Recovery has a network of vehicles and engineers in place to give refrigeration contractors national coverage. The onsite recovery service can attend site at short notice to handle jobs of all sizes. The equipment can recover refrigerants up to ten times faster than the conventional recovery methods, accessing equipment in difficult places, while enabling minimal disruption to business as usual. The Rapid Recovery team take responsibility for all aspects of the recovery work – from start to finish. Once recovered, refrigerant is returned to A-Gas for reprocessing through mechanisms such as filtering, drying and non-condensable gas removal to return it to the same quality as virgin refrigerant, in line with AHRI 700 specification.

It is clear that refrigerant recovery and reclamation are more than regulatory requirements. They are critical pillars of lifecycle refrigerant management. By investing in proper recovery techniques and solutions and working with certified reclaimers, contractors and end users can contribute towards a sustainable future for our industry.

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*LRM, The 90 Billion Ton opportunity



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Time to look at commercial heating

Did you see the recent Government announcement of another £940 million for Phase 4 of the Public Sector Decarbonisation Fund – which is designed to help Local Authorities remove gas heating from their buildings?

Since 2020 the Fund has made over £3.6 billion available to help decarbonise schools, libraries, town halls and other public buildings, and this has led to many examples of gas heating being replaced with low carbon renewable heating and hot water systems.

That is a lot of work for the HVAC sector and a clear sign that we really are very near the end of gas as the nation's dominant form of heating.

Whatever your views on renewables and gas, the direction of travel is towards the electrification of society, and this places the HVAC industry right at the front of the transition, presenting a significant opportunity for heat pump installers over the next 5-10 years.

Changes in the F-Gas Regulations and new refrigerants are bringing a bit of uncertainty to the world of air conditioning but companies that look to embrace heat pump technology for heating and hot water can end up with a much more sustainable business model.

Whilst I'm pleased to say that awareness of heat pumps has increased somewhat over the past few years, there is still much to be done. And one thing that continues to surprise me is how many people still think heat pumps are just for houses!

Surely the money going into the Public Sector Decarbonisation Fund shows the potential for 'non-domestic' buildings?

On the residential front, there are around 1.6m gas boilers sold each year, which contrasts sharply with the 70-80k heat pumps sold in 2024. So, domestically, there is huge opportunity to grow domestic heat pumps sales, if that is where you would like to focus your business.



Ben Bartle-Ross is a technical trainer at Mitsubishi Electric

Commercially though, I firmly believe that there are significant opportunities that are much more readily achievable and offer significant quick wins in terms of both business growth and carbon reduction.

Around 35,000 heat generating products are sold for commercial buildings annually, offering significant growth opportunities for heat pumps – and lots of work for the installation companies involved.

It's worth bearing in mind that the route to market for our commercial heating products is the same as the route for air conditioning systems, making things somewhat easier.

The adoption of commercial heat pumps is also outpacing the residential market, with two factors driving the conversion from gas to heat pumps:

Firstly, as mentioned above, over the past four to five years, the Public Sector

Decarbonisation Scheme (also known as SALIX) has been quietly helping with the removal of gas from council buildings and its replacement with heat pumps.

Secondly, global investment is demanding buildings that will be sellable, or lettable into the future, and this is changing the requirement for new-build properties along with the retrofit sector.

Put simply, your clients will not get finance for their project or find tenants for their office block, unless they can demonstrate they have a building that will comply with future energy and carbon emissions requirements.

The commercial sector's gas consumption in England and Wales has remained fairly flat since 2012 with an approximate 2.5% reduction down to 156TWh according to the UK Government's Non-Domestic National Energy Efficiency Data Framework (up to the end of 2022).

There are over 2 million 'non-domestic' buildings in the UK and they are responsible for around 18% of the UK's carbon emissions. That means there are a heck of a lot of commercial properties still using gas that need help to transition to electric heating over the next five to ten years.

For those already involved in the HVAC sector, this presents a fantastic opportunity to add heating skills and develop a truly sustainable business.

Ben Bartle-Ross is a technical trainer at Mitsubishi Electric

Find out more training by visiting <https://les.mitsubishielectric.co.uk/installers/installer-training>

New facility highlights evolving approach to HVAC education and product strategy

ACR Journal Editor Andy Slater visits two new training centres, in Stockport and Wakefield, which aim to help strengthen engineering skills across the sector.

Carrier Solutions UK has expanded its HVAC training provision with a new facility in Stockport offering vocational qualifications and short technical courses across the full spectrum of heating, ventilation, air conditioning, and refrigeration systems.

Training includes topics such as heat pump installation, VRF systems, controls, and commissioning, with content designed for both new entrants and experienced engineers.

The new centre complements existing training academies in Telford and London, with satellite locations opening in Glasgow and Wakefield. The Glasgow centre will focus on boilers and electrical training, while Wakefield, hosted by TQ Environmental (see facing page) puts the focus on air conditioning and leak detection systems. Additional sites are planned as part of a wider skills development strategy.

Multi-brand strategy

Carrier's group structure, which includes Viessmann, Toshiba, Riello, and Volkèra, supports a tiered product offering—from premium to entry-level—enabling customers to specify systems based on budget and performance needs, while maintaining consistency in support and training.

"We recognise that not every customer requires or can afford a top-tier solution," said David Dunn, Managing Director for UK & Ireland Carrier RLC EMEA. "Our multi-brand approach means we can offer something appropriate for every project, while staying within the Carrier family."

Training a priority

The Stockport site features working systems across all major HVAC technologies, including chillers, boilers and air source heat pumps. Carrier has also committed to delivering City & Guilds Assured courses along with BPEC, which support quality-assured competence-based learning in areas such as F-Gas handling, diagnostics, and system design.

"This isn't about ticking boxes—it's about giving engineers real skills and confidence," said Paul Longden, Product Training Manager. "From installation to commissioning, we want people leaving here ready to work on live systems."

Shift in focus

A key part of the training strategy focuses on supporting the industry's move towards low-carbon and hybrid solutions. Carrier is developing courses to help engineers transition from traditional systems to integrated technologies such as heat pumps, battery storage, and EV charging infrastructure.

"Renewables are the future, but we also need to make the transition realistic and manageable," added Dunn. "That's where hybrid systems and flexible training become essential."

The launch event featured guest appearances by England rugby players Ben Curry and George Ford, both Toshiba ambassadors. Attendees toured the new facility, engaged with Carrier's technical team, and explored live product demonstrations.



David Dunn addresses guests at the official opening

Carrier's expanded training network aims to meet growing demand for hands-on, competency-based learning across the HVAC sector. With further academies in development, the initiative is aligned with industry needs for multi-technology knowledge, regulatory compliance, and workforce readiness.

F-Gas compliance

Graeme Fox, F-Gas Scheme Director at The F-Gas Register, delivered a session focused on current and upcoming changes to F-Gas legislation and the practical implications for engineers and contractors.

"F-Gas is not just about paperwork—it's about environmental responsibility and professional standards," said Fox. "Everyone working with refrigerants must be aware of their obligations, especially as the industry moves towards low-GWP alternatives."

He highlighted the growing importance of refrigerant traceability and correct documentation, stating, "There's increased scrutiny on how systems are installed, serviced, and decommissioned. Engineers who are not compliant risk being left behind."

Fox also touched on future regulatory changes: "We're expecting more stringent controls in the next phase of the F-Gas regulation. Now is the time to invest in training and ensure your team has the correct qualifications."

The session served as a reminder that competence, certification, and environmental awareness must be prioritised as part of any forward-looking HVAC practice. 🏠



The new Carrier training facility in Stockport

TQ Environmental and Carrier Solutions UK launch new Yorkshire training hub

TQ Environmental and Carrier Solutions UK have linked up to launch a dedicated HVAC training centre in Yorkshire.



TQ Operations Director Gary Stanley welcomes guests to the opening



Inside the new Wakefield training centre

The new facility, hosted and managed by TQ Environmental, offers targeted training on air conditioning systems from Toshiba, part of the Carrier Solutions UK group, with the goal of developing a highly competent and confident engineering workforce.

Based in Wakefield, TQ Environmental specialises in gas and environmental monitoring systems, with over three decades of experience supporting a wide range of commercial, industrial and public sector applications. The partnership brings together Carrier's technical support and HVAC technologies with TQ Environmental's complementary gas detection solutions and commitment to skills development. The result is a purpose-built training hub that will serve as a local resource for contractors, engineers, and service providers.

Gary Stanley, Operations Director at TQ Environmental, said: "This partnership with Carrier aligns perfectly with our ethos. It's about raising the bar for technical training and creating a space where engineers can grow their knowledge and hands-on experience."

Courses on offer include residential and commercial systems, including

VRF. Engineers will receive both classroom instruction and practical demonstrations using the latest Toshiba by Carrier equipment.

Long-term investment

David Dunn, Managing Director for UK & Ireland, Carrier RLC EMEA, added: "The value of this partnership lies in its ability to deliver relevant, real-world training close to where our customers work. It ensures that engineers are not just qualified, but truly prepared to work with our systems safely and effectively."

The facility, located near major transport routes, aims to offer a professional yet welcoming learning environment. It builds on the momentum of Carrier's expanding training network and follows the recent launch of its Stockport centre, which offers courses in VRF, controls, commissioning and low-carbon heating technologies. Alongside technical instruction, the centre addresses key industry themes such as energy efficiency, environmental compliance and refrigerant safety. With a focus on delivering industry-recognised qualifications and hands-on experience, the centre is part of Carrier's long-term

commitment to developing a skilled, future-ready workforce.

Gary Hall, Managing Director at TQ Environmental, said: "We are delighted to partner with Carrier Solutions UK. The leak detection products we produce in the UK complement the product ranges offered by the Carrier Group. They are tried and tested, and we are in a position to develop bespoke solutions in-house, quickly and effectively, for any project requiring gas detection. It's a real pleasure to see the training centre being used already. Extra dates have been added and the footfall is high."

The partnership underscores both companies' shared focus on supporting the HVAC sector through long-term investment in people and education. With support from regional Carrier distributors, the centre is positioned to become a flagship for industry training in the North.

Training sessions are now available to book, with strong interest already coming in from engineers across the region.

<https://www.toshiba-aircon.co.uk/support-resources/training-academy/>

<https://tqplc.com/>



Teamwork spreads the load at jam factory

Multiple teams from wholesale group Beijer Ref UK & Ireland joined contractor Adcock Refrigeration and Air Conditioning to deliver an award-winning CO₂ plant installation for historic jam manufacturer Wilkin & Sons in Essex.

SCM Frigo PNC-MWT 60kW LT CO₂ Booster Packs at Wilkin & Sons in Essex

All equipment was supplied and specified by Beijer's FridgeHUB team, backed by onsite support during installation and commissioning from its HVACR field engineers. Specialist training came via the Beijer Ref Academy, and there was further key input from manufacturer SCM Frigo (also part of the Beijer Ref group of companies).

Comprising two SCM Frigo PNC-MWT 60kW LT CO₂ Booster Packs and two Güntner GACV CX 063.1JE 30kW evaporators for each pack, the installation was recognised as Refrigeration Project of the Year in the 2025 National ACR & HP Awards.

This was a first CO₂ (R744) project for Adcock, who said the support received gave them the confidence to choose a



Photograph: Wilkin & Sons

system operating on a natural refrigerant with minimal environmental impact (GWP < 1, ODP 0). Following the planning and specification phases, the company's engineers completed CO₂ training at the Beijer Ref Academy while the equipment was being manufactured.

Paul Parfitt, Director at Adcock, said: "The FridgeHUB team gave us the confidence to proceed with our first CO₂ project and the technical support from SCM in the UK provided crucial back-up. Being able to attend the Beijer Ref Academy in Wetherby was a big plus point for us when deciding where to place our business. FridgeHUB and the Academy certainly added value to the project."

Project overview

Wilkin & Sons has been producing quality jam and marmalades since 1885 and is perhaps best known for its Tiptree range of fruit preserves named after its Essex home. The existing HFC-based screw pack system at the factory was showing its age, with persistent leaks resulting in excessive service and repair expenses. Urgently needing to build reliability into its freezer rooms, a temporary glycol-based system had been installed until a permanent solution was found.

Four existing systems, screw packs each delivering 30kW of capacity at -31°C SST, required replacement. Given the limited space available, the new plant needed to be installed outdoors and, as the system called for a large low temperature (LT) duty, the equipment footprint was identified as a potential issue. The design process considered several options for splitting the load between smaller units and larger packs, ultimately leading to a focus on a refrigerant that would future-proof the site.

It was important to create a resilient system by distributing the load efficiently across multiple units while also accounting for a high temperature (HT) tempering facility in a planned second phase of the project.

FridgeHUB and SCM Frigo were able to specify a solution featuring SCM's advanced LT Booster systems, including integrated gas coolers. This innovation eliminates the need for separate gas cooler installations, thereby reducing both installation costs and downtime. Selecting the 60kW LT solution, which offered significant cost savings compared



to utilising four smaller units while maintaining resilience, ensured stability amid varying load conditions.

Although the loads on site are stable, each unit provides 28-100% capacity control. This, and the use of two identical packs, means the site can also manage any future low load conditions required. The LT compressors (with inverter on the lead) cascaded to the HT compressors (with inverter on the lead), where heat is rejected with an onboard gas cooler.

SCM also incorporated options for a glycol plate heat exchanger for the future tempering room, eliminating the need for subsequent additional infrastructure. This solution maximised the available space while future-proofing the installation against evolving client needs. The inclusion of specially coated fins on the gas cooler contribute to extending the lifecycle of

the equipment, making it a robust choice for the client.

Güntner GACV CX evaporators were chosen for their quality and reliability. They feature double-skinned drain pans and additional periphery heaters for the fans. The overall access provided by the design of the Vario coolers means that servicing the units, even at a high height (as these are), is easier than most designs. The effective defrost design was also an influencing factor.

Sustainable choice

While some of the HFO-based systems considered presented a lower initial capital cost, they also came with the potential for higher operating costs and regulatory restrictions. A2L options were also examined but limitations on charge sizes and pipe runs made them unsuitable for the site's needs. Finally, ammonia was considered but dismissed on the grounds of cost and flammability.

Although the initial energy consumption was projected to be 5% higher compared to traditional systems, the integration of a plate heat exchanger for future tempering rooms ensured long-term energy efficiency gains.

Michal Wiecek, Head of fridgeHUB, said: "We firmly believe that this project represents a model for successful refrigeration system upgrades: an efficient, sustainable, and expertly executed transition that directly addresses both present and future needs. The innovative approach to design, technology selection, and collaborative support sets a new benchmark within the industry."

www.fridgehub.co.uk



No compromise when replacing traditional AHU installations

Manuel Swärd, Export Director for West Europe at manufacturer IV Produkt, explains why an air handling unit solution specifically designed and optimised for heating is perfect for the UK climate.

As a result of the continuing drive towards improved energy efficiency and sustainability, alongside a strong focus on reducing investment costs and installation footprints, it is hardly surprising that UK customers are looking for new products and solutions to replace existing AHU HVAC installations for heating and cooling.

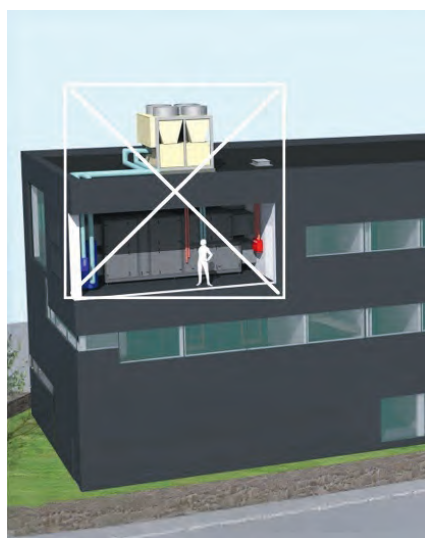
One of the key technologies available is the AHU with integrated reversible heat pump and, at first glance, it is easy to see the advantages of a much-simplified installation, only one heat exchange, and a 'one-supplier, one-responsibility' solution.

Traditional units over-promising and under-delivering

However, since most such systems traditionally are designed and optimised for cooling, they have largely promised far more than they could deliver, especially when it comes to energy efficiency and indoor climate during wintertime.

The ever-present defrosting issues and supply temperature fluctuations during colder weather have often forced suppliers and property owners to accept a number of design, operational and energy efficiency compromises.

Because no matter what design and defrosting technologies are applied, traditional units require either a decrease in the energy performance, adding substantial amounts of extra heating power and energy, or for the tenants to accept a deterioration of indoor air quality through significantly lower fresh airflows and much lower supply air temperatures in winter.



Complex AHU installations, which may include a boiler and chiller plant, can be replaced by an AHU with integrated reversible heat pump



The UK focus on improved and hygienic indoor climate, energy efficiency, decarbonisation and overall sustainability means that these compromises are no longer acceptable, with another type of reversible unit needed. This resulted in IV Produkt developing and launching a completely new type of defrosting-free AHU with integrated reversible heat pump, the Envistar Flex ThermoCooler HP R454B.

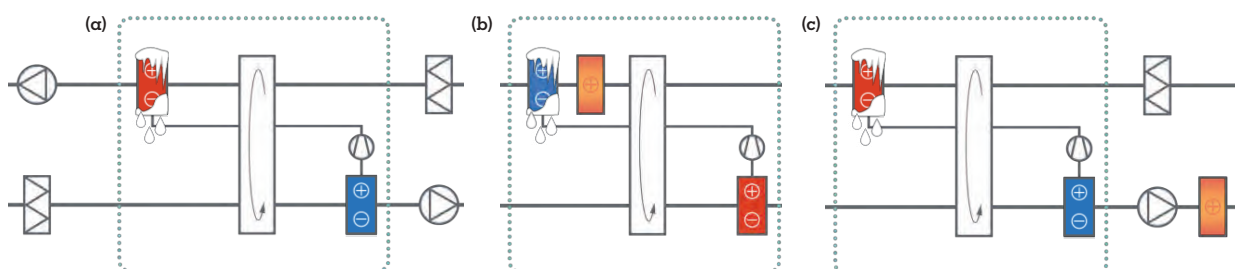
ThermoCooler HP R454B

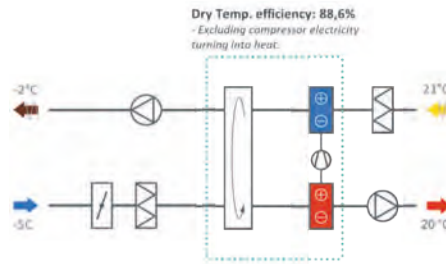
ThermoCooler HP R454B is specifically designed with defrosting-free heating applications in mind, while still providing effective and efficient cooling operation.

The new DX-cycle design and AHU-layout,

with both the evaporator and condenser positioned on the 'warm' side of the thermal wheel, is a perfectly optimised design for the UK and Northern European climate, where uninterrupted heating operation in winter, without any defrosting, pre-heating or re-heating needs, far outweighs maximum cooling power in fresh air ventilation AHUs.

Operational challenges and different defrosting techniques when running traditionally designed reversible heat-pumps in wintertime (a) Typical integrated HP design with one heat exchanger positioned on the 'cold' side of the thermal wheel operating in reverse cycle defrost with reduced capacity and airflow. (b) Close proximity electric heaters used to defrost the frozen evaporator (c) reheaters used to increase supply air temperature during decreased recovery and reverse cycle defrost.

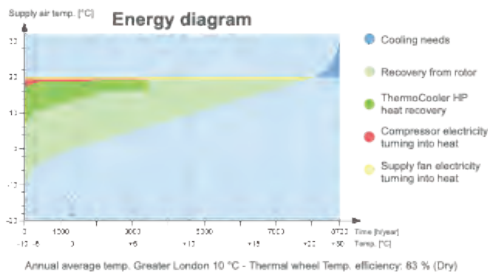




Performance flowchart in heating mode of the ThermoCooler HP defrosting free reversible heat pump unit

In heating mode, the new DX coil positioning enables a control algorithm that always maximises the temperature efficiency of the thermal wheel and only uses the heat pump to top up the supply air temperature when needed, something that significantly increases the unit's Seasonal Coefficient of Performance (SCOP).

In cooling mode, fresh air free cooling and night cooling are always prioritised before the DX cooling is activated. This fresh air operational sequence, together with the ThermoCooler HP's new higher DX evaporation temperatures, reduces the unit's latent cooling power and energy consumption, and provides pleasant cooling comfort with the lowest possible energy input.



Energy efficient operation

The diagram above illustrates how the thermal wheel and the reversible heat pump first work in sequence at higher ambient temperatures, and then start working in parallel when the thermal wheel alone cannot provide 20°C supply air. This example is taken in a Greater London climate with an annual average temperature of 10°C.

Improved sustainability and 3 out of 3 available BREEAM credits

As the UK market also drives towards lower GWPs and higher sustainability, the new product has been designed to operate with R454B refrigerant, which significantly lowers the relative heat pump GWP by 78% and 31%, respectively, when compared to R410A and R32 machines.

BREEAM is a widely-recognised third-party certification system used to specify and measure the sustainability performance of buildings. The new R454B DX cycle design, smart volume versus power ratio and integrated automatic leak detection system means ThermoCooler HP R454B qualifies for all 3 out of 3 available BREEAM credits under Pol 01, Impact of Refrigerants, a unique achievement from an AHU with integrated reversible heat pump.

Customer simplification and full security

Since making life as simple as possible for our customers is a key objective for IV Produkt, the ThermoCooler HP R454B units are delivered factory-tested, CE-marked, and with a Declaration of Conformity, certifying that the units comply with all relevant European regulation and industrial standards. This means that customers can install the units in normal plant rooms through the CE marking, without further risk assessments for concerns such as A2L refrigerants

The integrated automatic leak detection system is always fully operational and will automatically start the AHU and bring any refrigerant concentrations down to completely harmless levels, even in the case of a total failure where all the refrigerants may have leaked out. This safety function overrides all other operating modes, even if the unit is shut off for the night or being held off by a building management system.

Crucially, ThermoCooler HP R454B also has ISO Environmental Product Declarations (EPDs) for embodied carbon.

Save investment cost and avoid operational problems – use correct design data!

No matter what technologies are used to generate comfort cooling, there are significant investment costs to be saved,

as well as lots of operational stability and flexibility to be gained, by using the correct cooling design data.

Since comfort cooling is there to provide a comfortable indoor climate, it is easy to understand why cooling design criteria is often over-exaggerated and put into specifications. However, this well-intentioned safety margin doesn't only risk increasing overall investment costs, it can also significantly reduce your operational stability and variable air volume (VAV) flexibility during part load.

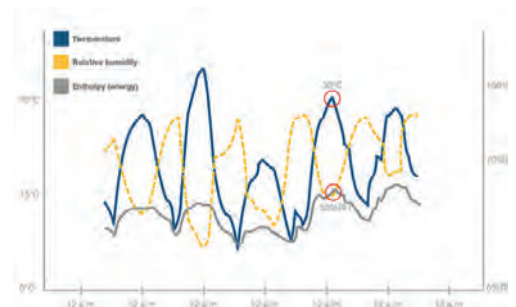
Warmer temperatures: lower relative humidity [RH]

One of the most common mistakes when specifying design criteria for cooling is the incorrect assumption that maximum temperatures and maximum relative humidity occur at the same time, while they in fact are mirroring each other.

The graph below from a warm summer week in Greater London 2024 shows that even if both the temperatures and the relative humidities at times were higher, a design criteria of 30°C/50% RH would in fact handle the enthalpy needs for all actual design conditions.

Consider this: If you design to cool 1m³/s of outdoor air down to 16°C, and you change design criteria from 30°C/50% to the seemingly only slightly higher design criteria of 32°C/60% - you will need to invest in almost **55% bigger cooling capacity**.

With a 55% oversized cooling capacity, you will naturally face problems with operational stability and temperature control during your lower part-load operation, and in fact, the vast majority of all running hours for comfort cooling are part-load, so it is best to design systems to the correct cooling design data!



Enthalpy profile on a day in London with temperature and RH relationship

For more information, visit <https://www.ivprodukt.com>



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Cooling the hotspots: why smarter switching is transforming efficiency

By Darren Watkins, Chief Revenue Officer at VIRTUS Data Centres

As AI and high-performance computing continue to reshape the data centre landscape, operators are under immense pressure to reduce power consumption and maintain thermal stability. Cooling, long seen as a support system, has become a central pillar of sustainable data centre design. But one critical factor is often overlooked: the network switch itself, and how its performance directly affects cooling demands.

The overlooked link between switching and cooling

Every byte of data that moves within a data centre must pass through network switches, and these switches are far from passive. In traditional designs, switching involves constant conversion of data signals between optical and electronic formats - a process that not only consumes significant power but also generates substantial heat.

This heat doesn't disappear - it becomes part of the data centre's thermal load, increasing the burden on cooling systems. As workloads become denser and more dynamic, especially in AI-rich environments, the switching layer is contributing to overall heat output more than ever. This means that any



gains in switching efficiency can have a direct and measurable impact on cooling performance.

A new approach: tackling heat at the source

To address this challenge, operators are rethinking not just cooling technologies but the very architectures that produce heat. One of the most promising breakthroughs comes from Finchetto, a UK-based innovator that has developed a fully passive, optical switch capable of reducing energy use, and by extension, heat generation by up to 50 times compared to conventional electronic switches.

By keeping data entirely within the optical domain, Finchetto's system eliminates the need for repetitive optoelectronic conversions that traditionally generate heat. The result is a dramatic reduction in thermal output at the network layer which allows cooling systems to work more efficiently and freeing up capacity for higher compute densities.

Innovations in cooling tech

While smarter switching tackles heat at the source, cooling systems themselves are evolving rapidly to meet new demands. Among the leading innovations are:

- Direct-to-chip liquid cooling, which brings coolant directly to the hottest components and drastically improves heat transfer rates compared to air cooling.
- Immersion cooling, where servers are submerged in dielectric fluids that efficiently absorb and dissipate heat, enabling much denser configurations.
- Rear-door heat exchangers and in-rack cooling, offering modular solutions that intercept heat at the rack level before it can impact the wider environment.
- AI-driven cooling control, which dynamically adjusts thermal management in real time to match actual workloads and environmental conditions. ➡

These cooling technologies, when paired with low heat switching innovations, create a powerful synergy reducing heat at both the point of generation and the point of extraction.

Heat reuse: turning waste into opportunity

Another significant trend is the rise of heat reuse schemes. As data centres become larger and more integrated into urban environments, operators are increasingly looking for ways to repurpose waste heat to benefit local communities. Efficient cooling, and critically, lower overall heat production through innovations like optical switching, makes it far easier to harness usable heat without excessive energy overhead.

District heating networks, greenhouses and industrial facilities are all prime candidates for receiving repurposed heat, helping operators achieve sustainability targets while delivering tangible community benefits.

The case for integrated design

In the past, cooling, power and network teams often operated in silos. But as workloads evolve and energy pressures mount, an integrated approach is essential. Smarter cooling alone can't solve the problem if other parts of the infrastructure, like switching, continue to produce avoidable heat.

The most efficient data centres today are those that align their cooling strategies with wider infrastructure choices, enabling each layer of the system to support overall efficiency. Optical switching is a prime example of how rethinking network design can cascade into lower cooling loads, smaller backup power requirements and improved facility performance.

Preparing for high-density workloads

The rapid rise of AI, big data, and high performance computing (HPC) means rack densities will only continue to grow. McKinsey claims that rack density is

expected to rise to 30 kW by 2027 as AI workloads increase and training models like ChatGPT can consume more than 80 kW per rack. To stay ahead, operators must build facilities that are both adaptable and efficient. This means investing not only in advanced cooling but also in low-heat, high-efficiency networking that minimises thermal output from the outset. Modular cooling designs, flexible pod layouts, and infrastructure that supports new thermal management techniques are now essential for long-term success.

Cooling has always been central to data centre performance, but its role is evolving. By embracing next generation switching technologies alongside leading cooling systems, operators can dramatically improve both energy efficiency and thermal performance.

Ultimately, the next generation of data centres will be defined not just by how much compute they can deliver, but by how intelligently and sustainably they can keep their cool. ❄️



Finchetto has developed a fully passive, optical switch capable of reducing energy use

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Safe handling of flammable refrigerants

A behind-the-scenes look at service equipment testing with Brad Bray, Managing Director of Evomart and UK distributor of CPS Products.

For many end-users, the safety and reliability of their equipment is taken as a given - a necessary condition for doing business. However, underpinning every compliant product is a regime of safety testing and validation procedures, which can be both fascinating and enlightening for those who take an interest in the process.

In this article we draw on the work of Holger König and Thomas Enkemann of Ref-Tech Engineering, and Timm Kolsch of CPS Products Europe, to bring technicians a rare glimpse into the world of equipment safety testing.

Safety is always essential but the growing use of hydrocarbon-based refrigerants, such as in classes A2L and A3, adds another dimension to safe working especially in relation to the ignition hazards of flammable refrigerants.

It's no secret that the F-Gas phasedown aims to reduce the use of hydrofluorocarbons (HFCs) and other fluorinated greenhouse gases (F-gases) in HVAC/R systems. It's all about reducing active use of gases classed as having high global warming potential (GWP). The safety challenge that comes with this transition is that refrigerant gases with lower GWP are often more flammable, and as such are susceptible to sparks and other sources of ignition.

Because of this, CPS Products has taken steps to both design equipment for safe operation with flammable refrigerants, and to have them independently tested for ignitability at the National Metrology Institute (PTB) in Germany in partnership with Ref-Tech Engineering.

Spoiler alert: The products that CPS has tested show no ignition is to be expected, but it's really interesting to see how they proved it.

So how do they know? By sharing these insights, we aim to demystify the sometimes opaque world of product testing and provide a



**Brad Bray, MInstSMM,
Managing Director of Evomart**

deeper understanding of what really goes on behind the scenes.

If everything always went according to plan, risks would always be minimal but it's because people make mistakes, that testing aims to take account of those more serious situations too.

CPS CC220 scales



The intended use of service equipment of course includes correct handling of approved refrigerants and avoiding refrigerant release, as required by current legislation. When correct protocols are followed, flammable atmospheres do not arise from refrigerant handling, neither near the equipment nor in supply lines. However, this all relies on technicians doing what they are supposed to do, proper installation and arrangement of the exhaust hose, and the equipment itself being leak proof – all of which are crucial to preventing accumulation of gas and formation of a flammable atmosphere – particularly in closed or poorly ventilated rooms.

According to the EU Machinery Directive, a risk assessment of service equipment, such as a vacuum pump or refrigerant recovery unit, must consider its intended use and also reasonably foreseeable misuse. This includes the possible release of refrigerant, and the possible creation of a flammable atmosphere, due to incorrect handling by the service professional. Although behavioural change measures such as training, warning labels and safe systems of work can go along way to reducing the frequency of human errors, mistakes can't be completely eliminated. And though 'technical protective measures' might be used to minimize ignition risk, by using forced ventilation of the working environment to prevent the formation of a flammable atmosphere, implementation of this is not something within the control of service equipment manufacturers.

However, the design of service equipment is within the manufacturer's immediate influence and so CPS Products Europe took the approach that testing the ignition properties of the equipment itself was worthwhile.

To really put the equipment through its paces, lab tests were carried out on service equipment to determine if a hazard or ignition effect could

be ruled out through misuse. This included mimicking the accumulation of R290 refrigerant that could arise, in closed and poorly ventilated rooms, as a result of incorrect practices during service work or maintenance. If a concentration above the lower explosion limit for R290 of 38 g/m³ is reached, an ignition might be triggered by any existing effective ignition source, with various consequences.

The lab test

With all of that in mind, an investigation of the ignition effectiveness of service equipment in a flammable atmosphere is justified. The investigation, then, aimed to determine whether the service equipment under examination provides a source of ignition in a flammable R290/air atmosphere, both during typical operating processes performed by the service technician as part of normal intended operation in accordance with operating instructions, as well as in the event of mishandling or incorrect practice.

CPS Products devices included in the tests were a scale, a fitter's aid, a vacuum pump, and a refrigerant recovery unit. Each device had unique correct operating instructions, which were all followed during the tests to simulate regular use in normal operation.

The tests were set up in a National Metrology Institute (PTB) test chamber that could contain flammable air-propane atmospheres. In these laboratory conditions, an ignitable mixture of 5.2 vol.% propane in air, served as the flammable atmosphere for testing.

Yes, we used robots

A desktop robot, itself tested for ignition safety, was used to operate the service devices within the test chamber. Ref-Tech Engineering programmed and extensively tested the operating procedures with the robot, ensuring the robot would reliably startup in the test chamber and carry out each test procedure without error. The procedures for operating and filling the test chamber were ensured by the National Metrology Institute (PTB) in Germany.

The devices were connected to supply and control lines, and a test run was carried out to ensure correct operation



CPS TRS21E refrigerant recovery unit

by the robot which was controlled by a computer outside the chamber, its movements within the chamber being tracked by a high-speed camera.

Within the closed test chamber containing the air-propane mixture, the operating procedures were repeated for each device. A high-speed camera documented any possible ignition event, while video recordings were made in the test chamber to document the execution of the operating procedures according to plan.



Operating robot within test chamber

Test results

Although safety first was clearly the order of the day for all testing, all tests carried out were without an ignition event, in spite of the high flammability of the atmosphere the tests were conducted in.

The test results prove that in the event of a faulty release of flammable refrigerant and the formation of an explosive atmosphere in a service situation or faulty delivery of an explosive mixture, no ignitability is to be expected from the devices tested.

However, this conclusion does not apply to poorly maintained, damaged or incorrectly repaired equipment. Furthermore, it should not be inferred from the investigation that operation of the service devices in an explosive atmosphere would be permissible, or lead to careless actions when servicing refrigeration systems with flammable refrigerant. The avoidance of releases and thus the prevention of the formation of explosive atmospheres is the most important measure to prevent accidents, especially since the presence of other effective sources of ignition cannot be ruled out.

Summary

We were obviously delighted with the result. This testing demonstrates CPS Products' unwavering commitment to ensuring the highest standards in their equipment. By prioritising this testing and publishing the results, CPS Products Europe has upheld the company's reputation for excellence in HVAC/R technologies.

A more detailed report can be found here: https://www.evomart.co.uk/wp-content/uploads/2023/11/R290-EN_06SEP2023_Web.pdf



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Two chances to WIN with Clivet at InstallerShow

Clivet is giving visitors to its stand at InstallerShow the opportunity to win two top prizes.

Visitors to Stand 5B46 at NEC Birmingham (June 24-26) will get the chance to: Attain the fastest lap time on Clivet's stand SuperBike to WIN a VIP race day ticket to see Mikey Hardie #93 race in the British SuperBikes

Plus, everyone who registers at the show for the new Clivet Club will go into a prize draw to WIN a factory visit to Clivet HQ in Italy, including a trip to Venice!

Don't forget to join Clivet at Stand 5B46 for the chance to WIN! 🏁

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Showtime at the NEC

We're excited to confirm that Heat Pumps Today & Renewable Energy Installer will be exhibiting at this year's InstallerSHOW, taking place from 24-26 June at the NEC Birmingham.

You'll find us at stand 5B70, where we'll be championing the latest in low-carbon heating, renewables, and installer-led innovation.

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ROINTE LAUNCHES FIRST INVERTER FOR HOME HEATING

Rointe says it is setting a new standard in climate control with the launch of the world's first inverter for electric home heating. While other brands stick to outdated ON/OFF systems, Rointe's INVERTER SMART ADAPTIVE technology offers a major leap forward — combining artificial intelligence, real-time responsiveness, and energy savings in one intelligent system.

This innovation, developed entirely by Rointe's in-house R&D team, learns from user habits and optimizes heat output accordingly. It delivers results that speak for themselves: 25% faster heating, 35% more stable temperature control, and 10% more energy efficiency. Compared to conventional radiators, users can enjoy up to 65% energy savings, immediate comfort, consistent temperatures, and longer product lifespan.

Rointe radiators also support Low Surface Temperature (LST) standards, offering safe, customizable surface settings—ideal for homes, care environments, and public spaces.

Paired with the new ROINTE NEXA app, users can remotely control, schedule, and monitor all devices. Features include: turning on heating before arriving home, adjusting power output remotely (reducing consumption by up to 30%), and smart modes like Night and Away, ensuring comfort while minimizing costs.

For centralised control, the GENIUS thermostat introduces two powerful modes. Zone Manager Mode lets users manage all devices in a room from one wall-mounted point. Smart Manager Mode uses sensors to maintain even temperatures and avoid overuse — perfect for large homes, offices, or hotels.

Designed to support sustainability, all Rointe products align with UN Sustainable Development Goals, significantly cutting electricity use and CO₂ emissions.

Celebrating 40 years of innovation, Rointe continues to lead the way in intelligent, efficient climate control across global markets.

The result? A heating system that doesn't just warm your home — it learns, adapts, and optimises your comfort.

<https://rointe.com/en/>



CARRIER SHOWCASES RENTAL INNOVATIONS AT CUSTOMER EVENT

Carrier welcomed customers to an exclusive Innovation Day at its Paisley facility. The event, attended by key industry professionals, provided an interactive experience showcasing the company's expanding capabilities and commitment to delivering cutting-edge rental solutions, including Pumps & Power provided by SLD, a Carrier company.

With a strong focus on education and engagement, the event was designed to introduce customers to a broader range of equipment and services beyond their traditional rental needs. Live demonstrations featured Carrier's latest HVAC, power, solar and hybrid rental solutions, including energy-efficient generators and high-capacity battery storage systems, alongside state-of-the-art electric pump technology. All equipment can be integrated into existing site systems and monitored to support carbon reduction reporting. Monitoring equipment automatically calculates carbon reductions based on decreased fuel consumption and generates reports, measuring the reduction in kilograms of CO₂.

"Many of our customers are familiar with parts of our offering, but this event allowed us to demonstrate the full spectrum of rental solutions we provide, including HVAC, Power, Pump and Energy Solutions," said Chris Hughes, Regional Sales Manager - North, SLD Pumps and Power. "It's about highlighting the innovation behind our products and ensuring customers know they can turn to us for a comprehensive suite of services."

"The day wasn't just about showcasing equipment, it was about strengthening relationships and demonstrating how our solutions can support our customers' evolving needs," said Russell Boswell-Munday, Sales Director, Carrier Rental Systems UK&I. "By bringing together power, pumps, and temperature control under one rental offering, we're helping businesses operate more efficiently and sustainably."

For more information on Carrier's innovative rental solutions, visit:

<https://www.carrierrentalsystems.co.uk/>



FUJITSU BOOSTS WARRANTY AND COMFORT CLUB BENEFITS

Fujitsu General Air Conditioning UK is strengthening its commitment to customers by introducing significant updates to its warranty programme, alongside key improvements to its Comfort Club rewards scheme.

Effective from April 1 and as part of ongoing efforts to support installers and distributors, Fujitsu has extended its warranty offerings to ensure greater peace of mind and long-term value.

The minimum warranty for Residential Air Conditioning (RAC) and Packaged Air Conditioning (PAC) systems has been increased from 3 years to 5 years, extendable to 7 years, offering improved coverage at no additional cost. Meanwhile, Variable Refrigerant Flow (VRF) warranty levels remain unchanged, with a standard 3-year warranty extendable to 7 years.

Elevating support through training and investment

Fujitsu's enhanced warranty programme rewards those who invest in professional training. Installers and contractors can qualify for extended warranties by ensuring their employees complete annual training courses. This ensures that customers receive service from highly skilled professionals while reinforcing Fujitsu's commitment to quality. Customers who meet the training requirements for the most comprehensive 7-year coverage will earn Infinity Partner status, gaining recognition as Fujitsu-accredited specialists.

Comfort Club: more flexibility, more rewards

In addition to warranty improvements, Fujitsu is making its Comfort Club rewards programme even more accessible. Members can now nominate unlimited distribution partners, providing greater flexibility in sourcing products. Other key updates include:

Voucher Points – All points remain valid for 12 months, running from April to March. Points accrued during March will automatically be carried over.

Expanded rewards – The introduction of VEX eVouchers allows members to redeem rewards from over 150 brands.

Streamlined claims process – A simplified online registration and claims system makes it easier than ever to manage rewards.

Commitment to long-term support

"We recognise the importance of providing not just high-quality products but also long-term value and support," said Deane Flint, Chief Operating Officer at Fujitsu General Air Conditioning UK. "By enhancing our warranty and Comfort Club programmes, we are ensuring that our partners and customers receive the best possible service, benefits, and peace of mind."

CONEX BÄNNINGER REBRAND CELEBRATES 115-YEAR ANNIVERSARY

Conex Bänninger has undergone a corporate rebrand to coincide with its 115th anniversary as a world-class manufacturer of fittings and valves.

The new-look image was unveiled at ISH, the world's leading exhibition for HVAC and water, staged in Frankfurt. Since 1909, Conex Bänninger has produced more than 24 billion fittings for homes and industries across the globe.

Martin Smith, Business Unit Director – UK & Ireland, commented: "The new branding has been created to mark this major milestone in the company's history. It incorporates a modern refresh on the standard Conex Bänninger logo bringing with it a new modern look to move forward with. To celebrate our anniversary, we will be using numerous logo variations highlighting '115 Years'.

"So much has been achieved in the company's history leading to a global reach across Europe, North America, Far East, Australasia and the Middle East. Conex Bänninger's success has been built on innovation through the development of such products as the industry leading >B< Press profile system, which allows installers to work 'flame-free', >B< Sonic (a quick and easy to install flame-free push fit fitting); and the award winning

>B< MaxiPro, designed for the air conditioning and refrigeration market." Looking back to the 1950s, the company launched its uniquely designed rib-nut. This joint provides strength, grip and engagement without the need for additional sealant.

Investment in technology, its people and customer service

Conex Bänninger has two advanced production facilities: one a fully equipped production facility making thousands of copper and red brass fittings every day, as well as producing bespoke, often complex special orders for Original Equipment Manufacturers (OEMs). The other has received significant investment, transforming the plant into a world-class centre of excellence and innovation for copper fittings production.

Conex Bänninger applies a responsible approach to sourcing, manufacturing and distribution. Martin Smith comments: "Products undergo rigorous testing across all stages of development from design through to production. These processes include pressure and temperature cycling, shock resistance and endurance trials. All products exceed international regulations including global certifications such as DVGW, BSI Kite Mark, WRAS and IAPMO.

"With offices and sales teams across key markets, our experts provide technical support, training, and in-depth industry knowledge - ensuring global reach with local expertise."



The new look was launched at ISH

PRODUCTS & SERVICES

WATCH ASSEN BRITISH SUPERBIKES WITH CLIVET

Clivet is giving its customers the chance to win VIP tickets to the Assen British Superbikes event in the Netherlands in September.

As a sponsor of rider Mikey Hardie #93, Clivet will provide flights, hotel and tickets for two, plus access to the pit lane, race merchandise and VIP hospitality.

Customers can enter by submitting photographs of a Clivet installation.

How to enter

Email m.kiki@clivet.com with pictures of your installation. Include details of where the installation is and if it was residential or commercial

Rules

1. The competition will run all summer and the organisers' decision will be final.
2. Clivet will draw the competition before the Assen race day, date TBC.



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STEPHEN GILL, HEAD OF INDUSTRY INSIGHTS, HAIER HVAC SOLUTIONS

Haier HVAC Solutions has appointed refrigeration specialist **Stephen Gill** as its Head of Industry Insights.

Gill, who founded World Refrigeration Day in 2019 and has extensive industry experience, is expected to play a key role in representing Haier at a range of industry forums, events and on professional bodies.

A past President of the Institute of Refrigeration (IOR), he currently serves as Vice President of the ASHRAE UK Chapter, having previously served as its inaugural President, and has served as a board member of ACRIB (The Air Conditioning and Refrigeration Industry Board). He is also involved with several United Nations-led initiatives, including the UN Cool Coalition and UNEP's Women in Cooling programme.

Haier HVAC Europe CEO Bob Cowland said: "We are extremely excited to have Stephen Gill come on board. He is an exceptional figure and his reputation as a visionary leader and his deep understanding of the HVAC landscape will be instrumental to our own developments and helping us to give back to the industry."

Haier describes Gill's appointment as a further expansion of the knowledge base within its European HVAC business. In February of this year, the company welcomed industry expert Graham Hendra as European Heat Pump Development Officer.



www.haierhvac.eu

JAMES BOSWELL, MANAGING DIRECTOR, TF SOLUTIONS

RACHP wholesaler TF Solutions has appointed **James Boswell** as its new Managing Director.

Boswell has spent nearly a decade within the Travis Perkins Group, including a period as Operations Director at TF Solutions. He returns to the business after a successful tenure as Regional Director for pipeline and heating specialist BSS in the South and South West.

He said: "TF Solutions has a strong foundation. My goal is to simplify our approach, reinforce our core values, and provide a clear direction for the business."

"We will continue to focus on our strengths, and what our customers know they can expect from us – exceptional customer service, strong stock availability, next-day delivery, and local relationships – while also expanding our technical capabilities to support our customers' larger and more complex projects."



www.tfsolutions.co.uk

JAMES COWAN, TRAINEE TECHNICAL SUPPORT ENGINEER, BITZER UK

James Cowan has joined BITZER UK as a Trainee Technical Support Engineer. In addition to supporting UK customers, he is also helping to strengthen links with the manufacturer's German headquarters.

Cowan is currently undertaking training through BITZER's global training network and will support in delivering and developing technical content for specialist compressor masterclasses.

He said: "It's been a fantastic start to my career. The training has been incredibly in-depth, and I've enjoyed getting hands-on with everything from compressor diagnostics to pricing and technical selections."

Technical Manager Liam Davies said: "James has quickly proven himself to be a great asset to the team. His confidence, customer rapport and technical understanding are outstanding, and his contribution to both technical delivery and international collaboration is already being felt."



www.bitzer.de/gb/en/

BARRY WHYLER, REGIONAL SALES ENGINEER, AERMEC UK

Aermec UK has appointed **Barry Whyler** as its newest Regional Sales Engineer, with responsibility for the Midlands area.

Whyler has over 30 years' experience and has built up in-depth knowledge of the HVAC industry. His key skills and experience are based around system concept and design in respect of both chilled water and heat pump systems, along with airside design/control.

In his new role at Aermec, Whyler will identify and create new partnerships whilst being tasked with specifying Aermec's extensive range of chillers, heat pumps, AHUs and fan coil units with mechanical design consultants. He will work to foster strong relationships and assist customers with solutions that help meet energy goals and transition towards the government's Net Zero targets.

He said: "I was attracted to Aermec as it is an established family run business with a reputation for innovation and great customer support. This is also an exciting time to be joining Aermec who have a dynamic product range that I believe to be market-leading with huge potential for growth."

David Evans, National Sales Manager, said: "We are really looking forward to Barry supporting the business, developing new partnerships and opportunities whilst providing added value for our customers."



www.aermec.co.uk



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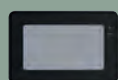
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