

Refindustry

REFRIGERATION INDUSTRY MAGAZINE

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Commercial Refrigeration Special Edition

Introducing the magazine “Refrigeration Industry”



Welcome to the 9th issue of our magazine!

We're pleased to present this Commercial Refrigeration Special Edition, focused on how retail and foodservice cooling is being redesigned around natural refrigerants, measurable energy performance, and smarter control.

Across the market, the transition away from high-GWP refrigerants is accelerating, with wider adoption of CO2 systems and hydrocarbon-based plug-in equipment—while efficiency is increasingly driven by “systems thinking,” from airflow and heat transfer to controls, insulation, and cabinet design. Connected refrigeration is also evolving into an operational layer for stores, turning monitoring and diagnostics into actionable performance across fleets.

Included in this special edition:

- *A technology review of key commercial refrigeration trends and solution priorities*
- *A EuroShop 2026 preview based on what exhibitors say they will present*
- *Case studies and application examples focused on real-world deployment and performance outcomes*

If you'd like to learn more, share feedback, or contribute your insights, please don't hesitate to reach out to us by [email](#)—or contact me directly on [LinkedIn](#).

Warm regards, Editor-in-chief

Sergei Mukminov.

The concept of the new magazine:

1. In today's fast-paced world, staying updated with the latest developments in the refrigeration industry can be challenging. Our mission is to simplify this by providing the most critical news and insights in a single quarterly issue.
2. The magazine is published exclusively in digital format, with pages designed in a landscape orientation for optimal readability on screens.
3. Our magazine is interactive, allowing you to follow internal content links, as well as external links to detailed articles on our website and advertisements.
4. All news featured in the magazine can also be easily found on our website by title.
5. The magazine is released once every quarter.



Commercial Refrigeration Special Edition



EuroShop 2026 highlights

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The case studies: Daikin Europe, AHT Cooling Systems, Secop



Mostra Convegno Expocomfort 2026

We recommend reading in a PDF viewer's full-screen mode.
Links may not work in a browser.

New Products

Fairland introduces COP 7.0 AI heat pump with solar-ready integration



Fairland has launched the AI R290 ATW Heat Pump, which the company claims is the first air-to-water model on the market to achieve a COP (Coefficient of Performance) of 7.0.

Designed for residential heating and hot water, the system integrates AI-powered control, solar energy compatibility, and remote management features.

According to Fairland, the high COP rating is enabled by a proprietary AI inverter innovative structural design and a liquid cooling system that reuses the heat.

Copeland launches GO Nano BLE logger for cold chain monitoring



Copeland has introduced its new GO Nano BLE temperature monitoring solution, designed for individual pallet- and zone-level tracking across global perishable goods shipments. The device aims to enhance visibility in the cold chain, particularly for high-value, temperature-sensitive commodities.

The GO Nano BLE logger uses Bluetooth low energy (LE) technology and can integrate with Copeland's new GO Nano Gateways or the Oversight Connect mobile app.

Thermo King Introduces New Sustainable Container Refrigeration Solutions



Thermo King, a brand of Trane Technologies, has introduced the new Magnum Eco refrigeration unit, developed to deliver energy-efficient and reliable performance for global shipping lines.

The unit builds on the Magnum Plus platform and incorporates technical upgrades to support sustainable and cost-effective operations.

The Magnum Eco features a next-generation evaporator, enhanced compressor, and an electronic expansion valve.

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Masterflux introduces Nevada compressor for mobile refrigeration systems

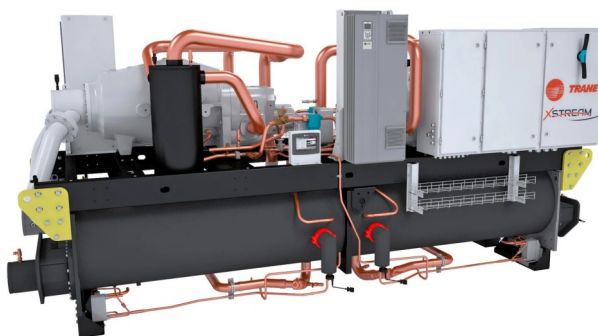


Masterflux by Tecumseh has launched its new variable-speed rotary compressor, Nevada, designed for mobile refrigeration and electric vehicle (EV) applications using natural refrigerants.

The Nevada compressor is built for robust performance in extreme environments, ensuring reliable and continuous operation in demanding transport refrigeration and mobile cooling use cases. It is suited for mobile containers, food trucks, and solar-powered cooling systems, offering a quiet and energy-efficient onboard solution.

Trane launches high-temperature water-source heat pump for industrial use

Trane has introduced the RTWF HT, a high-



temperature water-to-water heat pump designed for industrial heating and cooling applications.

Built on the company's XStream platform, the unit delivers hot water up to 105°C and heating capacities up to 1.5 MW, offering a solution for sectors seeking to reduce reliance on fossil fuels.

The new model follows the launch of Trane's City RTSF HT and expands the company's portfolio of heat pump systems.

Daikin to Launch Energy-Saving 'Ururu Sarara X' Room Air Conditioners in Japan

Daikin Industries will release its new room air conditioner series, Ururu Sarara X (R Series), on November 1, 2025, in Japan. The models focus on improving energy efficiency during both high-power start-up



and stable long-duration operation, which accounts for around 80% of total run time.

The new units offer high energy-saving performance, particularly in the 4.0 kW (for approx 14-tatami rooms) and 5.6 kW (for approx 18-tatami rooms) classes.

GEA launches AI-based energy optimization tool for cooling and heating systems

GEA has introduced GEA OptiPartner Blue-Red Energy, a cloud-based software solution designed to optimize the performance of compressors, chillers, heat pumps, and entire cooling plants. The digital application uses intelligent algorithms to deliver real-time system optimization, aiming to reduce energy consumption and carbon dioxide emissions.

The solution relies on artificial intelligence (AI) and machine learning (ML) to continuously analyze plant and environmental data.

Danfoss launches Cool Ctrl evaporator control panels for industrial refrigeration



Danfoss has introduced Cool Ctrl, a new line of evaporator control panels aimed at simplifying the design, installation, and commissioning process for industrial refrigeration contractors and system integrators.

The Cool Ctrl range offers both Standard and Advanced models, designed to reduce the time and complexity involved in refrigeration system upgrades or new installations.

According to Jay Lyon, Product Manager at Cool Ctrl System Controls, the panels address key challenges faced by contractors by providing pre-configured solutions that streamline setup.

G&D Chillers launches GDX Series for data center cooling in the U.S.



G&D Chillers has introduced the GDX Series, a new line of chillers designed for data center applications, including hyperscale and AI workloads.

The Oregon-based company announced that the systems are equipped with Danfoss Turbocor oil-free magnetic bearing compressors to deliver high efficiency and reliability in mission-critical environments. The GDX Series includes three configurations: air-cooled (GDX-Air), free-cooling (GDX-Cool), and water-cooled (GDX-Water).

Carrier launches new Coolant Distribution Unit for UK data centres

Carrier has introduced a new Coolant Distribution Unit (CDU) designed to help UK data centres meet growing cooling de-



mands while improving energy performance, system uptime and space utilisation.

The CDU is part of Carrier's QuantumLeap portfolio of purpose-built data centre solutions and supports the expansion of liquid-cooled IT environments.

The new CDU enables scalable deployment of liquid cooling, helping operators reduce Total Cost of Ownership (TCO) through energy savings and improved system control.

Market News

EU Commission drops planned Heat Pump Action Plan



The European Commission has officially abandoned its Heat Pump Action Plan, initially announced in 2023.

The initiative aimed to accelerate the deployment of efficient heat pumps in buildings, industry, and local heat networks as part of the EU Green Deal and REPowerEU objectives.

Despite strong support from a majority of EU Member States, over 60 industry CEOs, and civil society organisations, the initiative has now been formally discontinued.

Fujitsu General to Rebrand as GENERAL Inc. from 2026



Fujitsu General announced it will change its trade name to "GENERAL Inc." effective January 1, 2026, and adopt a new brand symbol under the same name.

The rebranding aligns with the company's 90th anniversary and marks a new phase in its global growth strategy. The name "General" has been used as a trademark by the company since 1946 and is currently registered in more than 120 countries and regions.

Daikin Applied acquires US-based Chilldyne to expand data center cooling portfolio

Daikin Applied Americas has acquired Chilldyne, a US company specializing in negative pressure liquid cooling systems for high-performance and AI data centers. The acquisition enhances Daikin Applied's data

center offerings with direct-to-chip liquid cooling technology, aiming to meet the growing demand for high-efficiency, resilient cooling in hyperscale and AI-driven environments.

Chilldyne's patented liquid cooling distribution unit CDU uses a negative pressure system to deliver chip level cooling through cold plates designed to reduce.

Arneg Group launches new subsidiary in Croatia



The Arneg Group has announced the launch of Arneg Croatia, a new company established to distribute its products and manage related services across the country.

Located in Croatia, the new subsidiary will serve as a local hub for commercial operations and technical assistance. Arneg Croatia will provide direct support to customers

and, in collaboration with local refrigeration partners, offer installation services when needed.

Fatal explosion involving flammable refrigerant reported in Nigeria



A fatal explosion involving a flammable refrigerant was reported on November 8, 2025, in Plateau State, Nigeria, according to information provided by Ahmed Ibrahim Ibrahim, National President of the Nigerian Association of Refrigeration and Air Conditioning Practitioners (NARAP) and of its National Executive Committee.

The incident resulted in the death of a refrigeration technician identified as Peter and follows earlier reported explosions in August and September. NARAP stated that the technician was alone at the workshop at the time.

Danfoss acquires Italy's Palladio Compressors to expand screw technology range



Danfoss has acquired Italian manufacturer Palladio Compressors, integrating screw compressor technology into its portfolio to support large-scale HVAC/R applications using natural and low-GWP refrigerants.

The acquisition follows a two-year collaboration between the two companies focused on high-lift heat pumps and large cooling systems.

Danfoss stated that Palladio's screw compressors complement its existing technologies, particularly for industrial heat pumps and large commercial and industrial refrigeration, enabling advanced high-temperature solutions.

Daikin Applied expands data center cooling capabilities with new products, acquisitions and facilities



Daikin Applied has announced a broad expansion of its data center cooling solutions, supported by new technologies, acquisitions, production facilities, and a dedicated global business unit.

The company aims to meet the increasing demands of hyperscale and AI-driven data centers with end-to-end cooling architectures designed for reliability, scalability and energy efficiency.

Key among the product developments is the Magnitude® WME-C Quad Chiller, described as the industry's largest capacity chiller with magnetic-bearing technology.

WORLD OF VALUES



22-26 FEB 2026
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HALL 16

Every innovation has a beginning. For us, innovation starts with our values.

Our values come before all our innovations and milestones, and before every refrigerated display we develop.

Vision, inspiration, change and service are our starting point and our direction.

Since 1963, they have been the compass guiding our journey worldwide. Every day, our values inspire new ideas and determine every choice we make.

We'll bring all of this to EUROSHOP 2026. And something more.

Come and see what's new. Together we can build the future of retail.



arneg

The Incold logo features a blue snowflake icon to the left of the word "incold" in a blue, lowercase, sans-serif font.

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Pfenning Logistics expands in Germany with new cold storage facility



Pfenning logistics group has launched construction of its new cold chain logistics center “freshcube Osthessen” in Bad Hersfeld with a symbolic groundbreaking ceremony.

The facility will cover a total area of approximately 40,000 m², including 12,000 m² of temperature-controlled storage space and an additional 1,100 m² for office and staff areas. The freshcube Osthessen is designed with a flexible storage concept that accommodates various temperature zones, ensuring an unbroken cold chain.

Copeland and Daikin expand joint venture in Europe for heat pump components



Copeland and Daikin said they are expanding their existing joint venture into Europe to supply residential heat pump solutions.

The companies said the cooperation will introduce inverter swing rotary compressors, power electronics and controls designed specifically for European residential heat pumps.

The companies linked the move to Europe’s transition away from fossil fuels and rising demand for residential heat pumps alongside sustainability targets.

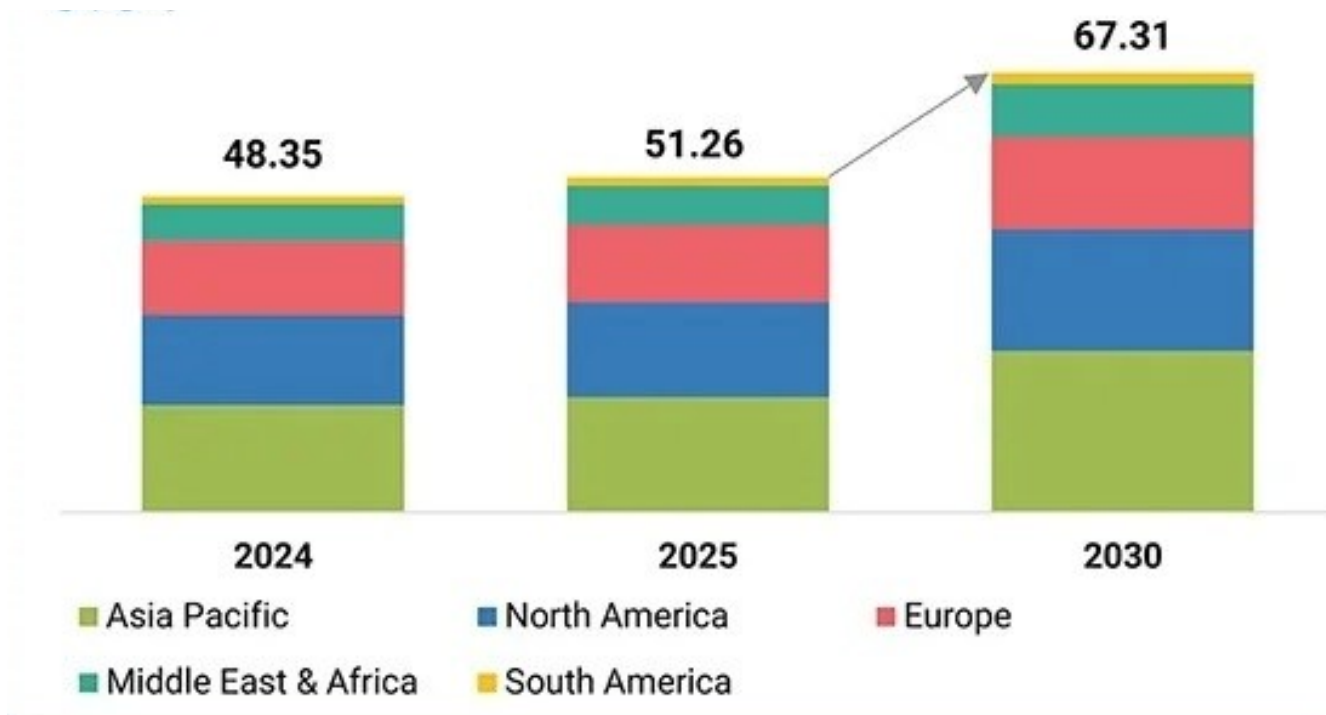
Munters receives \$82M chiller order for US data center

Munters has secured an order worth 82 million USD (approximately 775 million SEK) for its Geoclima Circlemiser chillers, including service and commissioning.

The order comes from a US-based data



center colocation provider focused on high-performance computing for artificial intelligence. The chillers will be deployed at a large AI facility serving a hyperscale tenant, with deliveries scheduled throughout 2026.



Market Research

Commercial Refrigeration Market Outlook from Seven Recent Reports

Recent market-research briefs published on RefIndustry point to steady growth in commercial refrigeration through 2030, supported by food retail, hospitality, pharma, and logistics demand.

The same set of reports highlights where

investment is concentrating—transport refrigeration, plug-in display cases, automation in frozen food processing, and “smart” specialty refrigeration across travel and onboard catering.

Commercial refrigeration market to reach USD 67.31 billion by 2030

MarketsandMarkets projects the global commercial refrigeration market will grow from USD 51.26 billion (2025) to USD 67.31 billion (2030) at a 5.6% CAGR.

Transport refrigeration is expected to lead by product type (32.1% share in 2024), reflecting growth in perishable trade and temperature-controlled logistics.

Fluorocarbons are projected to retain the largest refrigerant share, while hydrocarbons are forecast to be the fastest-growing (10.4% CAGR). Asia Pacific is expected to post the highest growth (7.0% CAGR) and the largest market share.

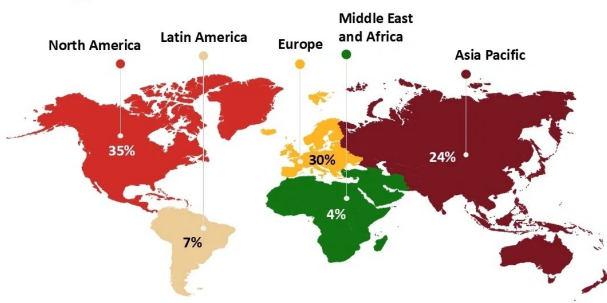
Global refrigerated display case market to reach USD 13.4 billion by 2030

Research and Markets forecasts refrigerated display cases will grow from USD 9.2 billion (2024) to USD 13.4 billion (2030) at a 6.4% CAGR. Plug-in cases are expected to lead, reaching USD 7.8 billion by 2030 with a 7% CAGR, while remote-operated cases are projected at 5.7% CAGR.

Drivers include demand for fresh and frozen products, energy-efficient systems, retail expansion in emerging markets, and adoption of smart monitoring and eco-friendly refrigeration technologies.

The report values the U.S. market at USD 2.0 billion (2024) and projects China to reach USD 1.8 billion (2030) at 9.5% CAGR.

Frozen food processing machinery market to reach USD 33.48 billion by 2034



Towards FnB projects frozen food processing machinery will expand from USD 23.52 billion (2025) to USD 33.48 billion (2034) at a 4% CAGR.

North America held 35% share (2024), while Asia Pacific is expected to be the fastest-growing region. Freezing equipment led by type (34% share, 2024), and meat/poultry/seafood represented 33% of revenue (2024). IQF technology held 29% share (2024), and semi-automated systems led (42% share, 2024), with fully automated lines expected to expand.

The report notes increasing use of AI/automation for quality control and predictive maintenance, and highlights recent examples of AI-enabled inspection and new frozen-food capacity.

Global Minibar Refrigerator Market to Grow Steadily Through 2030



Research and Markets estimates the global minibar refrigerator market at USD 180–350 million (2025) with 3%–6% CAGR through 2030. Growth drivers include tourism, energy efficiency demand, and urbanization, with increased preference for compact, silent, energy-saving units.

The report cites hotel revenues up 7% (2023) and e-commerce appliance sales up 9% (2024), and references a long-term rise in urban population to 68% by 2050. By technology, absorption minibars (silent operation) are forecast to grow 3%–6%, with thermoelectric and compressor-based units also growing. It flags opportunities tied to global travelers and challenges including cost of efficient tech and refrigerant regulatory pressures.

RV Refrigerator Market to Reach USD 2.59 Billion by 2032

Research and Markets projects RV refrigerators will grow from USD 1.46 billion (2025) to USD 2.59 billion (2032). The report links growth to energy-efficient appliances, smarter connectivity, and innovation for mobile/off-grid use.

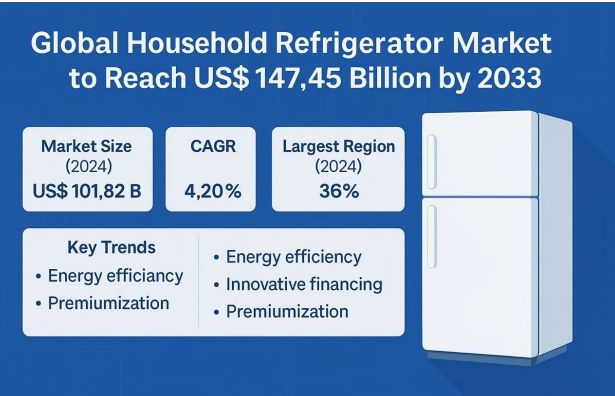
It spans absorption (DC-only and three-way), compressor (AC/DC), and thermoelectric technologies, with capacities from under 50 L to over 200 L. Noted trends include solar-compatible DC compressor units, dual-zone temperature control, lightweight composite materials, touchscreen interfaces, and smartphone monitoring. It also points to a shift toward R600a refrigerants and quieter, low-vibration compressors, aligning sustainability goals with comfort expectations.

Smart galley refrigeration market to reach USD 2.37 billion by 2033

Research Intello forecasts smart galley refrigeration will grow from USD 1.15 billion (2024) to USD 2.37 billion (2033), driven by marine and aviation demand for energy-efficient, connected systems. The report highlights IoT connectivity, remote diagnostics, energy optimization, and sensor-driven

controls for precise regulation, including digital temperature control with $\pm 1^{\circ}\text{C}$ accuracy. It also cites modular designs, embedded diagnostics, and refrigerants such as R-600a and R-1234yf, plus cloud-based fleet management in some systems. Key barriers include high upfront costs, integration complexity with legacy systems, cybersecurity risks, and training needs.

Global Household Refrigerator Market to Reach USD 147.45 Billion by 2033



Astute Analytica projects household refrigerators and freezers will rise from USD 101.82 billion (2024) to USD 147.45 billion (2033) at 4.20% CAGR. The report links market evolution to stricter energy-efficiency regulation (including California, South Korea, and the EU) and broader adoption of high-efficiency technologies such as variable-speed inverters and dual-evaporator

systems. It notes 48 million microcontroller-based smart compressors shipped in 2024, rising premium feature demand, and continued importance of chest freezers in regions with unstable power (including 1.4 million deep-freezer units imported by Nigeria in 2023). It also points to regionalized manufacturing, wider use of R-600a, Europe’s transition toward R-290, and early-stage alternatives like solid-state and magnetocaloric concepts.

HVACR Trends 2025



Regulation & Standards



Refrigerant Transition



Safety Readiness



Digital Monitoring



Components & Validation



Cold Chain & Logistics

Market review

2025 in Refrigeration — What Changed, What Mattered, What's Next

Refindustry has released its 2025 year-in-review, compiled from the most-read and most impactful updates published on <https://refindustry.com/>. The review cap-

tures how the industry moved from “refrigerant choice” discussions to real-world transition execution—where compliance pathways, safety engineering, component readiness, service capacity, and digital monitoring determine outcomes on projects and in day-to-day operations.

What shaped 2025 in practice:

- Regulation and standards became less linear, with reviews, petitions, and

evolving timelines pushing companies to plan for multiple scenarios.

- Safety readiness moved to the core of system design and service, driven by wider deployment of A2L refrigerants and hydrocarbons and rising attention to leak detection and verification.
- Environmental scrutiny widened beyond GWP, with more focus on lifecycle impacts and chemical-policy pressure that can influence long-term refrigerant strategies.
- Digital operations accelerated, with continuous monitoring and analytics increasingly seen as practical tools for leak reduction, reporting, and performance stability.
- Component and platform innovation remained central, as compressors, validated testing, and equipment design translated transition goals into real installations.
- Cold chain investment continued to grow, with decarbonisation framed more often as project-level engineering and measurable performance.

[Get the full report](#)

Sustainability

Commercial Refrigeration Special Edition

As retailers and foodservice operators push for lower operating costs and a smaller climate footprint, commercial refrigeration is being redesigned from the cabinet up. The transition away from high-GWP refrigerants is accelerating, with wider adoption of CO2 systems and hydrocarbon-based plug-in equipment. In parallel, efficiency is moving from “component upgrades” to systems thinking—optimised airflow, improved heat transfer, smarter controls, and better-insulated cabinets and doors.

At the same time, connected refrigeration is becoming an operational layer for the store. Monitoring, diagnostics, and data-driven optimisation are no longer limited to food safety and uptime. They increasingly support day-to-day execution: maintaining intended performance across fleets, reducing service events, and improving compliance and availability at the point of sale.

This Commercial Refrigeration Special Edition brings together technology direction, exhibitor announcements, and field insight that reflect where the market is heading:

natural refrigerants, measurable energy performance, and store-wide control concepts built on visibility and actionable data.

Included in this special edition:

- A technology review of key commercial refrigeration trends and solution priorities
- A EuroShop 2026 preview based on what exhibitors say they will present
- An expert view on how connected cooler fleets turn “cooling” into retail execution intelligence
- A collection of real-world case studies, highlighting practical applications from companies such as Daikin Europe, AHT Cooling Systems, Secop



Q4 2025 Launches

Arneg introduces Vendome refrigerated counter with enhanced transparency and ergonomics



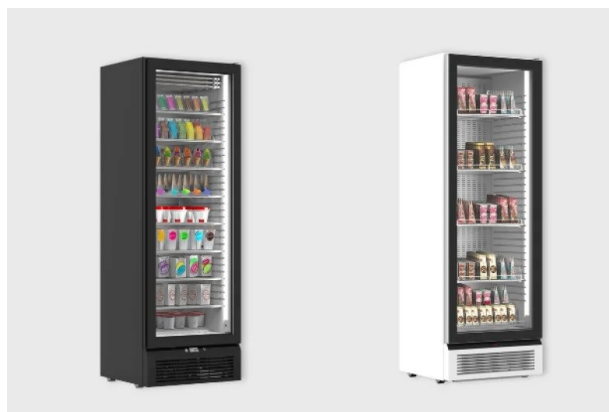
Arneg has launched Vendome, a refrigerated serve-over counter developed from its Baden model, designed to improve product visibility and ergonomics in food retail. The unit uses a minimalist layout to reduce visual barriers and provide panoramic visibility of displayed deli products.

Vendome features a partial front opening limited to the counter glass, intended to improve aesthetics while simplifying cleaning for staff. On the operator side, sliding glass doors support faster service and help maintain closed conditions on both sides to support product preservation and energy efficiency.

Arneg also highlights a lighting system de-

veloped to enhance product appeal while maintaining functional, modern styling.

Epta launches new Iarp Alba freezers for foodservice and retail



Epta has introduced two negative-temperature display cases under its Iarp brand: Alba 43 (static cooling) and Alba 45 (ventilated cooling), aimed at foodservice, retail, and Ho.Re.Ca. applications.

The cabinets increase glass surfaces and Total Display Area (TDA) to improve product visibility, while the ventilated version provides up to 40% more storage capacity. A redesigned condensing unit in the lower section targets improved airflow and energy performance, while maintaining Class C energy performance.

The units use up to 40% recycled-content plastics and support LineON digital monitoring for 24/7 remote tracking.

Copeland introduces CO₂ scroll compressor with dynamic vapor injection



Copeland has launched a transcritical CO₂ scroll compressor with dynamic vapor injection (DVI) technology in North America for distributed CO₂ refrigeration systems in food retail. The compressor is offered in fixed- and variable-speed versions and is intended for both new installations and remodels as the market transitions to lower-GWP refrigerants.

DVI injects high-pressure vapor within the compression cycle, reducing the need for parallel compression and helping simplify system design. Copeland states this ap-

proach can reduce component count, shrink piping and rack dimensions, and support easier installation and maintenance. Initial availability includes a 460 V model, with additional voltage options planned through 2026.

Liebherr launches new under-counter models for laboratory and healthcare use in the US



Liebherr USA has introduced a new generation of undercounter refrigerators and freezers for laboratories and healthcare facilities, designed for storing temperature-sensitive substances, pharmaceuticals, and flammable materials.

The models focus on precise temperature control, high temperature stability, and energy-efficient operation, supported by enhanced safety functions and advanced con-

nectivity. All units are certified under ENERGY STAR 2.0, and selected models comply with standards including DIN 13277, IEC 61010-2-011, NFPA 45, and NFPA 99. Network integration features enable digital temperature monitoring, centralized data recording, and real-time alerts for deviations.

The lineup is offered in Performance and Perfection series to address different precision and compliance requirements.

Hoshizaki Japan to Launch 66 New Models with Natural Refrigerants



Hoshizaki Corporation will launch 66 upgraded refrigeration products in Japan using HFC-free natural refrigerants, with sales starting from mid-December 2025 through its domestic sales companies. The rollout replaces R-134a and R-404A with isobutane

(R-600a) and propane (R-290), cutting refrigerant GWP by over 99%.

The range spans ice makers and dispensers, undercounter high-humidity refrigerators, and glass-door refrigerator/freezers, with updates such as improved cabinet design, inverter adoption, increased internal volume, and retrofit options for easier wastewater handling.

One cube ice maker model is scheduled to go on sale from January 19, 2026.

Reliable Solutions for Commercial Refrigeration



**V-Type
Condensers**



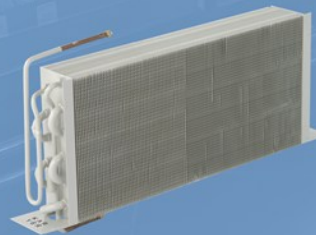
**Adiabatic
Cooling**



**Commercial
Condensers**



**Supermarket
Evaporators**



**Ceiling Type
Unit Coolers**



**Fruit and
Vegetable
Unit Coolers**





EuroShop 2026 spotlights CO₂ retail refrigeration and store-wide control

EuroShop 2026 takes place in Düsseldorf, Germany, on 22–26 February 2026. The show runs on a three-year cycle and brings together retail technology and in-store infrastructure topics that matter to food and non-food operators and their HVACR partners.

The exhibitor notes below reflect only what companies have publicly announced so far from the provided materials, grouped by the themes that appear in those announcements.

CO₂ and natural refrigerant refrigeration systems



Arneg Group presents multiple CO₂-focused system options for retail. Prisma is a CO₂ transcritical system family for mini-markets and small stores, designed for outdoor installation and available in normal and low temperature versions.

Booster integrates medium- and low-temperature refrigeration in a single CO₂ transcritical system for larger applications such as hypermarkets, distribution centres, and logistics platforms.

FREOR showcases commercial refrigeration equipment operating on R290 and CO₂, positioning these as almost zero-GWP and PFAS-free choices under the global HFC phase-down context. The company highlights Hydroloop, Continuous Cooling, and ENERGY equipment models as technology

themes tied to higher energy efficiency and lower operating costs.



Panasonic Heating and Cooling Solutions shows CO₂ condensing units for retail, including CR-series units and larger CO₂ solutions in the iCore range. It also presents iCool units for other refrigerants.

The portfolio includes an 8 kW (27,300 Btu/h) CO₂ condensing unit for retail and supermarkets, with iCore capacities up to 29 kW (99,000 Btu/h) for medium temperature and 15 kW (51,200 Btu/h) for low temperature.

AHT Cooling Systems, together with Daikin group members Tewis, Hubbard, and Zanotti, presents “United Beyond Cold,” focusing on advanced system technology, natural refrigerants, and smart integration for tailored food-retail solutions.



Frigoblock presents supermarket refrigeration solutions using natural refrigerants.

The company lists three product groups: R290 Propane Chiller, CO₂ Condensing Unit, and CO₂ Central Refrigeration Groups.

Refrigerated display cabinets and plug-in islands



Arneg Group shows cabinet and display formats aimed at merchandising and effi-

ciency, including Lipsia 4 (a vertical cabinet designed for effective use of vertical space) and Astana K (a plug-in, negative-temperature glass-door cabinet for frozen foods).

The company also lists Salency (a closed semi-vertical display for normal temperature) and the Amburgo range (closed islands and wall cabinets focused on performance, reduced consumption, modularity, and product presentation).



CCR premieres the visiCUBE Platform, a modular plug-in island family designed to maximise visibility, efficiency, and sales performance across different store formats.

The range includes visiCUBE ECO, TOP, OPTI, and PANO variants, positioned for different merchandising and placement scena-

rios. “visiCUBE empowers European retailers to create more engaging, efficient, and profitable in-store experiences,” — Anton Peter, Director Product Management Cabinets, CCR.

HAUSER presents REMETA Transformer, a cabinet designed to switch between an open configuration and a closed door solution in a few steps. The open setup supports peak customer flow, while the closed configuration supports lower-traffic and night-time operation to reduce energy use and operating costs.

Controls, monitoring, and energy management

CAREL presents its Total Store approach, integrating refrigeration, HVAC, lighting, and energy into one coordinated ecosystem through system integration and centralised data management.

The portfolio includes plug-and-play electrical panels, local control systems, software platforms for data acquisition and analytics, and the HEOS Pro ecosystem for plug-in and semi-plug-in units with connectivity and coordinated components. CAREL also offers Site Performance Optimisation services that use AI-enabled remote monitoring

and optimisation across large multi-site fleets.

Danfoss presents integrated heating, cooling, controls, drives, and digital services for food retail.

The showcased technologies include ADAP-KOOL controllers, BOCK compressors, heat recovery units, and newer products such as the AK-CC25 case controller, ETS 5T stepper valve, and the VLT Refrigeration Drive FC 103. The Smart Store ADC concept demonstrates live operational data from a working supermarket.

Epta presents an immersive booth experience supported by digital and multimedia tools to enable dialogue with its experts. The Talking Epta Arena programme features live discussions with retail figures, associations, partners, and customers. Epta also plans a press conference to present its positioning and strategic priorities.

Fans, motors, turbo compressors, and heat exchangers

ebm-papst presents products for cooling and refrigeration technology, including the iQx EC motor, AxiBlade.Perform fans, and



the CompaNamic oil-free turbo compressor.

The iQx motor targets supermarket applications and 1:1 replacement, with stated efficiencies up to 68%, service life over 40,000 hours, and noise reduction up to 8 dB(A), and it is designed for natural refrigerants. CompaNamic operates without oil and uses natural refrigerants with low GWP for applications such as supermarket chillers, central air conditioning, and cold rooms.

LU-VE lists featured products including Vantage FHC and Vantage FHD, plus cold-room-oriented units such as Alfa Optigo FMS and Alfa Optigo PF27MC (designed for safe operation with A3 refrigerants), and Giant S XDHV (tailored for transcritical CO₂

applications). The product positioning emphasises efficiency, EC fan motors, compact designs, low noise operation, and maintenance access.

Conclusion

Across the exhibitor announcements covered in this preview, EuroShop 2026 themes cluster around three practical priorities for food retail: CO₂ and R290 system choices, merchandising-focused cabinet and island formats, and Total Store-style integration that links refrigeration to wider building and energy performance.



Serge Joris, Frigoglass CEO

Expert view

Smart refrigeration becomes retail execution intelligence

From cold storage to a point-of-sale asset

The role of commercial refrigeration as a powerful point of sale (POS) asset is no longer up for debate. I see this every day: co-

olers drive visibility, impulse purchases, and brand preference. What is changing rapidly is the intelligence these assets can provide. Sensors, IoT connectivity, and AI-enabled analytics turn cooler fleets into a real-time picture of what is happening at the point of sale.

What connected fleets reveal

Across large connected fleets, the execution gap remains striking. “Brand purity and planogram compliance often fall below 50%.” Out-of-stock levels for key SKUs can reach 60% on average, and cooler location compliance can vary from 5% to 30%. For me, these numbers shift the goal of smart refrigeration from “monitoring” to “acting”—using operational data to improve availability, verify placement, and reduce lost sales opportunities.

Where efficiency gains come from

On sustainability, I see the biggest gains coming from systems-level engineering rather than one breakthrough component. High-efficiency compressors that match real cooling demand, optimised airflow, better heat exchangers, improved insulation in cabinets and doors, smart controllers, and low-energy LED lighting all contribute. IoT-

enabled monitoring helps keep equipment closer to intended performance and reduces service needs across fleets.

Natural refrigerants and circularity

Regulation and customer expectations also accelerate the move to natural refrigerants. Hydrocarbons are becoming a standard choice in plug-in equipment—R290 for medium and large coolers and R600a for smaller units—alongside a stronger focus on circularity, refurbishment, and end-of-life responsibility.

AKO

Stay connected to your refrigerated cold room

Discover the new AKO Controller, and take full control with these key functions:

• Remote control & monitoring

• Built-in Wireless connectivity

• Quick 2- set up



AKO-16523PN



Don't miss out!
Scan and get yours



Daikin Europe

EDEKA Lüning in Paderborn, Germany: a flagship store for the future of retail

EDEKA Lüning's recent flagship store in Germany is setting a new standard for sustainable refrigeration – with a total CO₂ solution combining Daikin and AHT cabinets in one integrated system.

On the roof (next to the playground and

surrounded by apartments), CO₂ Conveni-Pack powers both heating and cooling, recycling waste of heat for efficient building climate control. Inside, VENTO CO₂ & MON-TREAL XL cabinets for cooling and freezing, plus Daikin Cassettes for air comfort, create an energy-efficient, whisper-quiet environment that fits perfectly in a residential area. The store covers more than 1,300 m² with 37 refrigeration/freezing units and 24 plug-in R290 chest freezers.

From sustainable technology to an exceptional in-store atmosphere, it's no wonder ESM ranked EDEKA Lüning among Europe's

Finest Stores 2025 (July edition).

Efficiency. Sustainability. Experience. All in one store.

- Solution delivered in end of March 2024
- Food Retail Company
- Shop owner: Mr. Jens Krukenmeyer
- Installer: Mr. Cagatay Kavakbasi

When Sustainability Meets Innovation in Retail Design

In the heart of the Springbach Höfe residential quarter, EDEKA Lüning has opened a flagship store that redefines the modern supermarket experience. With more than 1,400 sq. metres of retail space and more than 25,000 products, the store blends sleek architecture with warm, natural materials and intuitive design.

Customers enjoy a vibrant fresh market atmosphere, complete with a sushi station, salad bar, and specialty counters for meat, cheese, and baked goods.

Sustainability is woven into every detail — from the reusable packaging at the service counters to a photovoltaic system and LED lighting throughout. At its core, the store features a cutting-edge CO₂ refrigeration

and comfort system (heating in winter and cooling in summer) powered by the unique Daikin Conveni-Pack and AHT cabinets, ensuring energy efficiency and climate comfort while meeting the highest environmental standards. A system prepared for the future.

With thoughtful amenities such as charging for electric vehicles charging, Scan & Go, and a partnership with local food banks, EDEKA Lüning Paderborn is a bright example of retail with purpose.

Objectives

- New Future-Proof Technology
- Natural Refrigerants
- Ultra Low Sound Emissions
- Sustainable and Efficient Technology

Technical Solution

- CO₂ Conveni-Pack (Daikin) with isolation
- CO₂ Round-flow Cassette (Daikin)
- CO₂ Cold room units (Daikin)
- Remote CO₂ (AHT)
- VENTO CO₂ (AHT)
- MONTREAL XL (AHT)



Results

- Natural Refrigerant (R744/CO₂): Environmentally friendly and efficient.
- Integrated Heating and Cooling: Eliminates the need for additional heating sources
- Low Noise Emissions: Achieved through Kellner sound-casing
- Remote Monitoring: State-of-the-art energy tracking via WURM.
- Lower energy costs calculated by Simulation Tool



AHT Cooling Systems

Full Turnkey Solution for REWE

Modern Cooling, Freezing & Heating combined

The REWE store in Lonnerstadt, Germany, was developed as a new-build project on a greenfield site. From the outset, the goal

was to implement a refrigeration solution that would meet the highest standards in energy efficiency, operational reliability, and ease of maintenance — all key criteria in today's competitive food retail environment. To achieve these goals, AHT Cooling Systems Germany delivered a complete system solution built entirely on natural refrigerants. The project featured the installation of AHT's latest SPI (Semi Plug-in) sys-

tem, designed with a dual-circuit architecture to maximize system reliability.

In addition, AHT supplied the new BOREA refrigeration racks and integrated a heat recovery system, which was combined with DAIKIN Altherma heat pumps to fully comply with REWE's building requirements. For refrigeration, the system runs on R290 (propane), while the heat pump uses R32 refrigerant.

AHT provided all key refrigeration components for the project. The core refrigeration units installed included the SPI upright cabinets and AHT plug-in freezers — all aligned with the store's need for efficient, flexible cooling across various product categories.

Full SPI / Waterloop Turnkey Solution with Heat Recovery

The solution's simplicity and intelligent design resulted in a straightforward installation process, which was highly appreciated by the installation company involved in the project. The system architecture also allows for low ongoing maintenance costs - a sig-

nificant operational advantage for the store.

Environmental performance was a key factor in the project's design. By utilizing natural refrigerants and avoiding complex centralized systems, the solution offers a minimal environmental footprint while ensuring future regulatory compliance.

The operator of the REWE Lonnerstadt store has expressed high satisfaction with the new system. The positive experience and performance have already helped inspire further projects within the REWE network and with other retail partners.

The project clearly demonstrates that AHT's SPI technology - combined with innovative heat recovery and modular system design — offers retailers a scalable, energy-efficient, and future-ready solution for both new stores and retrofit projects

Year of installation:

2025

Installed system:

- AHT Semi Plug-In System
- BOREA CHILL
- KALEA FREEZE
- Zanotti Cold Room units
- ATHEN XL
- KINLEY X5
- SPI CIRCUMPOLAR
- DAIKIN Altherma heat pumps
- Serve over counter

Project requirements:

System with maximum reliability, simple maintenance and high energy efficiency.





Secop

Vitrifrigo C51i HP Refrigerator (BDN50K)

This case study aims to demonstrate how the Secop BD Nano compressor, integrated into the Vitrifrigo C51i HP refrigerator, successfully addresses key challenges for recreational vehicle (RV) users during off-grid camping. In particular, the analysis will focus on three fundamental aspects: cooling

speed, performance, and noise level.

Application Description

The refrigerator tested is the Vitrifrigo C51i HP (High Performance). It features a total capacity of 51 liters and a 3.6-liter freezer compartment. The door has an innovative design that is scratch and fingerprint-resistant, contributing to an elegant and practical appearance. The finishing panel is extremely thin (from 0.8 mm to 3.0 mm),

allowing for a seamless integration effect. Installation is easy and secure.

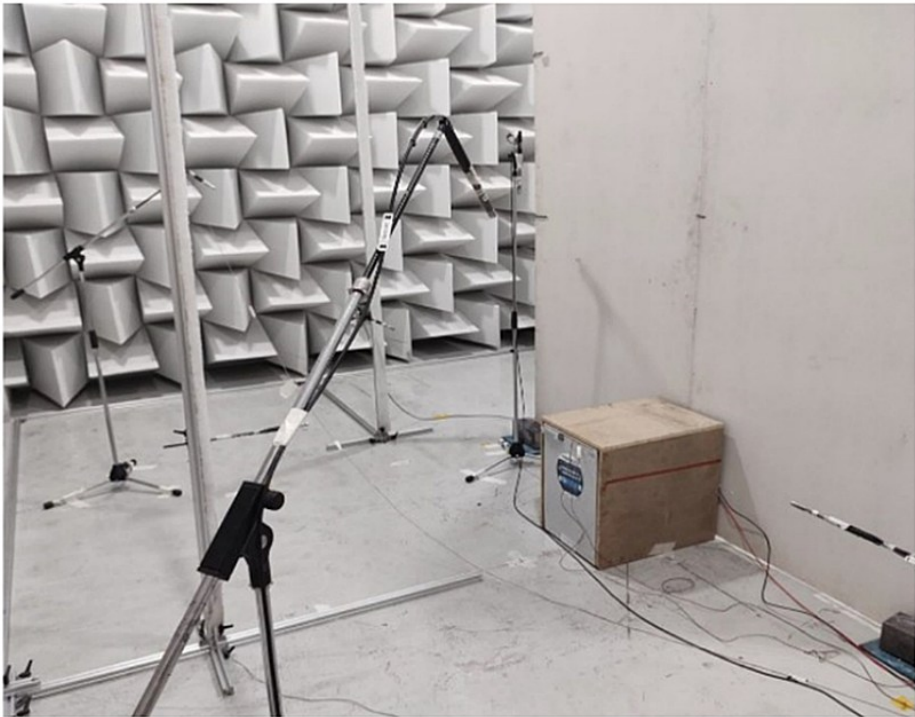
RV Compressor Challenges

- Minimizing battery consumption
- Reducing cooling time
- Increasing quietness

Advantages of Secop's BD Nano Compressor

- Compact Design: It is the smallest compressor on the market, only 93 mm high and weighing 1.5 kg, a reduction of approximately 3 kg compared to other compressors
- Performance: Cooling capacity up to 68 W and an efficiency of 1.54 W/W (ASHRAE LBP). It operates reliably in all ambient temperatures, including tropical conditions
- Low Vibration and Noise: The compressor is designed to operate quietly (-6dB/A). Vibrations are minimal, ensuring a comfortable and disturbance-free user experience
- Advanced motor: Enables rapid cooling

TEST RESULTS				
		BD35K	BDn50K	
Thermostat settings A-weighted sound power level	1° Cycle L_{wA}	46,6	42,1	dBA
	2° Cycle L_{wA}	46,5	42,1	
	3° Cycle L_{wA}	46,2	42,1	
Average A-weighted sound power level of the measurements	L_{wA}	46,4	42,1	±3,2 dBA
Time-averaged calculated surface sound pressure level, $\overline{L_{pA}}$, obtained by correcting the time-averaged surface sound pressure level ($L'_{pA}(S)$) for background noise (K1) and for the influence of the test environment (K2).	1° Cycle $\overline{L_{pA}}$	35,6	31,2	dBA
	2° Cycle $\overline{L_{pA}}$	35,6	31,2	
	3° Cycle $\overline{L_{pA}}$	35,3	31,2	
	$\overline{L_{pA}}$	35,5	31,2	
Time-averaged sound pressure level on the measurement surface of the background noise.	$\overline{L_{pA}(B)}$	20,8	20,3	dBA



Application Benefits

- Reduced Dimensions and Lower Overall Weight: Maximization of the fridge's internal capacity and significant reduction of the load on the vehicle
 - Energy Efficiency: Low energy consumption, preserving battery charge and minimizing the impact on vehicle autonomy; the system is designed for efficient and sustainable operation, even on long journeys
- Low Vibration and Noise (-6 dB/A): The application offers noise and vibration levels lower than those of a normal fan
 - Maintenance-Free Operation: Compressor refrigeration systems guarantee long-term operation without special interventions, similar to domestic appliances
 - Eco-friendly Refrigerant: Uses R600a, a natural gas with low environmental impact, contributing to greener and more sustainable refrigeration
- Tropical Class T Certification: Guarantees optimal performance even in extreme climatic conditions (+16 °C to +43 °C), maintaining 4 °C inside and ensuring stable refrigeration in any climate
 - Two-Star Freezer Compartment: Equipped with a freezing capacity down to -12 °C

Voice of Customer

Vitrifrigo is a significant Italian company op-

erating in the refrigeration sector. Founded in 1978 in Montecchio. Giorgio Biggiogero, Sales and Marketing Manager at Vitrifrigo:

This case study highlights how fundamental it is to make conscious purchasing decisions, especially for 'hidden' but crucial components like the refrigerator and its compressor. Choosing cutting-edge solutions like the Vitrifrigo C51i HP, equipped with the Secop BD Nano compressor, places the product at the top of its category for cooling performance, energy efficiency, quietness, and weight. The union of these two elements generates high added value for the end user, making holiday periods more comfortable.

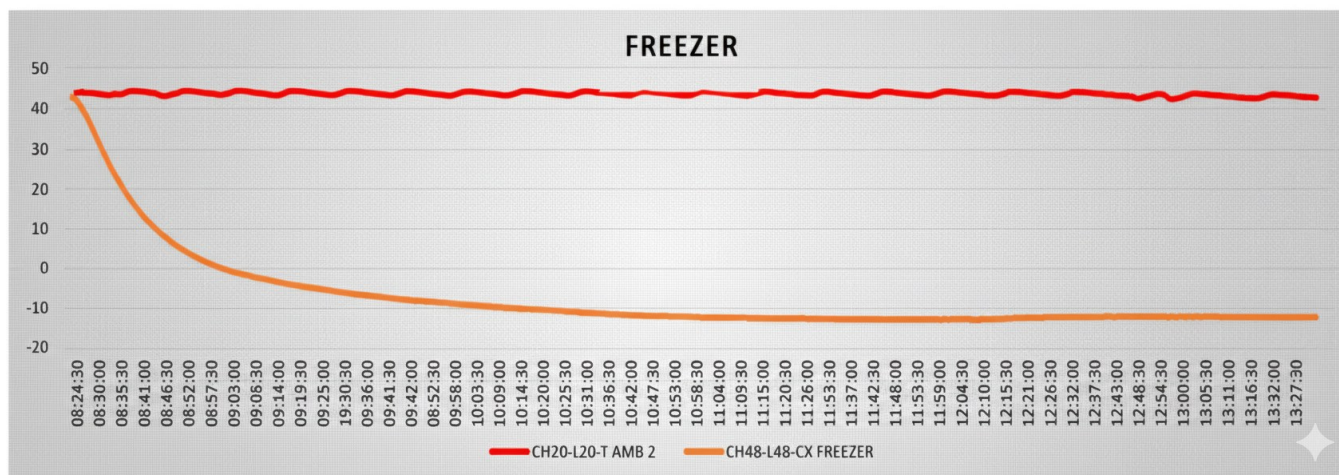
Test Results

Energy Consumption Data

- 78 Wh / 24 h

Noise Test Results

- Tests were conducted inside the semi-anechoic chamber at the "VAG Refrigeration Laboratory," a specialized facility of which only 3 exist in the EU
- Results showed that the refrigerator's noise level is lower than that of a normal fan during the cooling process



Cooling Speed and Temperature Stability

Four probes were placed at different points inside the refrigerator: one in the freezer compartment and three in the refrigerator section, from top to bottom.

- Freezer Compartment Test Results: With an external temperature of approximately 40 °C, the freezer compartment reaches its ideal temperature of about -12 °C in less than two hours and remains stable
- Refrigerator Test Results: With an external temperature of approximately 40 °C, the refrigerator reaches an internal temperature of 10 °C in less than an hour and then reaches 0 °C in less than two hours; the temperature remains homogeneous in all parts of

the refrigerator; therefore, the temperature is the same on both the lower and upper shelves

[Read the full case study here](#)

Events

MCE - MOSTRA CONVEGNO EXPO-COMFORT 2026



MCE – Mostra Convegno Expocomfort 2026 will bring together global companies from the HVACR, renewable energy, energy efficiency, and water sectors to showcase new technologies and systems for smart buildings across commercial, industrial, and residential applications.

The event serves as a platform for launching products and services globally and aims to facilitate business relationships between manufacturers, engineers, spec-

fiers, and installers focused on building efficiency.

MCE 2026 will emphasize three key themes: innovation, sustainability, and energy efficiency. These topics will be explored through dedicated events and curated visit itineraries designed to connect supply and demand.



According to the organizers, the growing impact of technological progress and the digital and green transitions is reshaping organizational and business models within the HVACR industry. MCE aims to address these changes by supporting strategic visions for improved comfort and sustainable development.

The exhibition positions itself as a marketplace where companies can enhance brand recognition and adapt to new industry paradigms through innovation serving environmental, economic, and social sustainability.

[*Know more about the event*](#)

Introducing the magazine in PDF Format to the partners

We are thrilled to introduce our new PDF magazine, designed to be a valuable resource for our readers. In a world brimming with information, our mission is to streamline the process of staying informed by delivering the most crucial updates and insights from the past quarter.

Distribution Strategy

We are committed to ensuring that our readers receive our magazine promptly. We distribute it through our newsletter to over 4,000 subscribers, registered users on our website, and webinar attendees.

Additionally, we will actively promote the magazine across our social media platforms. With more than 50,000 followers on our news feeds and over 150,000 members in our LinkedIn and Facebook groups, we guarantee extensive and far-reaching exposure.

We are excited to share our initial outlook on this new magazine and have plans for its ongoing development. Join us on this exciting journey, and please share your feedback and ideas.

Discover more about the magazine's features and pricing on the following pages.

Main Headings in the Magazine

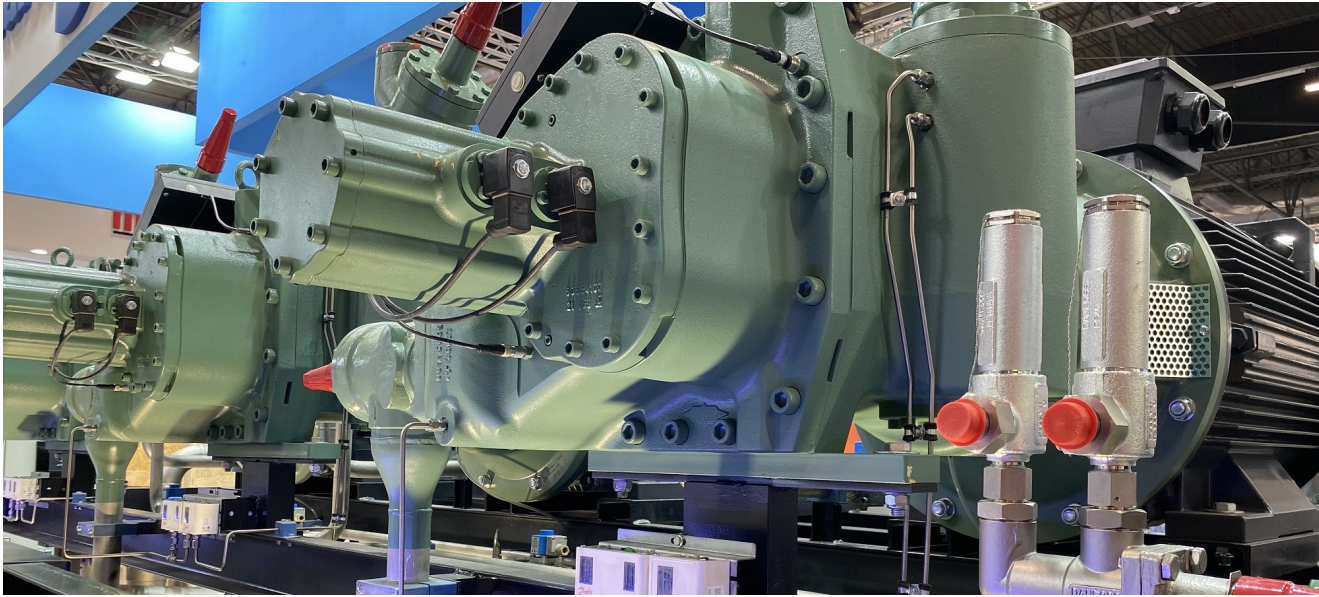
- **The Most Popular News from Refindustry.com:** Stay updated with the most crucial developments.
- **Sustainability:** Discussing green refrigeration practices and their impact on the environment.
- **Technical Insights:** Explaining complex concepts and providing technical insights into refrigeration equipment.
- **Case Studies:** Real-world examples of successful industrial refrigeration projects, installations, and problem-solving.
- **Maintenance and Troubleshooting:** Tips and guides for maintaining and troubleshooting refrigeration equipment.
- **Interviews:** Insights from industry experts, engineers, and leaders in the field.

- **Opinions:** Expert perspectives, commentary, and analysis on relevant industry issues and trends.

Advertising Opportunities in Our Magazine

Place an advertising module or contribute an article on topics like sustainability or successful case studies, sharing your company's experience with the magazine audience. Discover more in [our Media Kit](#).

For any inquiries, feel free to contact us at info@refindustry.com.



The opportunities

Enhance Your Visibility in the Refrigeration Industry with Our Targeted Advertising Options on Refindustry.com

As a leading online magazine and resource in the global refrigeration sector, we cater to over 300,000 users and generate more than 400,000 sessions annually, with a significant audience from the US, India, the UK, and the EU.

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- We promote the company profile on our social networks LinkedIn (50,000+ followers), Facebook (20,000+ followers), X (4,000+ followers).

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Add your company to the directory and enjoy our Bronze tariff plan absolutely free for the first month. Afterwards, you can choose to upgrade to one of our premium plans or continue with the Standard plan at no cost indefinitely.

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