

# SHOWEXPRESS

2025  
NO.81

The 36th International Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation,  
Frozen Food Processing, Packaging and Storage

April 27-29, 2025  
Shanghai New International Expo Centre



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China Refrigeration Expo 2026 (Back Cover)

## HIGHLIGHTS

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## Intelligence-Powered Cooling and Heating for Shared Future - CRH 2025 Reaches A New High

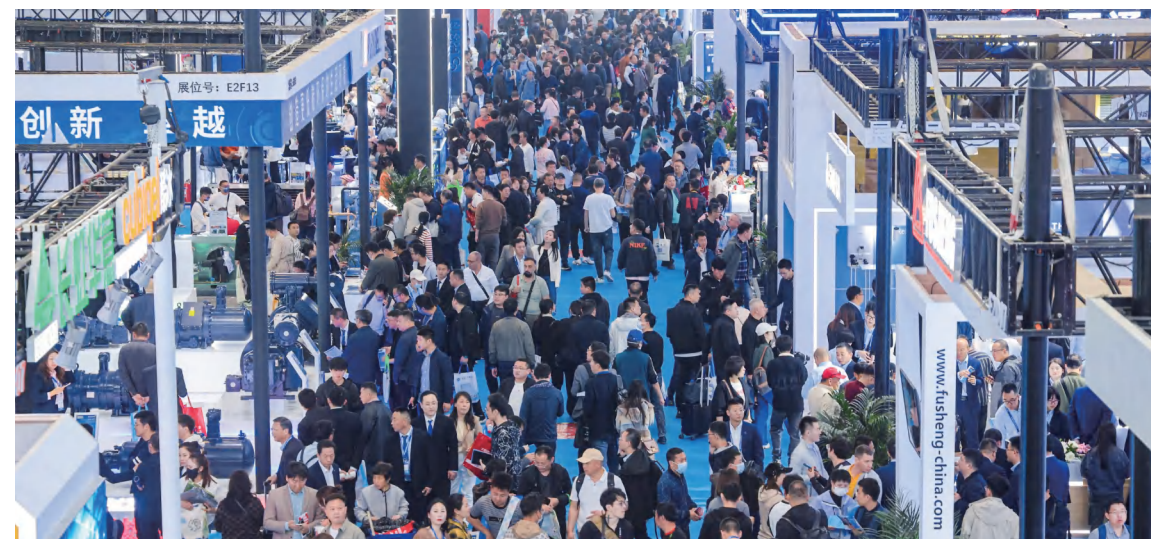
The 36th International Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage (hereinafter referred to as CRH 2025) will be held at Shanghai New International Expo Centre (SNIEC) from April 27 to 29, 2025. CRH 2025 is co-organized by the Chinese Association of Refrigeration (CAR), China Refrigeration and Air-Conditioning Industry Association (CRAA), Beijing International Exhibition Center Co., Ltd., Shanghai Society of Refrigeration and Shanghai Air-Conditioning and Refrigeration Institute, supported by Beijing Chamber of International Commerce, and hosted by Beijing International Exhibition Center Co., Ltd.

CRH 2025 covers an exhibition area of 115,000 square meters, with a total of 10 exhibition halls. The scale of the exhibition has reached a new high, and it will attract nearly 1,200 exhibitors from 32 countries and regions around the world to gather in Shanghai to display the latest technologies and products in the industry.

During CRH 2025, the organizers will hold forums, symposiums and technical seminars around the theme "Intelligence-Powered Cooling and Heating for Shared Future", organize professional audience groups such as the National Chief Engineer Delegation and the Refrigeration and Cold Storage Industry Observation Group, set up a number of characteristic exhibition areas, focus on hot topics in upstream and downstream of the industry, build a precise docking platform between supply and demand in sub-sectors, and promote in-depth communication between exhibitors and visitors.

More exhibition news and event details can be obtained through CRH official media - CRH Show Express, official website, WeChat official account, WeChat Video, Douyin, Red Note, Bilibili and other platforms.

CRH 2025 looks forward to gathering with you in Shanghai to talk about the cooling and heating future and draw a new chapter in the development of the industry!



Grand occasion in the CRH 2024 (Beijing)

ORGANIZERS



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北京国际展览中心有限公司董事长



### Congratulatory Message for the 36<sup>th</sup> International Exhibition for Refrigeration, Air-Conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage

27-29 April 2025 | Shanghai New International Expo Centre, China

On behalf of the United Nations Environment Programme (UNEP)'s OzonAction, it is my honour to offer our warmest congratulations on the 36<sup>th</sup> International Exhibition for Refrigeration, Air-Conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage (China Refrigeration Exhibition 2025).

The China Refrigeration Exhibition serves as a global center for innovation and exchange of expertise within the cooling industry. Industry leaders and experts convene not only to showcase and introduce their latest sustainable equipment and cutting-edge technologies, but also to forge partnerships and exchange knowledge. This collaborative environment supports worldwide efforts and accelerates the development of solutions for the protection of the ozone layer and mitigation of climate change guided by the Montreal Protocol on Substances that Deplete the Ozone Layer and the Kigali Amendment.

The achievement of Sustainable Development Goals (SDGs) necessitates accessible and affordable cooling technologies that are pivotal in safeguarding and sustaining the global food, healthcare, agricultural sectors, just to name a few. Despite the inherent environmental challenges associated with the cooling sector's rapid expansion and energy consumption, we are committed and have actively embraced our responsibility to find innovative, energy-efficient and more sustainable solutions, as consistently demonstrated at the Exhibition. Similarly, with this year's expo is being themed "Intelligence-powered cooling and heating for shared future", I am grateful that it provides a platform to the industry to help it evolve rapidly in response to the changes required in this today's fast paced world as well as helping us to solve the environmental problems caused by the ozone depleting and high global warming chemicals used in this sector.

Lastly, I sincerely express my gratitude to the organizers: Chinese Association of Refrigeration (CAR), China Refrigeration and Air-Conditioning Industry Association (CRAA), Beijing International Exhibition Center Co., Ltd. (BIEC) both for organizing the Exhibition and for facilitating a meaningful space for our Ozone2Climate Technology Roadshow and Industry Roundtable. With leadership from the Foreign Economic Cooperation Center, Ministry of Ecology and Environment, China (FECO/MEE), UNEP, together with other partners, is organizing the 14<sup>th</sup> Ozone2Climate Technology Roadshow and Industry Roundtable in China.

We look forward to participating in the Exhibition and meet with fellow international and Chinese agencies, government departments, industry associations, and enterprises and learn from their expertise, share experiences and ideas that promotes research, development and wider application of ozone and climate friendly higher energy efficient technologies in the refrigeration and air conditioning sector.

James S. Curlin

James S. Curlin  
Head of OzonAction  
Law Division  
United Nations Environment Programme



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Paris, 4 April 2025

Congratulatory Message from the IIR to our esteemed Chinese Colleagues at CAR for the China Refrigeration Expo 2025

Dear organising committee of China Refrigeration Expo 2025,

On behalf of the International Institute of Refrigeration (IIR), I would like to extend our warmest congratulations on the upcoming China Refrigeration Exhibition under the theme "Intelligence-powered cooling and heating for shared future", which will take place in April 27-29, 2025 in Shanghai.

This renowned event continues to serve as a global hub for innovation, knowledge exchange, and collaboration within the refrigeration and heat pump industry. It brings together industry leaders, experts, and organisations to showcase the latest sustainable technologies, cutting-edge equipment, and innovative solutions in refrigeration, air conditioning, heat pumps, and cold chain Technologies.

The importance of refrigeration cannot be overstated, as they are critical to meeting essential human needs, including food security, healthcare, and climate resilience. The rapid expansion of the refrigeration sector also brings to the forefront environmental challenges, particularly energy consumption and the use of refrigerants with high global warming potential. The IIR is deeply committed to working with our member countries, including China, to meet these challenges and to support the global transition towards more sustainable, energy-efficient technologies.

As part of the new strategy of the IIR, we are aiming to reinforce links and foster greater collaboration with our member countries. We are also working to provide broader access to the wealth of scientific information held by the IIR, empowering professionals and stakeholders across the globe to implement and benefit from scientific knowledge and latest advancements in the field. This is an essential part of our mission to further the development of sustainable technologies and enhance global efforts in the refrigeration and heat pump sectors.

While I regret that I am unable to attend this year's exhibition due to other commitments, I am pleased to note that the IIR's participation is strongly represented by Mr. Min Soo KIM, President of the IIR General Conference, who will be present at this prominent event of our esteemed Chinese colleagues to demonstrate our support and commitment to the development of the refrigeration sector.

Looking ahead, I am excited about the opportunity to actively participate in next year's event and to further strengthen our collaboration. China is a valued member country of the IIR, and we remain committed to supporting the growth and innovation of the refrigeration sector in your country. We encourage all Chinese colleagues, scientists, researchers, both male and female, and the younger generation to join us and work together to advance energy efficient and clean refrigeration technologies and practices for the future.

We look forward to continuing to work closely with our Chinese partners and to fostering a shared commitment to tackling global challenges in refrigeration.

I wish you all the very best for a successful, productive and impactful event!

Best regards

Yosr Allouche

Yosr Allouche  
Director General



To all our dear friends at CAR and the refrigeration industry in China:

On behalf of the INTERNATIONAL INSTITUTE OF **ALL-NATURAL REFRIGERATION (IIAR)**, we welcome all the participants to **China Refrigeration EXPO 2025** in Shanghai. The **IIAR** is honored to be associated once again, with the event and its long-standing relationship with the CAR (Chinese Association of Refrigeration). Our sincere congratulations to the CAR and the organizing committee for putting together and hosting such an important event and thank you for hosting us all for the important event, back this year to Shanghai.

**IIAR** is the world's leading advocate for the safe, reliable, and efficient use of ALL-NATURAL refrigerants such as Ammonia (R717), CO2 (R-744), and hydrocarbons. IIAR's members share their collective knowledge and experience to produce consensus documents that address various aspects of the **ALL-NATURAL** refrigeration industry. Since **1971**, IIAR has been the world's leading advocate for the safe, reliable, and efficient use of natural refrigerants. IIAR sets the standard for providing the most up-to-date technical information to the ammonia and natural refrigeration community. As the only organization writing design and operation standards for natural refrigerants, IIAR is an American National Standards Institute (ANSI) accredited standards developer. IIAR ANSI Standards have been incorporated into Building and International Codes. IIAR members come from all over the world, with some of our valuable material now available in Chinese, including standards and some training materials for safety.

- Our VISION:** To create a better world through the safe and sustainable use of ALL Natural Refrigerants
- Our MISSION:** To provide advocacy, education, and standards for the benefit of the global community in the safe and sustainable design, installation and operation of ammonia, CO2, and other Natural Refrigerant systems.

**IIAR** wishes all the participants and visitors of China Refrigeration Expo 2025 a very successful conference and exhibition; and we are looking forward to continuing the cooperation with CAR and the China refrigeration industry with the common goal of expanding the use of **ALL-NATURAL Refrigerants** in China.

With our sincere and warmest regards.

Gary Schrift  
President of the IIAR

Guy J.E. Cloutier  
Regional Vice-Chair – China and Asian Countries  
IIAR International Committee





To the kind attention of:

- Chinese Association of Refrigeration (CAR)
- China Refrigeration Expo 2025

Brussels, 15<sup>th</sup> March 2025

Dear President,  
Dear Director, International Division,  
Dear Ladies and Gentlemen,

I am pleased to announce our participation to China Refrigeration Expo 2025, a valuable event at global level for our industry.

I would like to wish you on behalf of all ASERCOM members, our warmest wishes for the success of the trade show.

ASERCOM is particularly honored to once again participate to this 36th edition organized by the Chinese Association of Refrigeration namely represented by Ms. ZHAO Na, Director, International Cooperation & Exhibition Dept. Chinese Association of Refrigeration (CAR) and member of the China Expo Organization committee.

Many ASERCOM Members will be attending the event contributing to build up a high-quality display for our industry and possibly to respond to a worldwide industry and trade expectation,

Wishing all of you a successful and fruitful 2025 event for the 36th edition of the annual China Refrigeration expo in Shanghai.

  
Marco Masini  
President of ASERCOM

Association of European Refrigeration Component Manufacturers  
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VAT no. BE 0448126835 registered: Tribunal of Commerce of Brussels under no. 13.335  
Chairman: Fabio Klein - President: Marco Masini  
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Letter of congratulations from Eurovent on China Refrigeration Expo 2025

Dear colleagues from the Chinese Association of Refrigeration (CAR) and the China Refrigeration and Air-Conditioning Industry Association (CRAA). On behalf of Eurovent Association, we would like to extend our heartfelt congratulations on the upcoming China Refrigeration Expo 2025. This prestigious event has become a benchmark for the global Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) industry, and we are excited to see the continued growth and success of this essential platform for innovation, networking, and knowledge sharing.

We recognise the immense effort and dedication that goes into organising such a comprehensive exhibition and are confident that the 2025 edition will be another remarkable milestone in the history of the Expo. Eurovent wishes you a lot of success in the Expo and the development of cutting-edge technologies, sustainable solutions, and collaboration among industry professionals worldwide. We foresee that this year's event promises to be an exceptional gathering, bringing together manufacturers, experts, and key stakeholders to discuss and showcase the latest advancements and solutions.

Once again, congratulations to the entire organising team for all the hard work and vision that has gone into preparing for the China Refrigeration Expo 2025. We are wishing you a prosperous and impactful Expo.

Yours sincerely,

Raul Corredera Haener  
President  
Eurovent

Francesco Scuderi  
Secretary General  
Eurovent



Eurovent AISBL / IVZW / INPA  
European Industry Association  
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On behalf of EPEE, which represents the leading association for Refrigeration, Air-Conditioning and Heat Pumps in Europe, I am delighted to attend the China Refrigeration EXPO 2025 as it has become a key global event for the industry as a whole. At a time when our economies are merging, or not given the recent geo-political developments, it is critical for the industry to get together and share our views on how our sector is developing whether it is from a market place perspective or, in EPEE's case, the Regulatory environment which in Europe, but also in all four corners of the globe, is directly impacting how we make and sell our products. Sharing is power and let's continue to exchange and dialogue. I am very much looking forward to the EXPO and honored to have been invited.

Russell Patten, Director General, the European Partnership for Energy and the Environment (EPEE)



**Russian HVAC&R society ABOK**



On behalf of Russian specialists in the HVAC&R field it is my pleasure to send warmly greetings to the guests and participants of the China Refrigeration Expo 2025!

The most important thing in our industry today is the quality of the microclimate and safety. New technologies, which are presented at the exhibition, can be considered outstanding achievements in the field of smart technologies, energy saving and environmental friendliness.

Currently, the task of bringing construction resources to the market, and first of all, the resources of the People's Republic of China, is urgent for Russia. These resources should make up for the deficit created due to the inability to supply construction resources from a number of countries exerting sanctions pressure.

China Refrigeration Expo 2025 has become one of the most significant and trustworthy events of the year; it makes a considerable contribution to the solution of the most important professional tasks, because it's an ideal base for the all-round contacts and could demonstrate the overall present-day resources of this branch. The show is characterized by a highly-professional visitor audience represented by the major Chinese and worldwide wholesalers and distributors, engineering design and installation, construction and real estate development companies.

The role of indoor climate quality and energy conservation and the theme of "More Digital Intelligence and New Paths for Win-Win Growth" of China Refrigeration Expo constitute the guiding principles of the exhibition ideology and run through the scientific and business program of China Refrigeration Expo 2025.

I would like to note well thought-out and accurate work of the organizers of the China Refrigeration Expo 2025. These companies open for broad cooperation, they can recruit different organizations, first of all, those determining construction' ideology, and mass media. I would like to note aspiration for more intellectual matter of the exhibition, not only reflecting the present-day state of the branch, but in many respects determining its tendency.

Co-operative work of the exhibition and symposium will set up the best conditions not only for mutually beneficial contracting, but also for promotion of the latest technology and developments in different fields of this branch of industry.

I wish all the participants and visitors of China Refrigeration Expo 2025 every success, expansion of business contacts and mutually beneficial partnership.

Russian HVAC society is looking for the close cooperation with Chinese Association of Refrigeration (CAR) and it's members in the indoor climate quality and energy saving engineering

IURII TABUNSHCHIKOV, President ABOK (Russian HVAC&R society)

Professor, President of the Russian Heating, Ventilation, Air-Conditioning, Heat Supply and Constructional Thermal Physics Engineers Association (ABOK), Member of the Russian State Academy of Architecture and Construction Science





São Paulo, Feb 18th, 2025

To Ms. Zhao Na,  
Director of International Cooperation of CAR

It is with great honor and gratitude that I send this letter on behalf of ABRAVA (BRAZILIAN REFRIGERATION, AIR-CONDITIONING, VENTILATION AND HEATING ASSOCIATION), to express our deep gratitude for the invitation to participate in the CRH 2025 Exhibition in the city of Shanghai.

This prestigious event represents an exceptional platform to promote cooperation and exchange in the air conditioning, refrigeration and heating sector. We recognize the significant value of this exhibition as a means of strengthening ties between our entities and our Nations, to drive mutual development in areas of common interest.

We hope that this exhibition will be a great success, that it will serve as a source of inspiration and an international reference for the entire Sector, and that the exhibiting companies will feel motivated to continue investing in innovative products and solutions. We are confident that this event will be an important international milestone for the Sector.

With our best regards,

**Arnaldo Basile**  
Executive President



January 25, 2025

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Phone 703 524 8800 | Fax 703 562 1942  
www.ahrinet.org

On behalf of the 330 manufacturers of HVACR and water heating equipment that are members of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) – several of which are based in China – I am pleased to extend best wishes to the organizers, sponsors, and exhibitors of the 2025 China Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging, and Storage. We are pleased and proud to once again be able to join you in-person for this year’s show, interacting with our member companies and with our Chinese industry friends. Many AHRI member companies will once again exhibit at an event that so vividly illustrates the importance of the Chinese market to our industry.

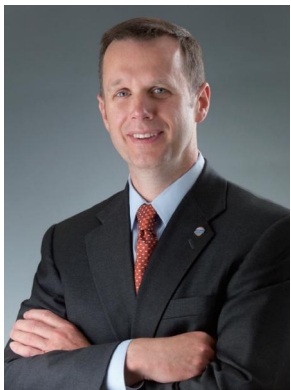
AHRI’s China office is the oldest in our association outside of the United States. Officially established in 2018, our office is an extension of a relationship we’ve had with our friends in China for more than 30 years. We have long-standing ties to China, both through our member companies with operations in China and also through our valuable partnerships with the China Refrigeration and Air Conditioning Association (CRAA) and the China Association of Refrigeration (CAR), both of which help AHRI members do business in China.

A portion of our collaboration in China occurs through our member companies based in China, while a large part of it occurs through our association partner CRAA, which is a longstanding member of the AHRI-managed International Council of Air-Conditioning, Refrigeration, and Heating Manufacturers Associations (ICARHMA), a group that comprises 11 industry associations from around the world.

We look forward each year to traveling to your great land and interacting with our friends and government contacts. The personal and business relationships we have established are valuable and important to us and attending this show each year helps those relationships flourish and thrive. We thank you for your friendship and hospitality and look forward to participating in an excellent show!

Sincerely,

**Stephen R. Yurek**  
President and CEO





Dear CAR Team,

Greetings from AIACRA!

On behalf of 'All India Air-Conditioning & Refrigeration Association' (AIACRA), we are pleased to extend our heartfelt congratulations to the entire team of 'Chinese Association of Refrigeration' (CAR) for organizing 36<sup>th</sup> International Exhibition on Heating, Ventilation, Air-Conditioning, Refrigeration, Frozen Food Processing, Packing and Storage.

AIACRA and CAR have been working closely together for more than two decades and the relationship has gone beyond 'Friends to Family' helping each other to develop the Refrigeration and Air-Conditioning Industry associations in both countries.

We would like to express our sincere gratitude to the members of CAR for their hard work and dedication for the global HVAC & R industry. You are continuing to do a great job of making this a great network for growing the industry. We hope that this will make a significant contribution to the industry in the future.

We look forward to many more successful years of collaboration with your entire team of Association.

Good Luck & Best Wishes to all.

**Harpreet Singh**  
President AIACRA



Milan, March 15<sup>th</sup>, 2025

### Letter of congratulations

China Refrigeration is one of the world's leading events in the refrigeration industry.

The constraints imposed by climate change have become increasingly pressing. The unavoidable need for decarbonization in the Refrigeration, Air Conditioning, and Heat Pump (RACHP) sector has become an absolute priority.

AiCARR, the Italian Association for Air Conditioning, Heating, and Refrigeration, is a non-profit cultural organization that creates and promotes culture and technology for sustainable well-being. Founded in 1960, AiCARR has consistently addressed issues related to the conscious use of energy and natural resources, as well as innovation in energy infrastructure, both in plant operations and construction.

The concept of sustainability has been approached in various ways over the last few decades, including considerations of refrigerants' environmental impact, safety, material compatibility, and cost, among others. It has become evident that the comprehensive concept of "sustainability in refrigeration" requires a holistic approach that cannot be limited to the Global Warming Potential (GWP) of refrigerants alone, as the impact of RACHP emissions accounts for about two-thirds of the total environmental impact.

Consequently, improving the efficiency of RACHP systems remains arguably the main objective. With efficiency as the primary goal, China Refrigeration will showcase both established and emerging technologies developed to address the challenges of sustainable development, with a specific emphasis on green development enhanced by digital intelligence.

We recommend visiting the China Refrigeration Exhibition.

I congratulate the organizers of China Refrigeration 2025 and wish them great success!

Prof. Claudio Zilio  
AiCARR President 2023-2026







China Refrigeration Expo  
Congratulatory Message  
2024-25 ASHRAE President M. Dennis Knight, P.E., BEMP, Fellow Life Member ASHRAE



Greetings!

On behalf of ASHRAE and its Board of Directors, I extend my warmest congratulations to the Chinese Association of Refrigeration (CAR) and the China Refrigeration and Air-conditioning Industry Association (CRAA) on the 36th International Exhibition on Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging, and Storage—China Refrigeration Expo.

This year, ASHRAE's Society theme, "*Empowering Our Workforce: Building a Sustainable Future*," emphasizes the vital role our industry plays in shaping resilient, healthy indoor environments. The HVAC&R sector is at the forefront of developing solutions that will define the future of the built environment, and none of this is possible without a well-trained, diverse, and forward-thinking workforce.

As we look ahead, the demand for skilled professionals in our field will continue to grow. Industry leaders, educators, and policymakers must work together to equip the next generation with the knowledge and expertise needed to navigate emerging technologies, sustainability mandates, and evolving building standards. The China Refrigeration Expo plays a key role in this effort by showcasing cutting-edge innovations and fostering collaboration among global industry experts.

This event is more than just an exhibition—it is a unique platform to exchange knowledge, explore new solutions, and strengthen professional networks. By sharing resources and best practices, we can collectively drive progress, adapt to the evolving demands of our industry, and lead the way in creating more efficient, resilient, and environmentally responsible HVAC&R solutions.

I encourage all attendees to engage with exhibitors, participate in educational sessions, and connect with fellow professionals who share a common goal of shaping a more sustainable future.

Once again, congratulations on this outstanding event. May your time at the China Refrigeration Expo be inspiring, productive, and impactful as we work together to build a better world for generations to come.

Sincerely,  
M. Dennis Knight, P.E., BEMP, Fellow Life Member ASHRAE  
2024-25 ASHRAE President



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43, Nehru Place, New Delhi-110019, India [www.ishrae.in](http://www.ishrae.in)



36<sup>TH</sup> CHINA REFRIGERATION EXPO.

Dear distinguished global partner organizations,

On behalf of the **Indian Society of Heating, Refrigerating, and Air Conditioning Engineers (ISHRAE)**, we extend our warmest congratulations to the **Chinese Association of Refrigeration (CAR)** and the entire organizing team on the successful hosting of the **36th China Refrigeration Expo 2025**. This prestigious event continues to be a cornerstone for the global HVAC&R industry, fostering **innovation, collaboration, and knowledge exchange** on an international scale.

As the world embraces **sustainability, energy efficiency, and smart technologies**, China Refrigeration Expo plays a pivotal role in bringing together thought leaders, researchers, and industry professionals to explore **cutting-edge solutions** and **emerging trends**. It serves as a crucial platform for advancing our shared vision of a **greener, more efficient future** for the HVAC&R sector.

ISHRAE values its longstanding partnership with CAR and other global industry leaders. Our shared commitment to **technical excellence, environmental responsibility, and skill development** continues to strengthen the HVAC&R community worldwide. We look forward to deeper collaborations, knowledge-sharing opportunities, and initiatives that drive industry growth and innovation.

Wishing the **China Refrigeration Expo 2025** immense success and a lasting impact on the industry!

Best regards,

Jayanta Kumar Das  
Society President (SY 2025-26)  
ISHRAE



**ISIB** | **TURKISH**  
**HVAC-R**  
Member

Distinguished guests and esteemed colleagues,

I would like to extend my deepest gratitude to the organizers of this event for their hard work in bringing us all together.

This platform provides an invaluable opportunity for us to exchange ideas, explore new technologies, and strengthen our partnerships. We would like to thank the organizer CAR for bringing together all the industry associations in each edition of the fair.

The refrigeration industry plays a crucial role in improving the quality of life for people all around the world, from ensuring the safety of our food to supporting sustainable practices in energy consumption. In this respect, the exhibition and sector is growing and increasing its success every year.

Once again, thank you to all the participants, guests, and industry professionals who have made this event possible. Your presence here today speaks to the strength of our collective vision and commitment to shaping the future of refrigeration.

I look forward to the fruitful discussions and collaborations that will emerge from this event. Let's enjoy this evening, build new connections, and continue to drive positive change in our industry.

Thank you.

**Zeki POYRAZ**  
Vice President of Turkish HVAC-R (ISIB)



Number : 60  
Subject : China Refrigeration Expo 2025 Congratulatory Message  
Date : 11.03 2025

To the kind attention of  
China Refrigeration Expo Organizing Committee,

On behalf of ISKID, Air Conditioning and Refrigeration Manufacturers' Association and its member companies, I would like to congratulate CAR and organizing team of **China Refrigeration Expo 2025**.

"China Refrigeration Expo" has proven itself as one of the landmarks in the sector of air conditioning, ventilation and refrigeration throughout the years. It has surely gained a reputation as a successful project. Today, we witness that the exhibition continues to expand, contributing to the prosperity of the sector. As ISKID, we would like to thank China Refrigeration Expo for its contributions to the HVAC&R sector by connecting industry professionals worldwide. The strong relationship between our nations provides a valuable opportunity to foster global industry development. The strong relationship between our nations provides a valuable opportunity to foster global industry development.

I am confident that the exhibition will once again achieve great success, as it has in previous years. Once again, thank you for your friendship, we look forward to continuing our cooperation in the future.

Sincerely,

Tunc KORUN  
Chairman of ISKID



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## CRH 2025 – Congratulations from JARN

The global energy transition, the active use of sustainable energy and environmentally friendly products have provided significant challenges and endless opportunities for our HVAC&R industry.

China Refrigeration Expo is a big stage for showcasing these new technologies and products. Thanks to China Refrigeration Exhibition for providing JARN magazine with excellent materials. JARN sent the most significant number of reporters to participate in this event. Our young reporters will come to Shanghai to experience new technologies and inventions with wisdom and passion, and spread these achievements accurately and quickly to all parts of the world.

In addition to JARN magazines and eJARN.com, JARN is expanding its presence on various social media platforms and plans to publish reports for CR Expo. We hope you are as excited about these new services as we are.

On behalf of JARN, I would like to extend our best wishes for a successful event! I would also like to take this opportunity to express my sincere gratitude to our readers worldwide, especially those from Greater China.

We look forward to seeing China Refrigeration Expo continue to make outstanding contributions to the development of the global HVAC&R industry and write even more brilliant chapters!

JARN Magazine  
President  
Keisho Ka  
at JARN Studio, Hanzomon, Tokyo



**JARN**



## CHINA REFRIGERATION EXPO 2025

On behalf of the Japan Refrigeration and Air Conditioning Industry Association (JRAIA) and its member companies, I extend my sincere congratulations on the successful opening of CHINA REFRIGERATION EXPO 2025 in Shanghai. This prestigious exhibition brings together leading manufacturers, industry experts, and visitors from around the world, providing an invaluable platform for sharing insights and advancing technological innovation in our industry.

As climate change and environmental challenges grow more pressing, our industry must play a proactive role in creating a sustainable future. Global efforts such as Europe's Green Deal and the Global Cooling Pledge from COP28 underscore the need for energy-efficient refrigeration, air conditioning, and heat pump technologies. At JRAIA, we are committed to advancing these initiatives through international collaboration, regulatory development, and the promotion of innovative solutions.

In 2024, JRAIA successfully hosted HVAC&R JAPAN 2024 at Tokyo Big Sight, welcoming a record-breaking 33,513 visitors. Building on this success, HVAC&R JAPAN 2026 will be held from January 27th to 30th, with an expanded exhibition space to accommodate growing global interest. Additionally, in this year we will host the International Symposium on Environment and New Refrigerants 2025 in Kobe on October 23-24, providing another key platform for industry collaboration and technological exchange. We warmly invite all stakeholders to participate in these important events.

China plays a pivotal role in shaping the future of our industry, and CHINA REFRIGERATION EXPO continues to serve as a critical venue for fostering international cooperation and business development. JRAIA values its strong partnership with the China Refrigeration and Air-Conditioning Industry Association (CRAA) and remains committed to working together toward a more sustainable and innovative industry.

Once again, congratulations on the successful organization of CHINA REFRIGERATION EXPO 2025. I wish all exhibitors and participants a fruitful and productive event, and I look forward to the continued strengthening of our partnership in the years to come.

Yours truly,  
Katsuyuki Sawai  
Chairman of the Board  
The Japan Refrigeration and Air Conditioning Industry Association (JRAIA), Japan



### Congratulatory Message from President of Japan Society of Refrigerating and Air Conditioning engineers

On behalf of Japan Society of Refrigerating and Air Conditioning Engineers (JSRAE), I would like to extend our heartfelt congratulations to all participants and organizers of the China Refrigeration Expo 2025. This prestigious event is an excellent platform for innovation, knowledge sharing, and collaboration in the field of refrigeration and air conditioning.

As the global demand for realization of carbon neutral society and sustainable solutions grows, events like this play a crucial role in shaping the future of our industry. I am confident that this year's exhibition will showcase the latest advancements, technologies, and trends, helping to drive progress and inspire future generations of engineers and professionals.

We are excited to see the developments that will emerge from this event and look forward to continued collaboration between our societies with better technologies.

Once again, congratulations to everyone involved, and I wish you all a successful and fruitful event.

Warm regards,

Kiyoshi Saito

President, Japan Society of Refrigerating and Air Conditioning Engineers



### Congratulation message for CR EXPO 2025

Greetings,

I am Cheonjae Park, President of the Korea Refrigeration and Air-conditioning Assessment Center (KRAAC). On behalf of KRAAC, I would like to extend my heartfelt congratulations on the grand opening of "The 36th China Refrigeration Expo 2025." It is a great honor to deliver these congratulatory remarks on such a meaningful occasion.

As one of the world's premier exhibitions in the HVAC&R sector, CR Expo has received numerous certifications from authoritative organizations, including UFI (the Global Association of the Exhibition Industry), the U.S. Department of Commerce (DOC), and CAEC (China Association for Exhibition Centers). These endorsements underscore its extensive credibility within the global industry.

Particularly noteworthy is that, compared to the previous year, the 2024 exhibition achieved a 42% increase in international exhibitors, bringing together a wide range of brands from across China and around the globe to showcase the latest technologies and products. This not only highlights the advances and achievements in the HVAC&R industry, but also reaffirms CR Expo's vital role in addressing carbon neutrality and energy concerns.

Although we have become increasingly aware of the seriousness of climate change and are taking active measures to address it, challenges such as natural disasters and energy shortages remain pressing issues worldwide. In response, major nations are accelerating international carbon-neutral regulations and energy transitions to combat global warming. With policies like the Kigali Amendment to reduce HFCs, the adoption of low-GWP and natural refrigerants, F-gas regulations, and the AIM Act, the global refrigeration and air-conditioning industry is at a pivotal juncture. High-efficiency heat pumps, renewable energy-linked heating and cooling systems, and cutting-edge smart control/IoT technologies further illustrate how the sector is striving for digital transformation and carbon reduction.

Amid these rapidly shifting trends, this year's exhibition is expected not only to foster sustainable growth for the global HVAC&R sector, but also to substantially contribute to meaningful technological exchange and industrial development between China and Korea.

Building upon the achievements of 2024, "The 36th China Refrigeration Expo 2025" features an even larger scale and integrates eco-friendly, smart, and high-efficiency technologies—marking another significant turning point in the refrigeration and air-conditioning industry's journey toward the future.

As Korea's leading testing and certification body in the refrigeration and air-conditioning field, KRAAC will continue to expand global collaboration in testing, certification, technological innovation, and energy efficiency policies, striving to lead the way in this new era of environmental stewardship and low-carbon development.

Once again, I offer my sincere congratulations on the successful opening of the 2025 China Refrigeration Expo. I would also like to express my deep gratitude to the officers and staff of the Chinese Association of Refrigeration (CAR) for their unwavering dedication in organizing this event.

It is my earnest hope that, going forward, the refrigeration and air-conditioning industries of China, Korea, and the rest of the world will work hand-in-hand to realize carbon neutrality and advance toward a sustainable future.

Thank you very much.



박천재

Cheonjae Park, President  
Korea Refrigeration and Air-conditioning Assessment Center (KRAAC)





And esteemed members of the HVAC&R industry,

The year 2025 marks the Year of the Snake in Eastern tradition. The snake has long been regarded as a symbol of wisdom, mystery, perseverance, and renewal. I sincerely hope that this auspicious energy will bless the 2025 China Refrigeration Expo, ensuring success for all participants and exhibitors.

This year is a pivotal moment for the HVAC&R industry. With increasing global demands for energy efficiency and environmental protection, our industry faces critical challenges such as developing high-efficiency systems and adopting eco-friendly refrigerants. In this context, I wish the China Refrigeration Expo to successfully implement its role as a platform to showcase cutting-edge technologies and innovative solutions.

The Korean HVAC&R industry has also achieved remarkable progress by advancing technologies such as smart heat pump systems and high-efficiency refrigeration systems using low-GWP refrigerants. Additionally, KRAIA's research institute K-Air has been contributing to the development of new refrigerants and cold chain technologies, supporting not only Korea's but also the global air conditioning industry's growth. We are also committed to assisting companies facing challenges in product development and testing.

I believe this expo will provide an invaluable opportunity for collaboration and exchange between Korea, China, and the global HVAC&R industry. It is my hope that all participants will discover new business opportunities, share ideas and technologies, and achieve greater growth together.

Lastly, I wish health and good fortune to all attendees and stakeholders, and I sincerely hope that the 2025 China Refrigeration Expo will be a resounding success.

Thank you very much.

Chairman of KRAIA Sunghee Kang

*S. H. Kang.*

### Congratulatory Message to China Refrigeration Expo 2025

On behalf of the Korean National Committee of IIR (International Institute of Refrigeration), I would like to extend my warmest congratulations on the China Refrigeration Expo 2025 in Shanghai.

HVAC&R technology plays an important role in energy savings and greenhouse gas reduction, and I'm sure that the China Refrigeration Expo 2025 provides the key to solve these problems. Efficiency enhancement by low energy consumption of the refrigeration and air-conditioning systems is inevitable to achieve the rational use of energy sources. In accordance with the global efforts to reduce carbon dioxide production and environmental protection, HVAC&R society should also cooperate and participate in coping with the worldwide energy and environmental issues. I am sure the China Refrigeration Expo 2025 will provide valuable insights.

Sincerely,

YongTae Kang, PhD, Professor, Korea University, Seoul 02841, Korea

Delegate of Korea, IIR



CONGRATULATORY MESSAGE FOR CHINA REFRIGERATION EXPO 2025 (CRH 2025)  
By PETER TAN CHIN WAH,  
President of the Malaysian Air-Conditioning & Refrigeration Association (MACRA)

Greetings and Congratulations

Esteemed organizers, distinguished delegates, and industry leaders, on behalf of the Malaysian Air-Conditioning & Refrigeration Association (MACRA), it is an honor to extend our heartfelt congratulations on the grand opening of the **China Refrigeration Expo 2025**. This year's theme, *"Intelligence-Powered Cooling and Heating for a Shared Future"*, resonates profoundly as we stand at the intersection of technological innovation and global sustainability.

The Global HVAC&R Landscape: A Statistical Snapshot

The HVAC&R industry is not merely a sector—it is the backbone of modern civilization. Today, the global HVAC market is projected to **grow at a CAGR of 6.7%** from now until 20230. Yet, our greatest challenge lies in balancing this growth with environmental stewardship. The International Energy Agency (IEA) reports that space cooling alone accounts for **10% of global electricity demand**, a figure set to triple by 2050 without sustainable interventions.

HVAC&R: The Catalyst of Modern Civilization

The invention of air-conditioning in 1902 by Willis Carrier did more than cool rooms—it redefined human potential. Skyscrapers, once impractical due to stifling heat, now pierce the skies, housing millions. Data centers, the engines of our digital age, rely on precision cooling to operate. Even healthcare breakthroughs, from vaccine storage to surgical theaters, hinge on refrigeration. As philosopher Marshall McLuhan observed, *"We shape our tools, and thereafter our tools shape us."* HVAC&R has reinvented architecture, urban planning, and human habitat, proving that climate control is not a luxury but a cornerstone of progress.

Climate Crisis and the Human Right to Comfort

In 2023, **global temperatures soared to 1.45°C above** pre-industrial levels (WMO, 2024), exacerbating heatwaves that claimed over **61,000 lives in Europe alone** (Nature Medicine, 2023). The World Health Organization (WHO) warns that by 2030, 38,000 annual deaths will result from extreme heat unless equitable access to cooling is prioritized. This is no longer about convenience—it is a matter of survival. The United Nations now recognizes cooling as a critical component of **Sustainable Development Goal 7 (Affordable and Clean Energy)** and **SDG 3 (Good Health and Well-being)**. Air-conditioning must be redefined as a **human right**, ensuring vulnerable communities—from Delhi slums to Senegalese villages—are shielded from killer heat without exacerbating climate collapse.

Intelligence-Powered Solutions: The Path Forward

CRH 2025's theme underscores the urgency to innovate. AI-driven HVAC systems can slash energy use by **30-50%** through predictive maintenance and IoT integration (McKinsey, 2024). Meanwhile, natural refrigerants like CO2 and ammonia are reducing global warming potential by **78%** compared to traditional gases (UNEP, 2024). **MACRA**, through initiatives like **MARVEX**, has championed such advancements, aligning with global frameworks like the **Kigali Amendment** and **COP28's Global Cooling Pledge**.

A Call for Collective Action

Let CRH 2025 be the catalyst for collaboration. To governments, we urge policies that subsidize green retrofits. To industries, we challenge you to invest in equitable, energy-efficient solutions. To individuals, we implore you to demand accountability. As Heraclitus once said, *"Change is the only constant."* Together, let us harness intelligence-powered innovation to ensure cooling and heating systems are not just tools of comfort, but instruments of justice and planetary healing.

Closing

To the organizers and participants of CRH 2025: May this expo inspire breakthroughs that transcend borders and generations. **MACRA stands with you** in this shared journey toward a cooler, fairer, and smarter future. Thank you, and may this event ignite transformative change for all.

Warm regards,  
PETER TAN CHIN WAH  
President, Malaysian Air-Conditioning & Refrigeration Association (MACRA)



To

The Organizing Committee  
China Refrigeration Expo 2025

On behalf of the Refrigeration and Air-Conditioning Trades Association (RATA), I would like to extend our warmest congratulations to you and your team on the successful organization of the China Refrigeration Expo, year after year

Your efforts in bringing together industry professionals, manufacturers, dealers and experts have created a premier platform for knowledge sharing, innovation, and business growth. This is indeed one of the largest & sought after event for the entire global HVACR fraternity

We appreciate the opportunities provided by the expo for our members to network, learn about the latest technologies, and showcase their expertise. We look forward to continuing our collaboration and supporting future events.

Once again, please accept our heartfelt congratulations!

Best regards,

Sachin Maheshwari  
National President  
RATA India



## THE SOCIETY OF AIR-CONDITIONING AND REFRIGERATING ENGINEERS OF KOREA

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Homepage: [www.sarek.or.kr](http://www.sarek.or.kr)  
E-mail: [hvac@sarek.or.kr](mailto:hvac@sarek.or.kr)

March 4, 2025

### SAREK Presidential Message to China Refrigeration Expo 2025

On behalf of the Society of Air-Conditioning and Refrigerating Engineers of Korea (SAREK), I extend my heartfelt congratulations to the Chinese Association of Refrigeration (CAR) on hosting the 36th China Refrigeration Expo, which will take place in Shanghai from April 27 to 29, 2025.

I sincerely appreciate your kind invitation and look forward to attending in person. As always, I anticipate that the China Refrigeration Expo 2025 will show a wealth of innovative ideas and cutting-edge products in the HVAC&R industry. The event's theme, "Intelligence-Powered Cooling and Heating for a Shared Future," is particularly relevant as artificial intelligence (AI) and digital transformation continue to drive technological advancements across industries, including HVAC&R. The integration of AI is accelerating the development of energy-efficient solutions, which are essential for achieving carbon neutrality and fostering a more sustainable future.

With a history spanning over 38 years, this prestigious exhibition has made significant contributions to our industry and society worldwide. Refrigeration and air-conditioning play an indispensable role in modern life, ensuring comfort, enhancing workplace efficiency, and supporting clean and sustainable industrial manufacturing. Moreover, as the global community strives to combat climate change, our industry must take the lead in advancing eco-friendly technologies, energy-efficient systems, and low-carbon solutions to meet the urgent demand for sustainability.

The strong and enduring partnership between SAREK and CAR has always been a priority for us. Our collaboration over the years has been marked by mutual trust and a shared commitment to shaping the future of the HVAC&R field.

Once again, congratulations on this remarkable milestone. I wish the China Refrigeration Expo 2025 great success and look forward to celebrating this important occasion with you.

Warm regards,

*Doosam Song*

Doosam SONG

President, The Society of Air-conditioning and Refrigerating Engineers of Korea (SAREK)



### Congratulatory Message from Reinhard Jeschkeit, Vice President of VDKF, for the China Refrigeration Expo 2025

Dear Organizers, Exhibitors, and Participants of the China Refrigeration Expo 2025,

On behalf of the VDKF – Verband Deutscher Kälte-Klima-Fachbetriebe e.V., I would like to extend my heartfelt congratulations on the successful opening of the China Refrigeration Expo 2025.

This prestigious event has established itself as a leading international platform for innovation, technological advancements, and global cooperation in the refrigeration, air conditioning, and HVAC industries. As the industry continues to evolve, the exchange of knowledge and expertise at events like this is essential in driving sustainability, energy efficiency, and smart solutions forward.

The VDKF values the strong and growing partnership between the German and Chinese refrigeration sectors. We appreciate the opportunity to strengthen our collaboration, share best practices, and work together towards a more sustainable future for our industry.

Wishing all participants a successful and productive exhibition, filled with valuable insights and new opportunities.

Best regards,

Reinhard Jeschkeit  
Vice President

VDKF – Verband Deutscher Kälte-Klima-Fachbetriebe e.V.





VIETNAM SOCIETY OF REFRIGERATION  
AND AIR-CONDITIONING ENGINEERS

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Hoan, Ba Dinh, Hanoi, Vietnam.  
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<http://lanhdkk.com.vn>

Hanoi, March 15, 2025

### LETTER OF CONGRATULATIONS

Refrigeration and air conditioning have become indispensable aspects of modern life, significantly impacting various domains and driving progress across multiple industries. These technologies serve a wide range of critical functions, from preserving food and medicine to ensuring comfortable indoor environments and facilitating technological advancements.

One of the most prominent global events in the field of refrigeration is the China Refrigeration Expo. This event garners substantial attention from the international refrigeration and air conditioning engineering community, including strong engagement from Vietnam.

The Vietnam Society of Refrigeration and Air-conditioning Engineers (VISRAE) was established in 2010. In accordance with legal provisions, VISRAE collaborates both nationally and internationally with industry-related associations, as well as with other scientific and technological organizations. The association actively engages with relevant ministries, authorities, and industry stakeholders. Furthermore, VISRAE facilitates the dissemination of knowledge through publications, journals, websites, and various informational resources while promoting research activities and technological advancements within the fields of refrigeration and air conditioning engineering.

VISRAE is committed to strengthening and expanding its cooperation with the Chinese Association of Refrigeration (CAR) in the near future.

With the China Refrigeration Expo 2025 scheduled for April, on behalf of VISRAE and the Vietnamese refrigeration engineering community, I extend my sincere congratulations to the event organizers and wish them great success.



General Secretary - Vice President of VISRAE

Dr. Nguyen Xuan Tien



China Association of Refrigeration  
- Congratulatory Message for CR Expo 2025



Greetings!

Congratulations to the Chinese Association of Refrigeration (CAR) for organising the 36<sup>th</sup> China Refrigeration Expo 2025 in Shanghai, China.

The China Refrigeration Expo is one of the big 5 top shows in the world with high attendances and participations from many people all over the world. It is also a platform to bring together industry leaders, experts, and enthusiasts to share valuable insights and foster collaboration involved in the HVAC field.

With the theme at the CR Expo 2025 being “Intelligence-powered cooling and heating for shared future”, I am sure that this event will inspire and ignite meaningful conversations among participants.

The many exhibition booths at CR Expo 2025 will also provide many business opportunities and technical exchanges for the exhibitors and participants.

Our collaborations and partnerships with CAR have much mutual benefits and advances for humanity and mankind.

Congratulations once again to the Chinese Association of Refrigeration (CAR) and we look forward to a successful, inspiring and exciting CR Expo 2025!

Yours Sincerely,

Leong Cheng Wee  
ASHRAE Director Region XIII (2022-2025)  
Singapore Chapter



Shaping Tomorrow's  
Built Environment Today

The Kensington Office Tower, 10 Floor, Jl. Boulevard Raya, Kelapa Gading | Jakarta, Indonesia | [www.ashrae.or.id](http://www.ashrae.or.id)

Jakarta, 20 March 2025

**China Association of Refrigeration (CAR),**  
10F, Yindu Tower, 67 Fucheng Road,  
Haidian District, Beijing, China, 100142.

Dear Officers and Committees,

On behalf of the ASHRAE Indonesia Chapter, it is my great pleasure to extend heartfelt congratulations to the Chinese Association of Refrigeration (CAR) on the successful launch of CR Expo 2025.

The CR Expo is globally recognized as a pivotal event, bringing together professionals, innovators, policymakers, researchers, and industry leaders in the fields of refrigeration and HVAC. Through this event, CAR has consistently provided a dynamic platform to showcase cutting-edge technologies, promote innovative research, and facilitate meaningful dialogue on pressing global issues such as climate change and sustainable development.

The positive impacts of CR Expo 2025 are substantial, enhancing knowledge transfer, driving industry growth, and making a significant contribution to the advancement of sustainable and efficient technologies. By fostering international collaboration and networking, CR Expo serves as a catalyst for partnerships that address critical environmental challenges and propel the industry toward a greener future.

ASHRAE Indonesia Chapter deeply appreciates our long-standing partnership and remains committed to further strengthening our collaboration to achieve mutual goals in sustainability, energy efficiency, and environmental stewardship.

We wish you great success at CR Expo 2025 and look forward to continued fruitful cooperation between our organizations!

Kind Regards,

Herlin Herlianika  
President  
ASHRAE Indonesia Chapter



**China Association of Refrigeration**  
**- Congratulations from ASHRAE Malaysia Chapter for CR Expo 2025**

Dear Organizers and Esteemed Participants,

The ASHRAE Malaysia Chapter extends its congratulations to the Chinese Association of Refrigeration (CAR) for the exemplary organization of the 36th China Refrigeration Expo in Shanghai, China. This pivotal event continues to stand as a beacon of innovation and collaboration in the HVAC&R industry on a global scale.

This year's Expo, themed "Intelligence-Powered Cooling and Heating for a Shared Future," is set to catalyze transformative discussions and showcase the latest advancements in the field. The breadth of exhibitions and the depth of the technical sessions are anticipated to enhance industry knowledge, foster business connections, and promote sustainable technological solutions.

The ASHRAE Malaysia Chapter commends the Chinese Association of Refrigeration for their dedication to advancing the HVAC&R industry through the CR Expo. It is a platform that not only highlights industry achievements but also encourages the collective pursuit of technological and ecological advancements.

Congratulations to the Chinese Association of Refrigeration on this remarkable event.  
Best wishes for a successful and inspiring CR Expo 2025!

With warmest regards,

Tee Tone Vei  
President  
ASHRAE Malaysia Chapter





Dear Organizing Committee of China Refrigeration Expo 2025,

On behalf of ASHRAE Vietnam Chapter, I would like to extend my heartfelt congratulations on the upcoming 36th China Refrigeration Expo in Shanghai from April 27–29, 2025.

This prestigious event continues to be a leading platform for innovation, collaboration, and technological advancements in the HVAC&R industry.

With the theme "Intelligence-powered cooling and heating for shared future," CR Expo 2025 highlights the critical role of smart and sustainable solutions in shaping the future of climate control. This commitment to driving industry progress and fostering global cooperation is truly commendable.

We appreciate your efforts in bringing together experts, industry leaders, and professionals from around the world to share knowledge and inspire the next generation of advancements. Wishing you a highly successful and impactful event!

Best regards,

Tuan Giang  
ASHRAE Vietnam Chapter



欣闻第 36 届中国制冷展（CRH 2025）将于 2025 年 4 月 27 日至 29 日在上海新国际博览中心隆重举行，我谨代表 ASHRAE 香港分会，向大会的召开致以最热烈的祝贺！同时，谨向本届展会的主办单位——中国制冷学会、中国制冷空调工业协会及北京国际展览中心有限公司表示由衷的敬意与感谢！多年来，三方的卓越组织与不懈努力，不仅推动了中国制冷行业的蓬勃发展，更为全球技术交流与产业升级树立了标杆。

中国制冷展作为全球制冷空调、暖通及冷冻食品加工领域最具影响力的国际展会之一，始终以推动技术创新、促进行业交流为己任，为全球企业搭建了展示前沿技术与解决方案的卓越平台。本届展会以“制冷空调·暖通”为主题，聚焦可持续发展与绿色科技，不仅呼应了全球减碳趋势，更彰显了中国在应对气候变化与能源转型中的引领作用。尤为值得关注的是，展会对“新质生产力”的实践探索——通过人工智能赋能的智能化技术、“节能降碳产品与技术”专题研讨驱动的低碳化转型，以及跨领域协同创新，重塑行业生产模式，为全球制冷产业注入高效、可持续的发展动能。这一系列举措，既体现了科技创新驱动高质量发展的核心要义，也为行业应对未来挑战提供了切实路径。

ASHRAE 香港分会长期关注行业技术革新与应用实践，与中国制冷展及主办单位始终保持着紧密的合作关系。我们欣喜地看到，本届展会特别设立“节能降碳产品与技术”专题研讨，深入探讨零碳制冷技术、智慧能源管理系统等前沿方向；同时，通过人工智能在设备优化、能耗预测及系统运维中的创新应用案例分享，展现了技术赋能行业的无限潜力。未来，我们将继续深化与组委会及各界同仁的协作，共同推动暖通空调与制冷领域的高质量发展，加速新质生产力的培育与落地，助力智慧节能技术普及与绿色产业链整合，为构建低碳智慧社会贡献力量。

最后，再次祝贺中国制冷学会、中国制冷空调工业协会及北京国际展览中心有限公司成功筹办此次盛会！预祝第 36 届中国制冷展圆满成功，以人工智能与绿色科技双轮驱动，为全球制冷领域的可持续发展与碳中和目标实现谱写崭新篇章！

ASHRAE 香港分会会长  
周智锋 谨贺







香港空調及冷凍商會  
梁栢泉  
會長

# 祝中国制冷展 技术创新引领 制冷展耀辉煌 圆满成功

中国制冷展二零二五年致庆



As the Chair of the Chartered Institution of Building Services Engineers (CIBSE) Hong Kong Region (HKR), it is with great pleasure that I extend my heartfelt congratulations on the upcoming 36th China Refrigeration Expo 2025, to be held in Shanghai from April 27-29, 2025. Since its inception in 1987, the China Refrigeration Expo has stood as a beacon of innovation and excellence in the heating, ventilation, air-conditioning, and refrigeration (HVAC&R) industry. This event has successfully brought together a diverse array of professionals from academia and industry, fostering collaboration and advancing the frontiers of our field. With more than 1,000 exhibitors from over 30 countries, and an expected attendance of over 70,000 technical and trade visitors, the Expo promises to be an unparalleled platform for showcasing cutting-edge technologies and sharing knowledge. The theme, "Intelligence-powered cooling and heating for shared future," resonates deeply with our shared vision of promoting sustainable practices and enhancing industry vitality. CIBSE HKR is proud to support such initiatives that align with our mission to advance the science, and practice of building services engineering. We are committed to promoting education, research, and collaboration within our community and beyond.

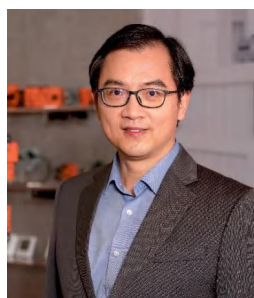
I look forward to engaging with all participants and witnessing the remarkable innovations and discussions that will emerge from this significant event. Together, let us continue to push the boundaries of our industry for a brighter and more sustainable future. Congratulations once again to the Organizing Committee and all stakeholders involved. May the China Refrigeration Expo 2025 be a resounding success!

Warm regards,  
Ethan Poon  
Chair, CIBSE HKR





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香港能源工程師學會會長

王榮耀工程師 敬賀

匠心獨運 綠能科技展宏圖  
零碳創新 節能減排護生態

中國制冷展二零二五



弘彰專業  
精研技術



香港註冊專門承建商（通風系統）協會  
HONG KONG REGISTERED SPECIALIST CONTRACTORS (VENTILATION) ASSOCIATION

主席 蕭一鳴



恭祝二〇二五年第三十六屆中國製冷展

萬商景仰  
大業允興



台灣區冷凍空調工程工業同業公會  
理事長 陳秋雄 敬賀



恭賀 2025 中國制冷展成功

智慧製冷 低碳創新  
節能永續 領航淨零

冷凍空調技師公會全聯會  
理事長 吳建興 暨 全體理監事 敬賀

恭賀 2025 中國制冷展成功

淨零產業 節能楷模  
融合創新 共創願景

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On behalf of HMSF,

**Hannover Messe Sodeks Fuarçılık A.Ş. (HMSF)** is one of the subsidiaries of Hannover Fairs Turkey Fuarçılık A.Ş., an affiliate of Deutsche Messe AG, one of the world's top 10 trade fair companies.

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I would like to congratulate you and your organization team of "China Refrigeration EXPO 2025"

"China Refrigeration" has proven itself as a landmark in the sector of air conditioning, ventilation, and refrigeration throughout the years. It has surely gained a reputation as a successful project. Today, we witness that the exhibition continues to expand, contributing to the prosperity of the sector.

We will be pleased to attend the "China Refrigeration 2025" and I trust that the exhibition will get a great success again as the past years.

Annika Klar,  
President of the Board



**Hannover Messe Sodeks Fuarçılık A.Ş.**

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# 中国制冷学会 制冷节能降碳与制冷剂替代工作组

在我国积极践行《基加利修正案》并全力推进碳达峰、碳中和目标的双重战略背景下，确保中国制冷空调热泵行业持续向绿色、低碳及可持续发展已成为核心议题与紧迫任务。其中，制冷剂的低碳化转型尤为关键。

经中国制冷学会十届四次常务理事会审议通过，中国制冷学会于2022年5月成立制冷节能降碳与制冷剂替代工作组。工作组旨在凝聚制冷领域内广泛的科技人才、行业协会、专业机构及企业力量，深度调研并核算我国制冷剂的使用与排放现状。同时，聚焦于制冷剂替代技术的探索与规划，引领并推动我国制冷领域节能降碳核心技术的研发与广泛应用。致力于为政府决策提供技术支撑，同时增强我国在国际制冷技术领域的交流与合作，进一步扩大国际影响力与宣传力度，共同促进全球制冷行业的绿色、低碳与可持续发展。

## 联系人:

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## ORGANIZATION

WWW.CR-EXPO.COM

## Timetable for CRH 2025

DATE	TIME	PROGRAM	VENUE
April 26 <sup>th</sup>	15:30-16:30	CRH 2025 Innovation Products Launch	Himalayas Ballroom, 6 <sup>th</sup> Floor, Shanghai Himalayas Hotel
April 27 <sup>th</sup>	08:45-11:45	Opening Ceremony and CRH 2025 Forum	Pudong Ballroom, 3 <sup>rd</sup> Floor of Kerry Hotel Pudong, Shanghai
April 27 <sup>th</sup>	09:00-17:30	Exhibition	Shanghai New Int'l Expo Centre (SNIEC)
April 28 <sup>th</sup>	09:00-17:30		
April 29 <sup>th</sup>	09:00-16:00		
April 27 <sup>th</sup> -28 <sup>th</sup>	09:30-16:30	CRH 2025 Symposiums	Shanghai New Int'l Expo Centre (SNIEC)
April 26 <sup>th</sup> -29 <sup>th</sup>	09:00-17:30	Technical Seminars	Shanghai New Int'l Expo Centre (SNIEC) Grand Ballroom 1, Holiday InnShanghai Pudong Kangqiao Hotel Songshan&Tianshan Room, 2 <sup>nd</sup> Floor of Sheraton Grand Shanghai Pudong Hotel
April 29 <sup>th</sup>	10:00-12:00	CRH 2025 Golden Award Products Launch	Meeting Room E2-M19, SNIEC

## CRH 2025 Forum (Simultaneous Interpretation)

Time	Venue	Topic
April 27 09:00-11:45	Pudong Ballroom, 3 <sup>rd</sup> Floor of Kerry Hotel Pudong, Shanghai	<ol style="list-style-type: none"><li>1. Principles of Large Foundation Models and Their Empowerment Modes ——Zongben XU, Academician of the Chinese Academy of Sciences, Professor at Xi'an Jiaotong University</li><li>2. Shanghai Advanced Light Source, a National Major Science Project ——Bo LIU, Research Professor of Shanghai Advanced Research Institute, Chinese Academy of Sciences, Deputy director of SSRF Science Center</li><li>3. Climate Change, Energy Transition, and the Responsibility of the HVAC&amp;R Industry ——Xianting LI, Director of the Expert Committee of China Refrigeration Expo, Professor at Tsinghua University</li><li>4. The Development of Natural Refrigerants in Refrigeration ——Marco Masini, President of the Association of European Refrigeration Component Manufacturers (ASERCOM)</li></ol>

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CRH 2025 Symposiums

DATE	TIME	TOPIC	VENUE
April 27 <sup>th</sup>	13:30-16:30	Symposium 1: Products and Technologies of Energy-saving and CO <sub>2</sub> Emission Reduction	Meeting Room W2-M2, SNIEC
	14:00-16:30	Symposium 2: New Ventilation Technologies for Special Environment	Meeting Room W2-M3, SNIEC
	13:30-16:30	Symposium 3: Green Data Center Cooling	Meeting Room W3-M5, SNIEC
	13:30-16:30	Symposium 4: Symposium on Low-carbon Technologies and Equipments for Industrial Process	Meeting Room W4-M6, SNIEC
	14:00-16:30	Symposium 5: New Technology of Refrigerating Compressor	Meeting Room W4-M7, SNIEC
	13:30-16:30	Symposium 6: Special Technical Report on New Standards of Refrigeration and Air Conditioning Equipments	Meeting Room W5-M8, SNIEC
	14:00-16:30	Symposium 7: Technical Forum on Cold Chain Equipment	Meeting Room E1-M11, SNIEC
	13:30-16:30	Symposium 8: HVAC and Low-Carbon Development in Buildings	Meeting Room E1-M15, SNIEC
	14:00-16:30	Symposium 9: Eco-Friendly Refrigeration Technology Workshop	Meeting Room E2-M17, SNIEC
	14:00-16:30	Symposium 10: Senior Engineer Forum of Chinese Association of Refrigeration	Meeting Room E2-M18, SNIEC
	13:30-16:30	Symposium 11: AI for Refrigeration	Meeting Room E2-M19, SNIEC
	13:30-16:30	Symposium 12 : Technical Innovation and Application for R&AC	Meeting Room E3-M22, SNIEC
	14:00-16:30	Symposium 13 : The 16 <sup>th</sup> National Advanced Seminar on Ice Maker Industry and the 14 <sup>th</sup> Advanced Seminar on Refrigeration Machinery Equipment	Meeting Room E3-M23, SNIEC
	14:00-16:30	Symposium 14 : Digital Cold Logistics Technology	Meeting Room E3-M24, SNIEC
	13:30-16:00	Symposium 15 : The 3 <sup>rd</sup> New Type of Energy Storage and Advanced Low Carbon Technology Symposium	Meeting Room E4-M27, SNIEC
	13:30-16:30	Symposium 16 : 2025 Ozone2Climate Technology Industry Roadshow and Industry Roundtable (Chinese-English Simultaneous Interpretation)	2025 Ozone2Climate Technology Roadshow and Industry Roundtable (Booth#E4F31)

DATE	TIME	TOPIC	VENUE
April 28 <sup>th</sup>	09:30-12:30 13:30-16:30	Symposium 16 : 2025 Ozone2Climate Technology Industry Roundtable (Chinese-English Simultaneous Interpretation)	2025 Ozone2Climate Technology Roadshow and Industry Roundtable (Booth#E4F31)
	09:30-12:00	Symposium 17: New Technologies of Heat Pump and Heating Under the "Dual Carbon" Goals	Meeting Room W2-M2, SNIEC
	09:30-12:00	Symposium 18: Environment Simulation and Test Technology	Meeting Room W2-M3, SNIEC
	09:30-12:00	Symposium 19: Techniques for Compressor Application-R744 Compressor	Meeting Room W3-M5, SNIEC
	09:30-12:00	Symposium 20: Symposium on Development of Multi-Split Air-Conditioning (Heat Pump) Unit Industry Technology	Meeting Room W4-M6, SNIEC
	09:30-12:00	Symposium 21: Symposium on Innovative Refrigerant and Coolant Technologies for Green and Low-Carbon Development	Meeting Room W4-M7, SNIEC
	09:30-12:00	Symposium 22: Future-Oriented Evaporative Cooling Technology	Meeting Room W5-M8, SNIEC
	09:30-12:00	Symposium 23: Low-carbon and Healthy Indoor Environment Technologies	Meeting Room W2-M9, SNIEC
	09:30-12:00	Symposium 24: The 7 <sup>th</sup> Indoor Air Purification and Fresh Air Technology Symposium	Meeting Room E1-M11, SNIEC
	09:30-12:00	Symposium 25: Refrigeration System with Oil Free Compressor	Meeting Room E1-M15, SNIEC
	09:30-12:00	Symposium 26: Future Refrigeration Technology-Ushering in a New Era of Refrigeration Innovation	Meeting Room E1-M16, SNIEC
	09:30-12:00	Symposium 27: Refrigerant Substitution and GHG Emission Reduction in Refrigeration Industry	Meeting Room E2-M17, SNIEC
	09:30-12:00	Symposium 28: The 9 <sup>th</sup> Light Commercial Refrigeration Technology Integration Forum between Industry and Education and China Light Commercial Refrigeration Technology Development Report in 2024 Release Ceremony	Meeting Room E2-M18, SNIEC
	09:30-12:00	Symposium 29: Refrigerant Substitution and Reduction Technology in Industrial and Commercial Refrigeration	Meeting Room E3-M23, SNIEC
	09:30-12:00	Symposium 30: Technical Forum on Creative Quality Based Cold Chain	Meeting Room E3-M24, SNIEC
	12:00-13:00	Symposium 31: European Legislation and Its Impact on Manufacturers in China (Chinese-English Simultaneous Interpretation)	Meeting Room E3-M22, SNIEC

DATE	TIME	TOPIC	VENUE
April 28 <sup>th</sup>	14:00-16:30	Symposium 32: R&HVAC for Rail Transit	Meeting Room W2-M2, SNIEC
	13:30-16:30	Symposium 33: Innovation Technology for Renewable Energy	Meeting Room W2-M3, SNIEC
	13:30-16:30	Symposium 34: Workshop on Low Carbon Development of VRF System	Meeting Room W3-M5, SNIEC
	13:30-16:30	Symposium 35: Symposium on Alternative Technologies of New Materials for Refrigeration and Air Conditioning Components	Meeting Room W4-M6, SNIEC
	14:00-16:30	Symposium 36: Innovation and Development Forum on Supercomputing Power and Next-Generation Data Center Cooling Technologies	Meeting Room W5-M8, SNIEC
	14:00-16:30	Symposium 37: Forum on the Development of Refrigeration Technology for Distributed Microgrids	Meeting Room W2-M9, SNIEC
	13:30-16:30	Symposium 38: Implementation Strategies of Ultra-low Energy Consumption Building Technology in the Renovation of Existing Buildings	Meeting Room E1-M15, SNIEC
	14:00-16:30	Symposium 39: Development of Heat Exchangers	Meeting Room E1-M16, SNIEC
	14:00-16:30	Symposium 40: Intelligent Low-temperature Storage Technology and Equipment for Biological Samples	Meeting Room E2-M18, SNIEC
	13:30-16:30	Symposium 41: AI-aided Intelligent Operation of Refrigeration, Heat Pump and Air-conditioning Systems	Meeting Room E2-M19, SNIEC
	14:00-16:30	Symposium 42: Symposium on Technology and Policies of LNG Cold Energy Recovery and Utilization	Meeting Room E3-M22, SNIEC
	14:00-16:30	Symposium 43: Low-carbon Cold Chain Logistics in Port and Shipping Industry	Meeting Room E3-M23, SNIEC
	13:30-16:30	Symposium 44: New Demand, New Development and New Technology in Cold Chain	Meeting Room E3-M24, SNIEC
	14:00-16:30	Symposium 45: Technology Innovation and Application in Industrial Refrigeration and Heating	Meeting Room E4-M27, SNIEC
	13:30-17:00	Symposium 46: AI Empowerment, New Era of Heat Pump-Industrial and Commercial Heat Pump Multi Scenario, Wide Field Innovation and Intelligent Application Development Forum	Meeting Room E5-M28, SNIEC

Schedule for Schedule Technical Seminars

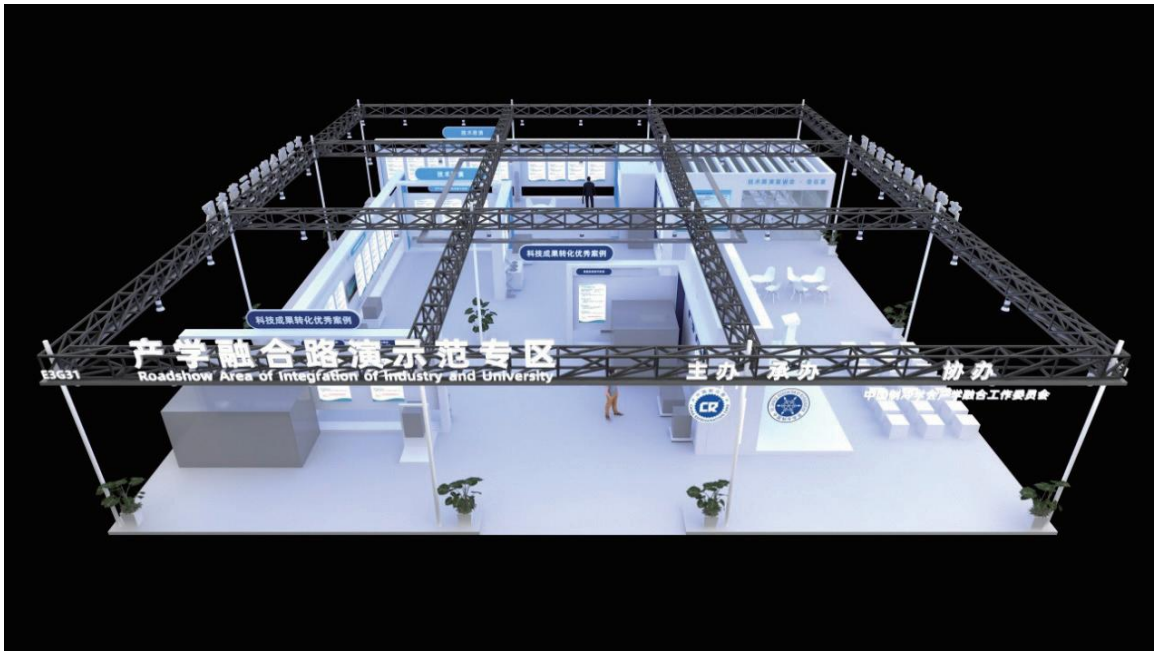
DATE	TIME	COMPANY	TOPIC	VENUE
April 26 <sup>th</sup>	09:00-12:00	Chinese Association of Refrigeration	The 2 <sup>nd</sup> Vehicle Thermal Management Technical Committee Inauguration & First Plenary Session of Chinese Association of Refrigeration (Closed-door Meeting)	Songshan&Tianshan Room, 2 <sup>nd</sup> Floor of Sheraton Grand Shanghai Pudong Hotel
April 27 <sup>th</sup>	11:30-13:30	China Refrigeration and Air-Conditioning Industry Association (CRAA)	Press Conference of the 19 <sup>th</sup> China R&AC Industry Science and Technology Contest for University Students	Meeting Room E4-M26, SNIEC
	13:00-15:00	Shanghai Sigriner STEP Electric Co.,Ltd.	Miniaturization of HVAC Drive Products under the Trend of Smart Cooling and Heating and Coping Strategies in Harsh Environments	Meeting Room W3-M4, SNIEC
	13:00-16:00	Copeland Climate Technologies (Suzhou) Co., Ltd.	Copeland Sustainable Solutions for Energy Station, Data Center, Industrial Heat Pumps, CO <sub>2</sub> Cold Chain and Residential Comfort System	Meeting Room E1-M12, SNIEC
	13:30-15:30	J-SUN Shanghai Trading Co., Ltd.	Research on Less Soluble Refrigeration Oils Technology and New Products Introduction	Meeting Room E5-M28, SNIEC
	14:00-16:30	Shanghai General Fushi Refrigeration Equipment Co., Ltd.	High Efficiency and Super Low Charge Refrigeration Systems	Meeting Room W1-M1, SNIEC
	14:00-16:00	GREE Electric Appliances, Inc. of Zhuhai	Building Upgrade Driven by New Intelligent Technologies	Meeting Room W2-M9, SNIEC
	14:00-16:00	Panasonic Wanbao Appliances Compressor (Guangzhou) Co., Ltd. Guangdong Tili Refrigeration Equipment Co., Ltd.	Green Refrigeration & Low-GWP Heat Pumps: Thermodynamic Innovations for Carbon-Neutral Futures	Meeting Room W3-M10, SNIEC
	14:00-17:00	Johnson Controls-Hitachi Wanbao Compressor (Guangzhou) Co., Ltd.	Infinite Power by Hitachi Scroll Innovation	Meeting Room E1-M13, SNIEC



DATE	TIME	COMPANY	TOPIC	VENUE
April 27 <sup>th</sup>	14:00-16:30	Chinese Association of Refrigeration	Inaugural Meeting and the First Working Meeting of Technical Committee of Built Environment in Residential Building of Chinese Association of Refrigeration (Closed-door Meeting)	Meeting Room E1-M16, SNIEC
	14:00-15:00	Shrieve Chemical Co.,Ltd.	Lubricant Development for Low GWP Refrigerants: Challenges and Shrieve Solution	Meeting Room E2-M20, SNIEC
	14:00-17:00	Chinese Association of Refrigeration National Steering Subcommittee for Higher Education in Building Environment and Energy Engineering National Steering Committee for Higher Education in Energy and Power	“Midea Cup”China HVACR Innovation Award Opening Ceremony	Meeting Room E5-M32, SNIEC
	16:00-17:00	Chinese Association of Refrigeration	The 2 <sup>nd</sup> Plenary Session of the 1 <sup>st</sup> Term Technical Committee on Advanced Energy Storage Technologies and Integrated Energy Systems of Chinese Association of Refrigeration(Closed-door Meeting)	Meeting Room E4-M25, SNIEC
	16:45-17:15	Chinese Association of Refrigeration	Launch Ceremony of Status Quo and Substitution Trends of Refrigerants in China	E3G31, SNIEC
April 28 <sup>th</sup>	08:40-12:40	The Organizing Committee of China Refrigeration Expo Building Environment and Energy Application Branch of China Engineering & Consulting Association (BEEAB)	Technical Seminar of National Chief Engineer Delegation	Grand Ballroom 1, Holiday Inn Shanghai Pudong Kangqiao Hotel
	09:00-11:30	Bingshan Refrigeration & Heat Transfer Technologies Co., Ltd.	Product Launch	Meeting Room E2-M20, SNIEC
	09:30-12:00	Chinese Association of Refrigeration	Inaugural Meeting and the First Working Meeting of Industrial Refrigeration Technical Committee of Chinese Association of Refrigeration (Closed-door Meeting)	Meeting Room E4-M27, SNIEC

DATE	TIME	COMPANY	TOPIC	VENUE
April 28 <sup>th</sup>	09:30-12:00	Chinese Association of Refrigeration Hua Shang International Engineering Co., Ltd	Seminar on the Revision of Four National Standards for Cold Storage Safety, Design and Construction	Meeting Room E5-M32, SNIEC
	10:00-12:00	INTERTEK	North American Combustible Refrigerant Air Conditioning and Ventilation Design and CVP Analysis Seminar	展馆会议室 W3-M4 Meeting Room W3-M4, SNIEC
	10:00-12:00	thermofin Heat Exchanger (Pinghu) Co., Ltd.	Evaporators for Reduced NH3 Inventory in Refrigeration Plants	Meeting Room E1-M12, SNIEC
	11:00-12:00	Chinese Association of Refrigeration ASHRAE National Steering Subcommittee for Higher Education in Building Environment and Energy Engineering	CAR-ASHRAE Student Design Project Competition Award 2024	Meeting Room E2-M19, SNIEC
	13:00-16:30	China Association for Quality Inspection Human Settlements Quality Professional Committee	2025 China Association for Quality Inspection Human Settlements Quality Professional Committee Annual Conference and Air Purification Industry Development Seminar	Meeting Room W1-M1, SNIEC
	13:30-16:30		Sharing of Case Studies on the Use of Natural Refrigerants in European and American Countries and Exploration of Development Trends in China Special Seminar Agenda	Meeting Room E2-M17, SNIEC
	14:00-16:00	UL Solutions	UL Solutions 助力制冷空调及零部件制造商向新冷媒应用快速过渡 Navigate the Low-GWP Transition with UL Solutions	Meeting Room W3-M10, SNIEC
	14:00-15:00	BITZER Refrigeration Technology (China) Co., Ltd.	比泽尔高效低温热泵涡旋压缩机 BITZER High Efficient Low Ambient Temperature Heat Pump Scroll Compressor	Meeting Room E3-M21, SNIEC
April 29 <sup>th</sup>	09:30-11:30	Chinese Association of Refrigeration	Seminar on Industrial Heat Pump Application Cases (Closed-door Meeting)	Meeting Room E2-M14, SNIEC

The Roadshow Area of Integration of Industry and University will be unveiled at CRH 2025



In order to promote the deep integration of industry, academia and research in the field of refrigeration, promote technological innovation, and help China’s refrigeration industry accelerate its transformation and upgrading to green development and achieve global leadership, the “Roadshow Area of Integration of Industry and University” (hereinafter referred to as “Roadshow Area”) will continue to be organized during CRH 2025.

The Roadshow Area is organized by the CRH Organizing Committee, hosted by Chinese Association of Refrigeration, and co-organized by the Industry-University Integration Working Committee of Chinese Association of Refrigeration. It is located at booth E3G31, Hall E3, Shanghai New International Expo Centre (SNIEC), covering an area of more than 500 square meters, and has two sections: “Excellent Cases of Transformation of Scientific and Technological Achievements” and “Technology Roadshow”.

1. Excellent cases of transformation of scientific and technological achievements

10 outstanding cases of transformation of scientific and technological achievements will be unveiled in the exhibition area. Some of the typical projects will be interviewed and broadcast live online simultaneously, giving you a closer understanding of the characteristics of the products and the industry-university integration mode. The list of projects is as follows (in alphabetical order of product name):

Serial Number	Product Name	Name of Producer
1	Cold storage integrated machine using R290 small tube diameter heat exchanger	Qingdao Keling Refrigeration Equipment Co., Ltd. Xi'an Jiaotong University
2	High-temperature heat pump steam unit	Ma'anshan Coldnot Technology Co., Ltd. University of Science and Technology of China Anhui Envalley Engineering Technology Co., Ltd.
3	Comprehensive experimental platform for HVAC intelligent control and flexible energy consumption system	Shanghai Dayou Instrument Co., Ltd. Chang'an University
4	MW industrial waste heat phase change upgrading centrifugal high-temperature heat pump	Xi'an Jiaotong University Moon Environment Technology Co., Ltd.
5	NT-WS-320NTW 145 degree high-temperature water-source heat pump unit	Shanghai Noton New Energy Technology Co., Ltd.
6	PVT direct expansion heat pump unit	Dalian Qunzhi Technology Co., Ltd. Dalian University of Technology
7	Dual system heat pipe air conditioner all-in-one unit	Hubei Xingzhi Tianxia Information Technology Co., Ltd. Huazhong University of Science and Technology
8	New low resistance 3D filter material oil mist filtration device	University of Shanghai for Science and Technology Shanghai Qingyou Environmental Technology Co., Ltd.
9	Test system for thermophysical properties of refrigerant and lubricating oil mixture	Xi'an Xiaxi Electronics Technology Co., Ltd. Xi'an Jiaotong University
10	Prefabricated integrated fire ventilation room	China Architecture Design & Research Group Co., Ltd. Beijing Guozhu Renju Engineering Consultant Co., Ltd. Royal Power (Wuhan) Co., Ltd.

II. Technical Roadshow

50 projects from 17 universities and research institutes will be exhibited in the form of “posters + objects” in the Roadshow Area during CRH 2025, and the project leaders will communicate in the poster area within a specific time period; On this basis, 20 of the projects are divided into five directions to organize presentations for enterprises. Experts introduce the existing achievements and the cooperation they hope to establish, build a communication platform, and help school-enterprise cooperation. The list of poster and presentation projects is as follows (the presentation projects are marked in bold, and please go to the “Roadshow Area of Integration of Industry and University” for the specific presentation time of each group):

Topics	Serial Number	Project Name	Name of Producer	Project Leader
Air processing, control equipment and systems	1	Low energy consumption regenerative MOF composite adsorption dehumidification material and runner	Beijing University of Technology	Professor Liu Zhongbao
	2	<b>Electrostatic trapping device with extremely narrow pole spacing and analysis of its purification efficiency</b>	<b>Northeastern University</b>	<b>Professor Hao Wenge</b>
	3	<b>Large model in building energy field</b>	<b>Shanghai Jiao Tong University</b>	<b>Associate Professor Du Zhimin</b>
	4	Discrete ice lattice anti-frosting solution	University of Shanghai for Science and Technology	Zhao Yugang
	5	Refrigeration system design software based on physical model and big data	Tianjin University of Commerce	Associate Professor Hu Kaiyong
	6	Convection-radiation coupling flexible terminal indoor environment creation system for intermittent heating	Tianjin University of Commerce	Lecturer Wang Chendong

Topics	Serial Number	Project Name	Name of Producer	Project Leader
Air processing, control equipment and systems	7	Research and Development of Structure Simulation for Efficiency Improvement of Axial Fan	Tianjin University of Commerce	Lecturer Wang Xinru
	8	Energy-saving intelligent control technology of refrigeration system based on model-free reinforcement learning	Xi'an Jiaotong University	Associate Professor Wang Chuang
	9	EnergyX, a large model platform for building energy conservation	Zhejiang University	Researcher Zhao Yang
Addressing climate change and other products/technologies	1	Application of sky radiation refrigeration film in photovoltaic power generation efficiency	Beijing University of Technology	Professor Liu Zhongbao
	2	CO <sub>2</sub> air-source heat pump coupled with absorption heat storage	Huazhong University of Science and Technology	Associate Professor Cai Dehua
	3	Combined cooling and power generation integrated energy system driven by hydrogen fuel cell	University of Shanghai for Science and Technology	Associate Professor Gao Peng
	4	Energy consumption simulation platform of building air-conditioning system and two-way interpretable spatio-temporal feature decision-making technology	University of Shanghai for Science and Technology	Associate Professor Han Hua
	5	Infrared warning of thermal runaway of lithium battery	University of Shanghai for Science and Technology	Associate Professor Li Kang
	6	Topology optimization of cold plate based on size constraints	Tianjin University	Associate Professor Ma Fei
	7	Experimental study on thermophysical properties of new generation environmentally friendly working fluid	Tianjin University	Professor Yang Zhao
	8	Preparation and system conceptual design of metal-supported solid oxidation fuel cell with in-situ reforming of liquid fuel	Tianjin University of Commerce	Lecturer Ma Shuai
	9	Regulation of iron oxide modified biogas residue source biochar on anaerobic digestion of high-load food waste/cold chain loss food	Tianjin University of Commerce	Lecturer Mu Lan
Air conditioning heat pump Equipment	1	Household air-source heat pump water heater coupled phase change heat storage	Beijing University of Technology	Associate Research Fellow Xu Shuxue
	2	Household air conditioner with phase change cold storage	Beijing University of Technology	Associate Research Fellow Xu Shuxue
		Household air-conditioning heat pump system with phase change heat accumulator	Beijing University of Technology	Associate Research Fellow Xu Shuxue
	3	PVT direct expansion direct drive heat pump water heater	Beijing University of Civil Engineering and Architecture	Professor Xu Rongji
	4	A novel high-temperature heat pump based on physicochemical thermal effect of reversible reaction	Southeast University	Professor Yin Yonggao
	5	Cascade high-temperature heat pump unit	Ma'anshan University	Wang Jiping Senior Engineer
	6	High-efficiency CO <sub>2</sub> heat pump energy storage system and its application optimization	Shanghai University of Electric Power	Professor Liu Fang
	7	End face pressure model and shaft seal optimization method of screw steam compressor for high-temperature heat pump	University of Shanghai for Science and Technology	Associate Professor Tian Yafen

Air conditioning heat pump Equipment	8	High-temperature steam heat pump unit with dual use of steam and cold water	University of Shanghai for Science and Technology	Lecturer Zhang Tianjiao
	9	Application prospect and safety protection measures of R290 in cabinet and room air-conditioning	Tianjin University	Professor Yang Zhao
	10	Comparison of replacement maturity and safety countermeasures of R32 and low GWP mixtures in multiple connections	Tianjin University	Professor Yang Zhao
		Comparison of maturity of multi-split substitution and security countermeasures	Tianjin University	Professor Yang Zhao
Compressors, heat exchangers, valves and other auxiliary components	1	Research on Key Technology and Application of Ultra-high-efficiency Synchronous Reluctance Motor	Huazhong University of Science and Technology	Associate Researcher Wang Yawei
	2	Study on air supply characteristics of scroll compressors with different turns of electric vehicles	University of Shanghai for Science and Technology	Associate Professor Li Kang
	3	High-efficiency horizontal falling film evaporator with spray compensation	University of Shanghai for Science and Technology	Lecturer Zhang Tianjiao
	4	Development of Scroll Compressor with Multi-Temperature Zone Heating and Pumping and Supplying Air	University of Shanghai for Science and Technology	Associate Professor Zhao Zhaorui
	5	Variable density micro-needle rib heat exchanger based on chip cooling	Tianjin University of Commerce	Lecturer Wu Dongxia
	6	Flash cooling technology	Tianjin University of Commerce	Lecturer Yang Qingzhong
	7	Research on intelligent defrost control based on parallel plate capacitor principle	Tianjin University of Commerce	Associate Professor Zhao Songsong
	8	Efficiency improvement technology of small diameter finned tube heat exchanger	Xi'an Jiaotong University	Associate Professor Chen Qi
	9	Air-to-air heat recovery heat exchanger based on microchannel full-loop pulsating heat pipe	Xi'an Jiaotong University	Professor Huang Dong
Industrial and commercial refrigeration and related components	1	Cold chain logistics equipment based on phase change energy storage and vacuum insulation integration	Shanghai Maritime University	Senior Engineer Kan Ankang
	2	Jet pump (ejector) instead of expansion valve refrigeration energy-saving technology	Shanghai Ocean University	Professor Wan Jinqing
	3	Determination of defrosting in heat pump system of carbon dioxide air-conditioning	University of Shanghai for Science and Technology	Associate Professor Li Kang
	4	R290 Thermal Management System of Secondary Circuit of Electric Vehicle	University of Shanghai for Science and Technology	Associate Professor Li Kang
	5	CO <sub>2</sub> thermal management system performance and economy optimization and control strategy design	University of Shanghai for Science and Technology	Associate Professor Tian Yafen
	6	Influence of Regeneration Side Parameter Structure on Performance of Two-Stage Runner Dehumidification System	University of Shanghai for Science and Technology	Associate Professor Yang Yingying
	7	Development of Components and System Simulation Software for Small Refrigeration Device	Tianjin University of Commerce	Professor Dai Baomin
	8	Self-cascade ultra-low temperature refrigeration technology	Tianjin University of Commerce	Associate Professor Hu Kaiyong



Topics	Serial Number	Project Name	Name of Producer	Project Leader
Industrial and commercial refrigeration and related components	9	Multi-physics coupling fresh-keeping cabin	Tianjin University of Commerce	Professor Liu Bin
	10	Cascade cold storage refrigeration system	Tianjin University of Commerce	Sun Huan Professor senior engineer
Industrial and commercial refrigeration and related components	11	Integrated equipment for mine cooling and geothermal co-mining	Xi'an University of Science and Technology	Associate Professor Chen Liu
	12	Extremely low vibration liquid helium-free cryogenic system	Shanghai Institute of Technical Physics, CAS	Liu Shaoshuai Young Researcher
	13	Small-scale continuous adsorption refrigeration device in 1K temperature range for quantum device measurement	Shanghai Institute of Technical Physics, CAS	Liu Shaoshuai Young Researcher

From April 27th to 29th, everyone is welcome to visit and exchange in the Roadshow Area of Integration of Industry and University!

## 2025 Ozone2Climate Technology Industry Roundtable

2025 Ozone2Climate Technology Roadshow and Industry Roundtable will be grandly held in E4F31 of 36th CRH on April 27-29th.

Ever since Ozone2Climate Technology Roadshow and Industry Roundtable was convened during CRH in 2012, it has grown into a critical platform to exchange Ozone2Climate friendly information amongst HVAC&R sectors, and it has done its indispensable part in achieving the stage-wise contract-fulfilling objective defined in Montreal Protocol for the concerned industries in China and world at large.

Ozone2Climate Technology Roadshow and Industry Roundtable will launch a series of technical show and exchange campaigns. The conference invites experts from the government, international organizations, industrial associations, companies, institutes and universities to introduce the latest policies, laws and regulations, technical development, standards overview, achievements and experience sharing. The roadshow will showcase the latest environment-friendly technologies and products by numerous manufactures from home and abroad.

Schedule of events:

Activities		Time	Location
Ozone2Climate Technology Roadshow		April 27-29 9:00~17:00	Roadshow Booth E4F31
Industry Roundtable			
	Policy and Challenges	April 27 13:30~16:30	
	Refrigerant Substitution Technology	April 27 9:30~12:00	
	Good Practices in the Servicing Sector	April 28 13:30~16:30	

Welcome to log in via scanning as simultaneous interpretation in Chinese and English is available during the roundtable conference.



2025 Ozone2Climate Technology Industry Roundtable  
(Chinese-English Simultaneous Interpretation)

**Time:** 13:30-16:30, April 27, 2025  
9:30-12:00, 13:30-16:30, April 28, 2025

**Venue:** Ozone2Climate Technology Roadshow and Industry Roundtable (Booth# E4F31)

13:30-16:30, April 27

Opening Remarks

Department of Atmospheric Environment, Ministry of Ecology and Environment Foreign Environmental Cooperation Center, Ministry of Ecology and Environment (FECO)

UNEP

UNDP China

CRAA

Topic1: Policy and Challenges

**Time:** 13:30-16:30, April 27, 2025

- 1. Status and Progress of Implementation of the Montreal Protocol  
——Division of Ozone Layer Protection, Department of Atmospheric Environment, Ministry of Ecology and Environment
- 2. From Montreal to Kigali: Green Cooling Trends and Challenges during Critical Compliance Periods for ICR industry  
——Foreign Environmental Cooperation Center, Ministry of Ecology and Environment (FECO)
- 3. Policy Framework in the Refrigeration and Air-conditioning Servicing Sector and Progress in the Asia-Pacific Region  
——Mr. Mikheil Tushishvili, Montreal Protocol Officer & ExCom Coordinator & Interim Regional Coordinator for South Asia Network, UNEP
- 4. Challenges in Montreal Protocol & Cooling Sector's Green Transformation  
——Ms. Cheng Bingxin, Programme Associate, UNDP China
- 5. Enhancing Energy Efficiency and Promoting R-290 Adoption in the Air-Conditioning Sector  
——Dr. Yunrui Zhou, Industrial Development Officer, United Nations Industrial Development Organization (UNIDO)

- 6. Current State of the Refrigerant Transition and Sustainability Planning  
——Mr. Stephen Yurek, President, Air-Conditioning, Heating, and Refrigeration Institute (AHRI)
- 7. The European Union: The clock is ticking for the RACHP Industry to make the transition from HFCs/HFOs to alternative refrigerants  
——Mr. Russell Patten, Director General, EPEE
- 8. The Refrigeration and Air Conditioning Industry's Efforts to Address Environmental Issues in Japan  
——Mr. Tetsuji Okada, President, The Japan Refrigeration and Air Conditioning Industry Association

Topic2: Refrigerant Substitution Technology and Action

**Time:** 9:30-12:30, April 28, 2025

Lectures:

- 1. Progress and Implementation of China Cooling Efficiency Program under the New Situation of Kigali Compliance  
——Mr. Zheng Tan, Program Officer, Energy Foundation CHINA
- 2. Global Policy, Market and Technology Trends for Natural Refrigerant Applications in Refrigeration and Heat Pumps  
——Mr. Jan Dusek, APAC business development, ATMOSphere
- 3. Analysis of the Life Cycle Safety Assessment System for Refrigeration and Air Conditioning Products  
——Mr. Wang Rujin, Assistant to the Division Director, Hefei General Machinery Research Institute Co., Ltd.
- 4. Discussion on the Component Configuration Strategy of R290 Domestic Air Conditioners  
——Mr. Zhou Yi, Chief Technology Officer, Shanghai Highly Electrical Appliances Co., Ltd.
- 5. Application and Development Trends of Natural Refrigerants in Commercial and Industrial Refrigeration  
——Mr. Zhang Huiming, Vice President/Senior Engineer, Moon Environment Technology Co., Ltd.
- 6. Sustainable CO<sub>2</sub> Solutions for Cold Chain Applications  
——Mr. Andre Patenaude, Director Business Development and Solutions Strategy, Copeland Climate Technologies (Suzhou) Co., Ltd
- 7. Environmentally Friendly Refrigerant Compressor Solutions for All Fields of Refrigeration and Air Conditioning  
——Mr. Lang Xianming, Senior Director, Sonyo Compressor (Dalian)Co., Ltd.
- 8. The Application of Hydrocarbon Heat Pump Equipment in High Temperature Field  
——Mr. Tan Hailong, Deputy Chief Engineer, Fujian Snowman Group Co., Ltd.

Topic3: Good Practices in the Servicing Sector

Time: 13:30-16:30, April 28, 2025

1. Compliance Requirements in the Refrigeration Servicing Sector of China
- Ms. Hua Xue, Senior Project Officer, Foreign Environmental Cooperation Center, Ministry of Ecology and Environment (FECO)
2. Shanghai ODS Filing Policy Interpretation
- Ms. Shi Junjie, Deputy Section Chief, Shanghai Solid Waste and Chemicals Management Technology Center
3. Progress in the Management of the Destruction and Disposal of Ozone Depleting Substances
- Ms. Hu Junjie, Professorate Senior Engineer, China Solid Waste and Chemicals Management Technology Center of the Ministry of Ecology and Environment of China
4. Bridging the Skills Gap in Refrigeration & Air Conditioning through TVET and Industry Collaboration
- Mr. Mohd Zaki Bin Mohamed, Director, University Kuala Lumpur
5. Global Lifecycle Refrigerant Management
- Ms. Louise McCann, Group Commercial Director, A-Gas Group
6. Shang Hai Refrigerant Filing and Control in ICR Servicing Sector
- Mr. Di Fang, Deputy Secretary General, Shanghai Air-conditioning and Refrigeration Institute
7. Refrigerant Recovery and Reuse Model for End-of-Life Vehicles
- Mr. Wang Haitao, General Manager, Tianjin Aohong Environmental protection material Co., Ltd.
8. Safety classification analysis of common single-component refrigerants in various regulations and standards
- Ms. Gao Yu, Deputy Director, China Refrigeration and Air-Conditioning Industry Association (CRAA)



Intelligent New Journey, Leading the Future  
—— The 16th National Chief Engineer Delegation Activity  
Shanghai - Late Spring

Organized by the Organizing Committee of CRH, hosted by China Refrigeration and Air-Conditioning Industry Association (CRAA) and Architectural Environment and Energy Application Branch of China Engineering & Consulting Association (CECA), and co-organized by Beijing CRAA Quality Certification Center Co., Ltd., the 16th National Chief Engineer Delegation (referred to as the “Chief Engineer Delegation”) event will be held at the Shanghai New International Expo Centre (SNIEC) from April 27 to April 28 at the CRH 2025; The “Chief Engineer Delegation” activity is a two-way communication platform between chief engineers, designers and refrigeration and air-conditioning companies of national architectural design institutes. It is an innovation and deep integration of industry-university-research design and application to create a new industrial ecology. It promotes product quality improvement and contributes to the refrigeration and air-conditioning industry. It plays a very positive role in empowering and promoting products to be recognized and selected by design institutes. Moreover, the Chief Engineer Delegation activity is a famous and important brand image and cultural symbol of CRH, and has become one of the most influential observation groups at present.

With the opening of the CRH 2025, this year’s Chief Engineer Delegation activity is based on the theme of “Intelligent New Journey, Leading the Future”. We incorporate the trinity of “upstream, midstream and downstream” of the industry, a new high-quality development ecology deeply integrated with “Industry-University-Research Design and Application”, a working model based on wisdom as the anchor, innovation as the driving force, and green energy saving as the benchmark. Actively respond to the national call for high-quality development, integrate cutting-edge technologies and industrialized ecosystems of national chief engineers and designers, focus on smart innovation, green low-carbon, and sustainable development, efficiently matching and co-creating resources among enterprises, technologies, and designs to enhance industrial competitiveness, and strive to accelerate the new industrialization and smart transformation of the refrigeration industry, foster new drivers and advantages for development. It is expected that the experts participating in this event will work together to discuss how to create new productivity, promote the construction of green industrial ecology, inject wisdom into industrial upgrading, and create a sustainable future.

During CRH 2025, the “16th National Chief Engineer Delegation” will hold the following activities:

1. On April 27th, organize a visit to the CRH 2025, go deep into the booths of key enterprises to observe, and conduct face-to-face technical exchanges with enterprises;
2. In order to replenish momentum to the development of the industry, promote product quality improvement, and build a high-quality product promotion platform, at noon on April 27, the heat pump exhibition area in the exhibition hall was held by the China Refrigeration and Air-Conditioning Industry Association (CRAA) and the Architectural Environment and Energy Application Branch of China Engineering & Consulting Association (CECA). The award ceremony of High-quality Products Recommended by the National Design Institute Chief Engineering Group in 2025 jointly sponsored;
3. On April 28, “Intelligent New Journey, Leading the Future” technical seminar. The technical seminar will have authoritative technical reports made by the chief engineer of the design institute, experts from the testing institute and outstanding enterprises in the industry, as well as the certification ceremony of the newly launched CRAA chiller selection software certification and box performance certification certified enterprises, and the release ceremony of the “China Refrigeration and Air Conditioning Industry Product Performance Database”.

In short, the Chief Engineer Delegation activity is rich in content, focuses on the hot spots of development, brings forth



new ideas, and makes every effort to empower the industry. The technical seminar will be held in the Shengshi Banquet Hall on the 1st floor of Kangqiao Greenland Holiday Hotel in Pudong, Shanghai. Beijing CRAA Quality Certification Center Co., Ltd. sincerely invites industry elites and experts to come to the site to have in-depth discussions and exchanges with colleagues in the industry, and face-to-face dialogue with chief engineers and experts to seek new opportunities for industry development. Let's go hand in hand, gather wisdom, and jointly start a new journey of high-quality development!



Group photo of the National Chief Engineer Delegation at CRH 2024

# AI Empowers, Jointly Explore the New Future of Commercial and Industrial Heat Pumps —— CRH 2025 Heat Pump Pavilion

The Heat Pump Pavilion of CRH 2025 will be set up at The 36th International Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage (hereafter referred to as CRH 2025) from April 27th to 29th at the Shanghai New International Expo Centre (SNIEC).

The Pavilion is organized by the Organizing Committee of CRH, hosted by the Heat Pump Branch of China Refrigeration and Air-Conditioning Industry Association (CRAA), and co-organized by Hefei General Machinery and Electrical Products Inspection Institute Co., Ltd. The theme of “AI Empowerment, New Horizons for Heat Pumps — Forum on Multi-Scenario, Wide-Ranging Innovative Smart Applications for Commercial and Industrial Heat Pumps” gathers industry wisdom and draws a blueprint for the development of industrial and commercial heat pumps.

China's industrial heat consumption is huge, accounting for more than 60% of the country's total heat consumption, but the industrial waste heat recovery and utilization rate is only about 30%, and the phenomenon of energy waste is prominent. As the proportion of clean energy in the field of power generation continues to increase, industrial heat pumps have become the core force in achieving green and low-carbon transformation. The deep integration of AI technology has opened up a new situation for the innovative application of industrial heat pumps in multiple scenarios and in a wide range of fields.

The booth number of the Heat Pump Pavilion is W4F27, covering an area of about 200 square meters, attracting many well-known companies in the industry. Moon Environment Technology Co., Ltd., Sonyo Compressor (Dalian) Co., Ltd., Heilongjiang ARCO Technology Co., Ltd., Danfoss (China) Investment Co., Ltd., Dalian Xuanke Air Conditioning Compressor Co., Ltd., Bitzer Refrigeration Technology (China) Co., Ltd., Snowcoil (Shanghai) Refrigeration Equipment Co., Ltd., Jiangsu Tenesun Electrical Appliance Co., Ltd., Hitachi Air Conditioning and other enterprises will present cutting-edge achievements to demonstrate innovative products integrating AI technology, such as intelligent control compressors and AI optimized heat pump systems.



During CRH 2025, “AI Empowerment, New Horizons for Heat Pumps — Forum on Multi-Scenario, Wide-Ranging Innovative Smart Applications for Commercial and Industrial Heat Pumps” will be held in the E5-M28 conference room from 13:30 to 17:00 on April 28, 2025.

The forum will be chaired by Professor Zhang Zhentao, a member of the 14th National Committee of the Chinese People's Political Consultative Conference and a researcher at the Technical Institute of Physics and Chemistry, Chinese Academy of Sciences. Professor Zhang has made outstanding

achievements in high-temperature heat pump technology and compressors, efficient utilization of low-grade energy and thermal integration technology, and enjoys a high reputation in the industry.

During the forum, experts and scholars from enterprises and universities will present a series of insightful reports:

1.Application and exploration of Hisense high-temperature heat pump units in multiple industries: Mr. Li Yufei, senior customer support manager from Qingdao Hisense Hitachi Air-Conditioning System Co., Ltd., will bring in-depth sharing about Hisense high-temperature heat pump units. He will not only introduce in detail the product characteristics of Hisense high-temperature heat pump units and the various application scenarios it is suitable for, but also conduct an in-depth analysis of project cases in practical applications of products in multiple industries, and conduct a comprehensive analysis of future application exploration directions.

2.Intelligent technologies such as AI empower full-link high-temperature heat pump solutions and applications: Engineer Li Qihao, senior product manager of Chongqing Midea General Refrigeration Equipment Co., Ltd., will share that Midea’s industrial high-temperature heat pump is empowered by intelligent technologies such as AI, from equipment selection to after-sales use of innovative solutions with full link and full life cycle.

3.Multi-Scenario Intelligent Application of Heat Pump Technology Based on the Consumption of Green Power from New Energy: Senior Engineer Meng Jie, Deputy Chief Engineer of Tongfang Artificial Environment Co., Ltd., will focus on the consumption of green power from new energy and delve into the intelligent application of heat pump technology in various scenarios such as residential heating, commercial cooling, and agricultural drying. Successful real-world case studies will also be shared.

4.Winning with Wisdom-Exploration of Full-Cycle Solutions for Industrial Thermal Management: Senior Engineer Mao Guoliang, Deputy Director of the Low Carbon Energy Division of Moon Environment Technology Co., Ltd., will introduce the development status of the industrial thermal management industry and share Moon-Tech’s experience in industrial and commercial heat pump solutions. Explore practice and innovative results.

5.Development status of CO<sub>2</sub> high-temperature heat pump technology: Song Yulong, associate professor at Xi’an Jiaotong University, will sort out international high-temperature heat pump research trends and give an in-depth introduction to the development status and future prospects of high-temperature heat pump technology using CO<sub>2</sub> as the medium.

6.From source to end: Danfoss industrial heat pump overall solution: Tang Xiaohui, business development manager of Danfoss Climate Solutions Division, will introduce Danfoss’ rich industrial heat pump product portfolio and overall solutions created for different application scenarios.

7.Solutions for improving the performance and reliability of components for heat pump systems: Senior engineer Qiu Cheng, application manager of Zhejiang Dun’an Artificial Environment Co., Ltd., will share the proposals for improving the performance and reliability of heat pump systems through research on superheat control and component materials of heat pump systems. Innovative solutions for reliability.

8.AI + high-temperature heat pump helps upgrade industrial heat: Sun Jinjin, general manager of Ma'anshan Kano Technology, will explain how high-temperature heat pump integration with AI technology can break through industrial heat problems, and share successful cases and future development potential.

The Heat Pump Pavilion and forum of CRH 2025 is an important platform for industry technical exchanges, achievement displays, and cooperation negotiations. We sincerely invite industry practitioners, experts, scholars, business representatives, etc. to come to the site to witness the innovation and transformation of AI-empowered industrial and commercial heat pumps. Work together to promote the green and sustainable development of the industry.

W4F27, E5-M28 Heat Pump Pavilion looks forward to your arrival!

# The 19th China R&AC Industry Science and Technology Contest for University Students Launched

The launching ceremony and press conference of the 19th China R&AC Industry Science and Technology Contest for University Students will be held at CRH 2025 on April 27, 2025.

The 19th China R&AC Industry Science and Technology Contest for University Students (hereinafter referred to as “Contest”) is a mass science and technology activity with social welfare attributes for college students and graduate students. The Contest helps the innovation and reform of the curriculum system and content of energy and power, building environment and energy application engineering disciplines in colleges and universities, promotes the implementation of quality education in colleges and universities, and is committed to publicizing and guiding young students to actively participate in extracurricular science and technology activities. Through scientific and technological contests, we will enhance the awareness of innovation, promote the spirit of craftsmanship, enrich practical experience, improve engineering literacy, and promote the cultivation of outstanding reserve talents in the industry.

The Contest in 2025 will continue to be sponsored by the China Refrigeration and Air-Conditioning Industry Association (CRAA), jointly sponsored by the Teaching Steering Committee for Energy and Power Engineering Majors in Institutions of Higher Learning of the Ministry of Education and the Teaching Steering Sub-Committee for Building Environment and Energy Application Engineering Majors in Institutions of Higher Learning of the Ministry of Education, with special support provided by the United Nations Development Programme (UNDP). The finals cover the whole country, and it is expected that more than 100 college teams will participate in the finals.

This year, many internationally renowned enterprises such as Qingdao Haier Air Conditioning Electronics Co., Ltd., Shanghai Hanbell Precision Machinery Co., Ltd., Moon Environment Technology Co., Ltd., Fujian Snowman Group Co., Ltd. and Guangdong Haiwu Technology Co., Ltd. continue to co-organize the Contest.

With the joint efforts of these international institutions, educational institutions and industry enterprises, the Contest will give support and assistance to the youth group of college students from multiple dimensions.

If you want to learn more about the detailed introduction and arrangement of the Contest and the special activities of the organizer at the same time, please attend the Press Conference of the 19th China R&AC Industry Science and Technology Contest for University Students held at noon on April 27, 2025 in the E4-M26 meeting room at SNIEC..



# The CAR-ASHRAE Student Design Project Competition Award Ceremony 2024 will be held soon

The CAR-ASHRAE Student Design Project Competition Award Ceremony 2024 will be held during the 36th China Refrigeration Expo on April 28, 2025.

To promote the teaching reform of building environment and energy application engineering major in China, improve the practical design skills of students in this major, discover and cultivate future industry talent, and promote international exchanges, combining the “Carbon Peak and Carbon Neutrality” goal and green and low-carbon concept, Chinese Association of Refrigeration (CAR), ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers), and the Teaching Steering Sub-Committee for Building Environment and Energy Application Engineering Majors in Institutions of Higher Learning of the Ministry of Education (hereinafter referred to as the Building Environment Teaching Steering Committee) jointly held the CAR-ASHRAE Student Design Project Competition. Johnson Controls serves as the Competition’s exclusive supporting organization.

The competition is held once a year, and 2024 is the 16th edition. A total of 56 teams from 57 universities signed up for this competition, and finally 52 teams from 53 universities submitted valid works. After preliminary examination, review and defense, one special prize team, three first prize teams, three second prize teams, 17 third prize teams and 24 individual prize teams have been awarded.

The CAR-ASHRAE Student Design Project Competition Award Ceremony 2024 will be held at 11:00 on April 28, 2025 in Conference Room E2-M19 of Shanghai New International Expo Centre (SNIEC). Please come.



Group photo of the CAR-ASHRAE Student Design Project Competition Awards Ceremony 2023

# The signing ceremony of the Young Talent Support Program for Building Environment and Energy Application Engineering Majors in National Institutions of Higher Learning will be held soon

The first phase of the Young Talent Support Program for Building Environment and Energy Application Engineering Majors in National Institutions of Higher Learning selected for young scholars and the second phase of the Support Program cooperation signing ceremony will be held during the 36th China Refrigeration Expo on April 27, 2025.

The Chinese Refrigeration Society and the Teaching Steering Sub-Committee for Building Environment and Energy Application Engineering Majors in Institutions of Higher Learning of the Ministry of Education jointly established the National Young Talent Support Program for Building Environment and Energy Application Engineering in Colleges and Universities, and Qingdao Hisense Hitachi Air-Conditioning System Co., Ltd. provided support for the Support Program. The Support Program selects outstanding young scholars majoring in environmental construction and supports their outstanding scientific research ideas with promotion potential and application value. At the same time, it helps enterprises enrich scholar resources, establish stable cooperation, enhance industry influence, fully realize the combination of the growth of outstanding young scientific and technological talents and the technical needs of enterprises, and promote the integration of industry and academia.

The first phase of the Support Program has been launched in 2024. A total of 57 young scholars from 44 colleges and universities have applied. After selection, three young scholars have been selected. The second phase will be launched in 2025.

The first phase of the Young Talent Support Program for Building Environment and Energy Application Engineering Majors in National Institutions of Higher Learning selected for young scholars and the second phase of the Support Program cooperation signing ceremony will be held on the afternoon of April 27, 2025 at the Shanghai New International Expo Centre (SNIEC) W2D41 Hisense Central Air Conditioning booth. People from all walks of life in the industry are welcome to come and observe.



Group photo of the signing ceremony of the first Young Talent Support Program for Building Environment and Energy Application Engineering Majors in National Institutions of Higher Learning



CHR Innovation Products 2025

1. Direct Expansion Air Conditioning and Heat Pump Equipment

SN	Product	Company	Booth Location
1	AI IOT VRF	Qingdao Haier Air Conditioning Electronics Co., Ltd.	W3D41
2	GMV9 Zhiyue Multi-connected Air-condition Unit	Gree Electric Appliances, Inc. of Zhuhai	W2D25
3	RAH-E Series Fully Efficient Free Cooling Inrow Precision Air Conditioning for Data Centers	GD Midea Heating & Ventilating Equipment Co., Ltd.	W3F21
4	HITACHI SET-FREE RIII Multi-connected Air-condition (Heat Pump) Unit	Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd.	W3F09
5	Commercial Multi Connected G Series 8X Central Air Conditioning	Panasonic Electric Equipment (China) Co., Ltd.	W4F15

2. Hot / Chilled Water Chillers

SN	Product	Company	Booth Location
1	Air Source Screw Heat Pump for Ultra-low Ambient Temperatures of -35℃	Xinlei Compressor Co., Ltd.	W3D15
2	AI Self-adaptive Dynamic Pressure Gas-bearing Variable Frequency Centrifugal Chiller	Veek (Tianjin) Co., Ltd.	W2D55
3	Two-stage Direct Drive Variable Frequency Centrifugal Chiller	McQuay Air Conditioning & Refrigeration (Wuhan) Co., Ltd.	W2D01
4	Ultra-low Temperature Heat Pump Unit	Qingdao Haier Air Conditioning Electronics Co., Ltd.	W3D41
5	Hisense 10kV Positive-pressure Refrigerant Levitation Oil-free Centrifugal Chiller	Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd.	W2D41
6	YORK YVAE-C R32 Low Ambient Full Inverter Modular Heat Pump Based on AI Powered IWE SMART Robo Technology	YORK Guangzhou Air Conditioning and Refrigeration Co., Ltd.	W2F15
7	YORK Intelligent Water Ecosystem (IWE) Home YVAS-C R32 Low Ambient Full Inverter Heat Pump	YORK Guangzhou Air Conditioning and Refrigeration Co., Ltd.	W2F15
8	Intelligent Hybrid Air Source Heat Pump Unit	Sonyo Refrigeration (Dalian) Co., Ltd.	E1D01

3. Air Handling, Transmission and Distribution Equipment and Parts

SN	Product	Company	Booth Location
1	EC High Static Pressure Centrifugal Fan	Wolong Electric Group Co., Ltd.	W3B01

2	IDS3.0 Duct Air-conditioner	GD Midea Heating & Ventilating Equipment Co., Ltd.	W3F21
3	Atmos GIGA-BX	Wilo China Ltd.	W3D09
4	Trinity 3in1 Ion Purification Module	Nanjing TICA Climate Solutions Co., Ltd.	W2F01
5	High-Quality and High-Efficiency Ferrite Magnet Motor	Guangdong Welling Motor Manufacturing Co., Ltd.	W3D25
6	High-efficiency, Low-noise Large Axial Fan	Fans-tech Electric Co., Ltd.	W1H11
7	Hisense Self-sufficient Regenerative Heat Dual Rotor Dehum. & Purif. System	Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd.	W2D41
8	Reversible Dual-directional Ducted Central Air Conditioning	Gree Electric Appliances, Inc. of Zhuhai	W2D25
9	EC Fan's Harmonic Current Solution - Professional Cooling for Datacenter	Ziehl-Abegg Mechanical and Electrical Equipment (Shanghai) Co., Ltd.	W1H01
10	SmartPurify Yufeng Series Energy Recovery Ventilation	Panasonic Electric Equipment (China) Co., Ltd.	W4F15

4. Compressors

SN	Product	Company	Booth Location
1	12-18kW Wide-frequency Inverter Rotary Compressor	Guangdong Meizhi Compressor Limited	W3D25
2	16-20kW R290 Variable Frequency Rotary Compressor	Guangdong Meizhi Compressor Limited	W3D25
3	25HP High Efficiency R32 DC INV Scroll Compressor	Hongtong Climate Technologies (Guangzhou) Co., Ltd.	E5B09
4	28kW Super-silent and High APF DC Inverter Scroll Compressor for VRF Unit	Johnson Controls-Hitachi Wanbao Compressor (Guangzhou) Co., Ltd.	E2B25
5	450RT Dynamic Gas Bearing Centrifugal Refrigerant Compressor	Xeca Turbo Clean Power Rugao Co., Ltd.	W3G59
6	SRN-15S Process Gas Compressor	Fujian Snowman Group Co., Ltd.	E1F15
7	160cc High Efficiency Variable Frequency Scroll Compressor for Energy Storage	Sonyo Compressor (Dalian) Co., Ltd.	E1D01
8	Low Ambient Heat Pump Scroll Compressor	BITZER Refrigeration Technology (China) Co., Ltd.	E2G01
9	Copeland Oil-Free Centrifugal Compressor with Aero-lift™ Bearing Technology	Copeland Climate Technologies (Suzhou) Co., Ltd.	E3F01
10	GEA Grasso L XHP Series Compressor	GEA Process & Equipment Technologies (Suzhou) Co., Ltd.	E2C31

5. Heat exchangers, Valves, and Other Auxiliary Components

SN	Product	Company	Booth Location
1	EBV305H100 Three Way Safety Shut-off Valve	Zhejiang Sanhua Commercial Refrigeration Controls Co., Ltd.	E2E09
2	ETS 5T Electric Expansion Valve for CO <sub>2</sub> System	Danfoss (Tianjin) Co., Ltd.	E2D01
3	EXV-K Lineup High Temperature Electronic Expansion Valves	CAREL Electronic (Suzhou) Co., Ltd.	W3D01
4	Micro-plate Heat Exchanger	Zhejiang DunAn Artificial Environment Co., Ltd.	W3F01
5	Super-silent Electronic Expansion Valve	Zhejiang DunAn Artificial Environment Co., Ltd.	W3F01
6	MVL702 Magnetic Expansion Valve	Siemens Ltd., China	W5E01

6. Control Equipment and Systems

SN	Product	Company	Booth Location
1	Danfoss NeoCharge Self Adaptive Liquid Supply System	Danfoss (Tianjin) Co., Ltd.	E2D01
2	Carbon Intelligent Space Central Controller	Shanghai Kong Intelligent Building Co., Ltd.	W3F21
3	GREE Taishan Building Digital Intelligence Platform	Gree Electric Appliances, Inc. of Zhuhai	W2D25
4	Haier Intelligent Management Controller	Qingdao Haier Intelligent Buildings Technology Co., Ltd.	W3D41
5	Hisense ECO-B Smart-building and Energy Management System 2.0	Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd.	W2D41
6	High-efficiency Low-noise Frequency Converter Based on Voltage Fluctuation Following Control Technology (QH10A)	Wanbao Group Compressor Co., Ltd.	E2C55
7	Defrosting Control System Based on Frost Thickness Model Prediction and Intelligent Cooling Energy Management Equiprment	Jinan Dasen Refrigeration Engineering Co., Ltd.	E1D41
8	Commercial Refrigerator Electrical Controller with Built-in Wireless Networking Module	CAREL Electronic (Suzhou) Co., Ltd.	W3D01

7. Industrial and Commercial Refrigeration Equipment and Related Parts

SN	Product	Company	Booth Location
1	CO <sub>2</sub> Transcritical Cold and Heat Integrated Coupling Unit	Bingshan Refrigeration & Heat Transfer Technologies Co., Ltd.	E1D01
2	NMD70FSC Ultra High Efficient Intelligent Variable Frequency Lightweight Commercial Compressor	Changhong Huayi Compressor Co., Ltd.	E2H11

3	Pulsor eCool Electrical Transportation Refrigeration Unit	Shanghai Carrier Transicold Equipment Co., Ltd.	E1G41
4	SRF-22 Series Open Screw Compressor	Fujian Snowman Group Co., Ltd.	E1F15
5	SRS-RRE-14M Vi Adjustable Semi-hermetic Screw Compressor	Fujian Snowman Group Co., Ltd.	E1F15
6	SW5L300 Large Displacement Semi-hermetic Screw Compressor for Refrigeration	Fujian Snowman Group Co., Ltd.	E1F15
7	Ultra-high Efficiency and High Reliability R290 Inverter Compressor (VF7L72ML)	Wanbao Group Compressor Co., Ltd.	E2C55
8	Embraco VNEX High Efficiency and Large Cooling Capacity R290 Refrigeration Compressor for Commercial Applications	Nidec Compressor (Beijing) Co., Ltd.	E2B41
9	Copeland Scroll ZFI180 Large Low Temperature Refrigeration Compressor (50HP)	Copeland Climate Technologies (Suzhou) Co., Ltd.	E3F01
10	LC-410-L Wide Temperature Rang Screw Refrigeration Compressor	Shanghai Hanbell Precise Machinery Co., Ltd.	E2F15
11	CO <sub>2</sub> Semi-hermetic Screw Compressor with Auto Vi and IPM Motor	Yantai City Aowei Refrigeration Equipments Co., Ltd.	E1D15

8. Industrial Heat Pumps

SN	Product	Company	Booth Location
1	140°C + High-efficiency Industrial Large-capacity High-temperature Centrifugal Heat Pump	Gree Electric Appliances, Inc. of Zhuhai	W2D25
2	Low Carbon High Pressure Ratio Steam Centrifugal Compressor	Moon Environment Technology Co., Ltd.	E1F01
3	NT-WS-320NTW High-temperature Water Source Heat Pump Unit	Shanghai Nuotong New Energy Technology Co., Ltd.	W5G20 E3G31
4	HPS-H 200 Screw High Speed VSD Permanent Magnet High Temperature Heat Pump Unit	York (Wuxi) Air Conditioning and Refrigeration Co., Ltd.	W2F15

9. Addressing Climate Change and Other Products

SN	Product	Company	Booth Location
1	DST G290 A3 Gas Sensor	Danfoss (China) Investment Co., Ltd.	E2D01
2	OCCS Liquefaction Unit	Bingshan Refrigeration & Heat Transfer Technologies Co., Ltd.	E1D01
3	Hisense M3 Photovoltaic Hybrid-Powered Multi-Split Air Conditioning System	Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd.	W2D41
4	Refrigerant Leakage Monitoring Gas Sensor AM4205	Cubic Sensor and Instrument Co., Ltd.	W5B49
5	Solar Direct Drive and Weak Grid Power Management System	Secop Compressors (Tianjin) Co., Ltd.	E2H01

## Gree Central Air Conditioning Makes a Grand Appearance at CRH 2025

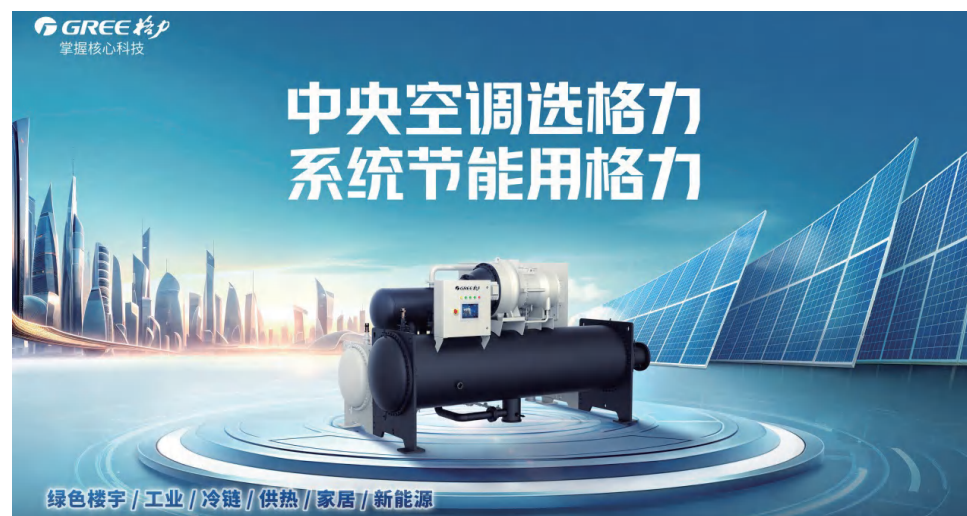
(Main Booth W2D25, Refrigeration Booth E1F31)

As a comprehensive solution provider for smart buildings, Gree Central Air Conditioning will make a major appearance with multiple products, comprehensively displaying the latest technology products and professional solutions including commercial, household, optical and air storage, heating, refrigeration and refrigeration products. Solutions and their diversified product matrix for different scenario applications.

At CRH 2025, Gree Central Air Conditioning booth has two exhibition areas: Central Air Conditioning and Refrigeration. The central air conditioning exhibition area covers star products, six major industry solutions, household green energy, the “Taishan” building digital intelligence platform, commercial central air conditioning, comfortable home solutions, heating solutions for extreme and severe cold regions, and core components, spanning eight sectors. The refrigeration and cold storage exhibition area includes solutions for large and medium-sized cold storage, small-scale cold storage, terminal refrigeration solutions, and a display of screw compressors dedicated to refrigeration and cold storage. This powerfully showcases Gree Central Air Conditioning's business layout in providing customized, professional, and energy-saving solutions for all scenarios across various industries.

The star products of Gree Central Air Conditioning exhibition area include GMV 9 Zhiyue Multi-Split Air Conditioner equipped with AI energy-saving control technology, 140°C Industrial Large-Capacity High-Temperature Heat Pump Centrifuge with “Internationally Leading” technology, High-Efficiency Two-Stage Permanent Magnet inverter Screw Chiller, and Integrated Maglev and Air Levitation Unit with independent intellectual property rights of core technology. These products not only demonstrate Gree's profound accumulation in the field of air-conditioning technology, but also reflect Gree's determination and strength to continuously innovate in energy conservation, environmental protection and intelligence.

At CRH 2025, Gree Central Air Conditioning is ready to start again!



## Hisense Central Air Conditioning Debuts at CRH 2025 with Innovative Achievements

**Empowering Intelligent and Low-Carbon Upgrades in the HVAC industry**  
(Booth No. W2D41)

In 2024, Hisense Central Air Conditioning completed its “debut” at the China Refrigeration Expo. Hisense’s green and low-carbon full-scenario solution has received widespread attention from the audience, providing support for the industry to move towards a new stage of energy-saving, low-carbon and sustainable development. help.

At CRH 2025, Hisense Central Air Conditioning will be unveiled again. Through the multi-dimensional efforts of “Water machine platform innovation, Multi-split technology breakthrough, Smart building system upgrade iteration, and Global product matrix”, it will demonstrate its latest technological progress and provide global users with smarter, low-carbon and comfortable air-conditioning life cycle solutions, empowering the HVAC industry to move towards a new stage of intelligence and low carbonization.

### Three platforms unveiled

At CRH 2025, Hisense Central Air Conditioning will display its innovative Three Water Machine Platforms, including oil-free platform, heat pump platform and purification platform. As an innovative product independently developed by Hisense, a New Generation 10kV Positive Pressure Liquid-Floated Oil-Free Inverter Centrifuge based on an oil-free platform is widely used in industrial, commercial and civil fields, providing efficient and stable air-conditioning solutions for various buildings. In addition, heat pump platform and purification platform products provide green and low-carbon high-quality options for building heating and indoor air quality optimization, meeting the needs of places with stringent environmental requirements in multiple segments.

### Energy-saving multi-split system drives low-carbon innovation

At CRH 2025, the Hisense M3 series will be reinstalled and unveiled, focusing on low-carbon energy-saving innovation, improving energy efficiency and optimizing operational stability to meet the energy-saving needs of various scenarios. At the same time, the new G3 + high-temperature cascade water module will be released on site. With its four-tube heat recovery system and high-efficiency, it will become a green alternative to traditional boilers.

### ECO-B2.0 iterative upgrade drives building smart energy saving

At CRH 2025, Hisense ECO-B2.0 Intelligent Building Management and Control System will be unveiled to demonstrate full-scenario green and low-carbon solutions; Through intelligent control and precise energy consumption management, this system helps buildings achieve more efficient energy utilization and promotes the development of buildings in a green and low-carbon direction. As one of the innovative technological achievements of Hisense Hitachi Company, the launch of the ECO-B2.0 Intelligent Building Management and Control System means that Hisense will focus more on the entire life cycle of buildings, and technological innovation will empower building energy conservation and help the brand value of the “Carbon Peak and Carbon Neutrality” goal.

### Global ecological layout smart life

Under the trend of globalization and home comfort upgrading, Hisense Central Air Conditioning will exhibit high-efficiency and energy-saving products for overseas markets and home users At CRH 2025. For overseas markets, we



will launch HVAC products with stronger adaptability and better energy efficiency to help the green and low-carbon development of the global market. At the same time, Hisense also provides home users with air-conditioning solutions that take into account intelligence, energy saving and health, and is committed to creating a more comfortable and environmentally friendly home experience for users and promoting the sustainable upgrading of family lifestyle.

In addition to products, Hisense Central Air Conditioning solutions in many hot subdivisions such as energy-saving transformation and clean energy will also be unveiled at CRH 2025. Hisense Central Air Conditioning has always focused on user needs and is committed to providing leading new technologies and high-efficiency energy-saving products to more industries and users, so as to promote the realization of a green and low-carbon future. With the upcoming opening of CRH 2025, Hisense Central Air Conditioning will bring more surprises and join hands with industry partners to create a smart, green and low-carbon smart future. Hisense Central Air Conditioning looks forward to your visit!



## Midea Building Technologies to Debut at CRH 2025.

### Highlights Express

(Booth No.: W3F21)

As a service provider of smart ecological integration solutions for buildings, Midea Building Technologies will make a major appearance with its MDV, Kwing and other brand product matrices, and comprehensively demonstrate the overall solution of energy-saving renovation around diverse scenarios such as commercial real estate, industrial and agricultural production, and data centers., efficient computer room overall solutions, industrial overall solutions and rich industry application cases, as well as full life cycle user services, help the green and low-carbon transformation and upgrading of the construction industry.

MDV is a fluorine machine brand under Midea Building Technologies. While meeting the personalized space needs of users, it also realizes the interconnection between the inside and outside of the building space through data fusion, and enhances the value of every participant in the space. The MDV array products and control products displayed on site will create a comfortable, low-carbon and beautiful architectural space for users based on the concept of "humanistic technology".

Kwing is a water machine brand under Midea Building Technologies. It has hard-core independent research and development and scientific and technological strength, and has created a Maglev Inverter Centrifuge with completely independent intellectual property rights. It has broken through the monopoly barrier of foreign capital in the core technology of maglev all the year round and achieved product technology. leap. CRH 2025 will demonstrate for the first time the self-research strength and efficient application of Midea Building Technologies's maglev full-stack.

In addition, Midea Building Technologies will display energy-saving renovation, efficient computer room, industry, commercial services, real estate supporting facilities, infrastructure and other industry solutions in multiple dimensions, as well as multi-scenario applications in different fields, empowering thousands of industries.

In terms of user service, Midea Building Technologies will demonstrate one-stop service, full life cycle service management, and self-developed i housekeeper service to improve equipment management efficiency and user experience through digital and intelligent means.

At CRH 2025, Midea Building Technologies accumulates green and technological smart energy, helps the sustainable development of building space, and injects surging new momentum into the innovative development of the cooling, HVAC and air-conditioning industry. Lock in April 27th-29th, Shanghai New International Expo Centre (SNIEC) Midea Building Technologies Booth, stay tuned for more exciting things!



## Haier Meta Building Invites You to Visit at CRH 2025!

(Booth No.: W3D41)

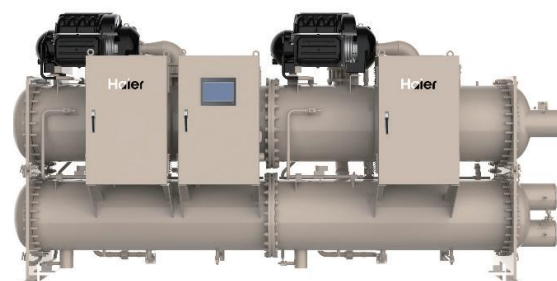
As the second curve of Haier Smart Home's development, Haier Meta Building undertakes the strategic mission of providing users with smart life needs in the Internet of Things era. Under the "Carbon Peak and Carbon Neutrality" goal, green buildings have become the future trend. Haier Meta Buildings keep pace with the times and are committed to becoming a leader in efficient and sustainable green smart buildings. Focusing on the four major business segments of high-efficiency HVAC, building intelligent control, heat pump heating, and industrial environment, relying on the self-developed Meta Building brain with independent intellectual property rights, it provides ten major industry users, including government public buildings, commercial real estate, rail transit, education and medical care, and industrial manufacturing. It provides full-space, full-scenario, and full-cycle green and low-carbon solutions such as IoT multi-split, high-efficiency computer rooms, comprehensive energy, and smart purification to comprehensively assist the smart upgrade of buildings.

From the establishment of China's national brand of Central Air Conditioning to winning the National Science and Technology Progress Award of China Refrigeration and Air-Conditioning Industry; From the advent of China's maglev central air conditioner here, to the focus on digital intelligence of buildings, creating the brain of smart buildings in the industry. Along the way, Haier Meta Buildings has carried the core mission of green building space business and has always been committed to the research and development and innovation of green, energy-saving, and low-carbon products. From scenarios to users, Haier Meta Buildings actively develop proactive green building solutions to help achieve sustainable future development.

Haier Meta Buildings will be unveiled with innovative technologies at CRH 2025, so stay tuned.

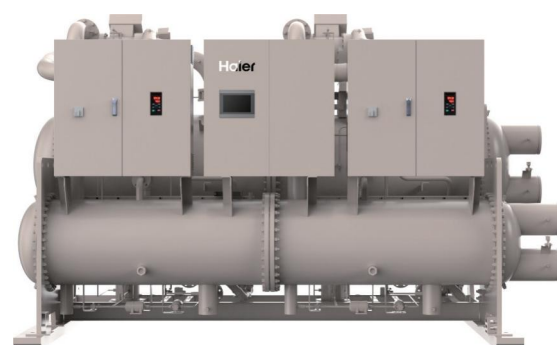
### Haier Maglev Central Air Conditioner

Differentiated technical capabilities such as 3 major smart functions and 2-amp flexible start-up have successively won 132 patents, 15 certifications, 2 major standards, and 10 major award certifications.



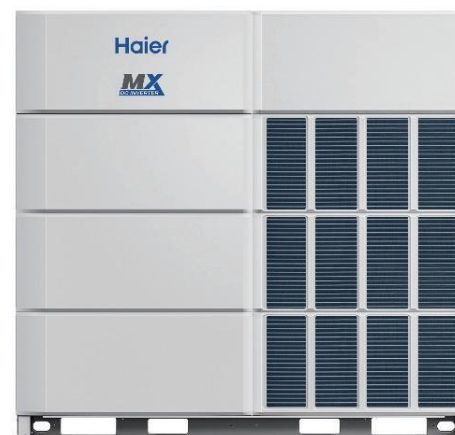
### Haier Air Levitation Central Air Conditioner

Hydrostatic air suspension compressor technology eliminates friction problems during start-stop.



### MAX IoT Multi-Split System

All-round breakthroughs have been achieved from the five dimensions of power MAX, quality MAX, convenience MAX, comfort MAX, and wisdom MAX, achieving a single module 48 hp combination of 192 hp.



### Haier Meta Building Full-Scenario

#### Intelligent Control Solution

By integrating advanced technologies such as the Internet of Things, big data, and artificial intelligence, intelligent control, remote monitoring and data analysis of building equipment are realized, effectively improving the operational efficiency and energy-saving effects of buildings.





**Snowman Group to Make Grand Debut at CRH 2025  
- Showcasing Full-Chain Refrigeration Solutions and  
Innovative Exhibits  
(Booth No.: E1F15)**

CRH 2025 is about to kick off grandly. Snowman Group will make a big appearance with its four major brands: RefComp, SRM TEC, SNOWKEY, and OPCON, bringing full-chain refrigeration solutions covering design, installation, and customized services.

At CRH 2025, Snowman Group will set up a number of characteristic exhibition areas to comprehensively display advanced technologies in the industry, help global customers improve the stability, energy efficiency and sustainability of cold chain and refrigeration systems, and jointly explore new trends in industry development.

## All-round display, directly addressing industry needs

•Digital and intelligent after-sales service exhibition area-An in-depth analysis of Snowman Group’s global after-sales network, showing how Snowman can achieve rapid response, efficient operation and maintenance and precise optimization through digital and intelligent systems, providing customers with stable, continuous and efficient service guarantees.

•RefComp products - focusing on high-performance industrial and commercial refrigeration compressor technology, covering core commercial and industrial refrigeration products, providing strong power for cold chain, food processing and other industries.

- SRM TEC products - bring cutting-edge applications of SRM compressors in industrial refrigeration, cold chain logistics and other fields, demonstrating the technical advantages of high performance and high reliability.

•OPCON (heat pump) products - focusing on energy conservation and environmental protection, this paper introduces the innovative applications of OPCON heat pumps in new energy utilization and industrial waste heat recovery, helping the industry move towards a green and low-carbon future.

- SNOWKEY products – system solutions from a world-renowned ice-making brand, introducing their wide-

ranging applications in fields such as food processing, construction, nuclear power, and bridge engineering.

### Technological innovation product application


the fields of high-voltage breakthroughs, intelligent applications, advanced rotor technology, optimized structural design, etc. The innovative products launched this time not only represent another leap in Snowman Group's core refrigeration technology, but will also bring new solutions that are more efficient, smarter and lower carbon to the industry.

At CRH 2025, Snowman Group sincerely invites global industry partners to visit the booth to jointly explore the future of refrigeration technology and witness how innovation drives industry development!

**雪人集团**  
SNOWMAN GROUP

**SRMTEC**

**SRS-RRE-14M 半封闭螺杆压缩机**  
Screw Compressor




- 1500 匹制冷量
- 制冷剂 R404A
- 半封闭压缩机
- 压缩机与润滑油系统由 R404A 润滑油组成
- 压缩机与润滑油系统由 R404A 润滑油组成

型号	单位	1500 RRE-14M
制冷量 (kW)	kW	300
额定电压	Volts	380
制冷剂 (R404A)	kg	100-150
重量 (kg)	kg	400
尺寸 (mm)	mm	1000-1500-1500
重量 (kg)	kg	1000

**雪人集团**  
SNOWMAN GROUP

**SRMTEC**

**SW51300 半封闭螺杆压缩机**  
Screw Compressor




- 1500 匹制冷量
- 制冷剂 R404A
- 半封闭压缩机
- 压缩机与润滑油系统由 R404A 润滑油组成
- 压缩机与润滑油系统由 R404A 润滑油组成

型号	单位	1500 SW51300
制冷量 (kW)	kW	300
额定电压	Volts	380
制冷剂 (R404A)	kg	100-150
重量 (kg)	kg	400
尺寸 (mm)	mm	1000-1500-1500
重量 (kg)	kg	1000

**雪人集团**  
SNOWMAN GROUP

**SRMTEC**

**SRF-22L 开启式螺杆压缩机**  
Screw Compressor




- 1500 匹制冷量
- 制冷剂 R404A
- 开启式压缩机
- 压缩机与润滑油系统由 R404A 润滑油组成
- 压缩机与润滑油系统由 R404A 润滑油组成

型号	单位	1500 SRF-22L
制冷量 (kW)	kW	300
额定电压	Volts	380
制冷剂 (R404A)	kg	100-150
重量 (kg)	kg	400
尺寸 (mm)	mm	1000-1500-1500
重量 (kg)	kg	1000

**雪人集团**  
SNOWMAN GROUP

**SRMTEC**

**SRN-15S 工艺气体压缩机**  
Process Gas Compressor



- 1500 匹制冷量
- 制冷剂 R404A
- 工艺气体压缩机
- 压缩机与润滑油系统由 R404A 润滑油组成
- 压缩机与润滑油系统由 R404A 润滑油组成

型号	单位	1500 SRN-15S
制冷量 (kW)	kW	300
额定电压	Volts	380
制冷剂 (R404A)	kg	100-150
重量 (kg)	kg	400
尺寸 (mm)	mm	1000-1500-1500
重量 (kg)	kg	1000

**Build a Green and Low-Carbon Future Together**  
**Bingshan Group at CRH 2025**  
**(Booth No. E1D01)**

The 95-Year history is full of ice. Bingshan Group, which is celebrating its 95th anniversary, will organize 10 funded enterprises to participate in the 36th International Refrigeration, Air Conditioning, Heating, Ventilation and Food Freezing Processing Exhibition, with the theme of “Leading Green Hot and Cold to Create a Zero-Carbon Factory”, comprehensively display innovative products and solutions covering different application scenarios such as industrial refrigeration and heating, air-conditioning and environment, commercial refrigeration and refrigeration, smart cold chain, industrial interconnection and intelligent control in the hot and cold industry chain.

## Hard core technology: Building a new hot and cold ecosystem with green and low carbon

Energy saving and carbon reduction for customers is the focus of Bingshan Group's hot and cold industry chain. At CRH 2025, Bingshan Group grandly launched the CO<sub>2</sub> Transcritical Cold and Heat Coupling Five-in-One System, which raised the combined cooling and heating to a new height. The system uses natural refrigerant, and through an integrated coupling unit, it can provide ice making, air-conditioning refrigeration and fresh air systems, air-conditioning heating, domestic water, and process heat for ice rinks, snow resorts, cold chain logistics, large supermarkets and other scenarios. -50 ~ 80 °C combined cooling and heating, the annual energy efficiency ratio increases by 15% ~ 20%.

Also unveiled at the same time are a series of green and low-carbon innovative products, the newly developed Semi-hermetic Carbon Dioxide Screw Compressor Unit, which empowers artificial refrigeration scenarios requiring -30 ~ -52 °C in food, aquatic products, scientific research and other fields; New Generation High-Efficient Double-Machine Double-Stage Unit for Stratum Freezing, which are used for formation freezing in mines, tunnel drilling and other formations, reducing comprehensive energy consumption by 15%; As well as Intelligent New Hybrid Power Air Source Heat Pump Unit used in the field of commercial air-conditioning,

Outdoor Piston Air-Cooled Condensing Integrated Unit and Low-Noise Outdoor Scroll Condensing Integrated Unit used in supermarkets and cold storage refrigeration fields, and Dry-Wet Switching Cooling Tower used in new metallurgical materials and new energy industries, etc.

At CRH 2025, Bingshan will also display representative scroll compressors that meet the needs of different market segments such as refrigeration and refrigeration, heat pump heating, and energy storage. Among them, the evaporation temperature of the ultra-low temperature air-source heat pump can reach as low as -42 °C, and the low-temperature heating capacity of the compressor is outstanding in energy efficiency. The low-temperature heating working capacity is increased by 13%, and the energy efficiency is increased by 18% (actual measurement data of Bingshan Songyang compressor).

## Zero-carbon factory: a “combination boxing” for carbon reduction in the entire industry chain

In response to the new needs of energy conservation and carbon reduction in different scenarios such as coal, ships, and food processing, and the creation of zero-carbon factories (parks), in terms of building a green and low-carbon coal industry chain, Bingshan Group has created a zero-carbon technology matrix for the entire chain of “mining-conversion-application”, demonstrating high-efficiency refrigeration and heating, waste heat recovery, CO<sub>2</sub> recovery and capture, coal-to-olefins, coal-to-methanol, and coal-to-green hydrogen in different process links such as coal mining, coal coking, coal chemical industry, and coal-based new energy.

In terms of assisting the green and low-carbon transformation and upgrading of the shipbuilding industry, Bingshan Group will demonstrate the Ship Carbon Capture and Recovery OCCS System, which uses natural green refrigerant R744 (CO<sub>2</sub>) to liquefy and capture CO<sub>2</sub>, adopts a transcritical CO<sub>2</sub> system, and is equipped with fresh water and seawater heat exchange system, BOG system, non-condensable gas treatment,



maintenance system and refrigerant replenishment system. The annual recovery of liquid CO<sub>2</sub> with a purity of 99.7% reaches 44,000 tons.

To give smart wings to green and low-carbon development, this exhibition, Bingshan Group will demonstrate new solutions for digital energy conservation. The newly launched Energy-Saving Solution for Permanent Magnet Motors of Intelligent Refrigeration Units, combined with laboratory and actual case data experience, uses the improvement of efficiency and speed of permanent magnet synchronous motor to achieve the energy-saving effect of partial load frequency conversion adjustment of cooling capacity and condensation pressure of floating refrigeration system. Bingshan relies on the industrial Internet platform to provide full life cycle services for the refrigeration and air-conditioning aftermarket. It can provide comprehensive energy management solutions, realize fault prediction, smart inspection, and second-level analysis of Internet signs and anti-counterfeiting, contributing new value to customers.

### Fresh experience: technological temperature at your fingertips

At CRH 2025, Bingshan Group will also specially display “heart” products using green refrigerant R290, such as island cabinets, air curtain cabinets, and freezers, which are used in supermarkets, convenience stores and other scenarios. Among them, the vertical built-in air curtain cabinet and the vertical glass door freezer meet the national first-class energy efficiency, saving 10% energy.

In addition, you can also experience the freshly ground coffee machine and ice cream machine at the Bingshan Group booth, feel the strong aroma of freshly ground coffee with the robotic arm and the sweetness of “fresh” ice cream, and provide a fresh experience for friends from all walks of life who participate in the exhibition and visit the exhibition.

In addition to on-site demonstrations, Bingshan Group engineers will also be invited to participate in technical forums on different topics to exchange and share technical experiences.



## Expanding Boundaries of Cooling and Heating, Revitalizing with Intelligent Innovation - Moon Environment at CRH 2025 (Booth No.: E1F01)

Moon Environment Technology Co., Ltd. (stock code: 000811), founded in 1956, is a diversified and international comprehensive equipment industry group enterprise. The main business covers industrial and commercial refrigeration, HVAC, green energy equipment, precision molding, digital intelligence industry and other industrial clusters.

Moon Environment takes the simultaneous development of hot and cold and the active expansion of energy-saving and environmental protection industries as its development strategy, and uses a lower-carbon way to provide the best temperature and pressure conditions for users in various industries around the world.

At CRH 2025, Moon Environment showcases its theme of “Expanding Boundaries of Cooling and Heating, Revitalizing with Intelligent Innovation”. Focusing on the detailed sharing of the company’s “Intelligent Carbon Park Comprehensive Service Solution”, highlighting its full-chain low-carbon service systems in fields such as offshore fishing and aquatic product processing centers, livestock breeding and slaughter processing centers, dairy processing centers, chemical industrial parks, and marine engineering equipment. Moon Environment provides corporate clients and industry peers with a comprehensive display of professional, high-value-added low-carbon and intelligent industrial pathways, taking concrete actions to implement the green and low-carbon development philosophy.

After winning the gold medal for heat pump innovative

products at two consecutive China Refrigeration Expos in 2023 and 2024, Moon-Tech will soon release the “Industrial Global Thermal Control Matrix Service Solution” at CRH 2025. Conduct in-depth research on waste heat, residual pressure, cold and heat demand in various industries, improve multi-source and multi-level energy comprehensive utilization system solutions in the industrial field, and strive to promote high-end industrial structure, low-carbon energy consumption, and resource utilization recycling, contributing Ice Wheel wisdom to the realization of the “Carbon Peak and Carbon Neutrality” goal.

Moon Environment, in the field of energy and power, adheres to innovation-driven, inclusive, and harmonious coexistence between man and nature, strives to achieve the global temperature control goal of 1.5 °C, and promotes high-quality sustainable development.





## TICA's Green Innovation is Ready to Go, Looking Forward to Starting a New Journey with You

(Booth No.: W2F01)

CRH 2025 with the theme of "Smart Connection for Cooling and Heating, Shared Future" will be held grandly at the Shanghai New International Expo Centre (SNIEC) from April 27th to 29th. As an influential annual event in the refrigeration and air-conditioning industry, China Refrigeration Expo is not only a stage to display cutting-edge technologies and innovative products, but also an important platform for industry exchanges, cooperation and development. This year, TICA will make a big debut with a new product matrix, fully demonstrating its sustainable development strength under the two-wheel drive of "smart clean environment + green energy system".



TICA booth renderings

Founded in 1991, TICA builds its core competitiveness with the strategy of "one environmental protection path, two business segments". TICA relies on AGI scenario algorithms to create zero-carbon solutions. From Beijing Bird's Nest to Sydney Opera House, from C919 aircraft to Dubai Mirdif Hospital, TICA's smart clean air system serves high-end scenarios across national boundaries; TICA Energy, on the other hand, continues to "trap leaks" in the global energy system through technological innovations such as geothermal power generation, industrial waste heat, and biomass utilization, and fulfills its ESG commitment to temperature control of 1.5 °C.

In terms of international quality purification, TICA provides professional process air environment solutions

for hospital operating rooms, biopharmaceuticals, microelectronics enterprises and other places with extremely high requirements for air temperature, humidity and cleanliness. As early as 2014, TICA built an ISO1 ultra-clean environment integrated system, which has served more than 7,000 secondary and tertiary hospitals, more than 5,000 biopharmaceutical companies and more than 3,000 microelectronics companies.

At CRH 2025, TICA will display the new products of SMARDT Maglev centrifuge units in detail.



TICA Modular Maglev Chiller Qile Series

heat pumps, and inverter multi-split system, bringing a more comfortable and healthy cooling and heating experience to users under different climatic conditions. At the same time, the TICA OptSeek (1 + 5) Visible Energy-Saving and Smart IoT Data Platform provides users with stable and reliable energy-saving public trust zero-carbon comprehensive solutions based on AGI general artificial intelligence active optimization algorithm. In addition, the TICA Airnext Five-Constant Air Ecosystem launched by TICA intelligently integrates Central Air Conditioning, floor heating, fresh air and other equipment to create a healthy and comfortable environment with constant temperature, humidity,

oxygen, purity and quietness for home users, which is helping the development of the fourth generation of technological housing.

The development of the refrigeration and air-conditioning industry is inseparable from the joint efforts of every practitioner. All along, TICA has been constantly exploring energy conservation and public trust, quality vision, and healthy life. At CRH 2025, TICA's new product matrix will inject new vitality into

the development of the industry and contribute to the realization of sustainable development goals. At the same time, TICA is eagerly looking forward to deepening collaborative innovation with partners across the entire industry chain and gathering industry synergy. TICA sincerely invites people from all walks of life to attend the grand event and join hands to open a new chapter in the global human settlements environment and green revolution.



TICA Airnext Five-Constant Air Ecosystem

## Change and Innovation, Decarbonization and Development - Danfoss at CRH 2025 (Booth No.: E2D01)

Danfoss focuses on clean energy technology and is committed to promoting low-carbon and green development. The company's products and services cover application fields such as cold chain, air-conditioning, commercial building and residential heating, urban area energy, motor control systems, power modules, sewage treatment, mobile and industrial hydraulics, and electrification. Danfoss is also active in emerging industries such as data centers, energy storage, shipbuilding and offshore engineering, electronic factories, and new energy electric vehicles, providing them with core technologies and devices.

Danfoss was founded in Nordborg, Denmark in 1933. It currently employs 42,000 employees, sells its products in more than 100 countries, and has 100 factories around the world. Danfoss continues to make significant investments in China to enhance its strategic position as a "second home market". Through steady business development, Danfoss has established a complete industrial chain in China in accordance with global standards, and through business practices in the fields of tax payment, green employment, environment, employee rights and workplace safety, Danfoss leads the creation of a green supply value chain that meets international standards, and actively plays the role of a responsible corporate citizen.

At CRH 2025, Danfoss will comprehensively display innovative technologies and solutions in the fields of air-conditioning heat pumps and refrigeration and refrigeration, with the theme of "Change and Innovation, Decarbonization and Development", focusing on hot applications such as industrial heat pumps, data centers, and environmental testing equipment. At the same time, the 30th anniversary of the launch of Turbocor® Maglev Compressor will be solemnly commemorated, demonstrating its continuous breakthroughs in the fields of high-efficiency, energy saving and low-carbon technology. During CRH 2025, Danfoss will compete for the "Innovative Product Award" with a variety of new products, and actively participate in theme forums to discuss the green future with industry colleagues.

### Danfoss Turbocor® TGS380 New Maglev Oil-Free Compressor

- High performance and high pressure ratio
- An all-round player in air cooling and water-water heat pump applications
- Air-cooled chillers for extreme environmental climates
- Suitable for water-to-water heat pumps with heat recovery or water-cooled chillers
- Higher cooling rating
- Works with ultra-low GWP HFO-1234ze or low GWP R515B refrigerant

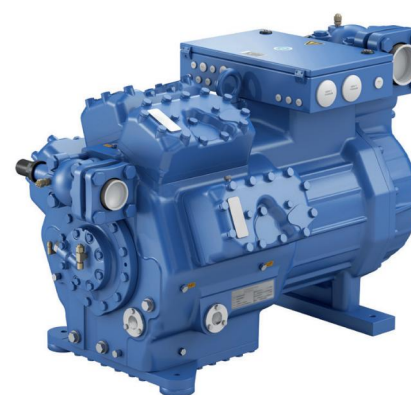


### BOCK® Semi-hermetic Piston Compressor

- The HG single stage series includes 7 size specifications: HG12P, HG22e, HG34e, HG44e, HG56e, HG66e, HG88e. Covers 25 displacement classes from 5.4 to 281.3 m³/h (50 Hz).
- Product Features:
- Advanced technology, convenient operation, simple

maintenance, high-efficiency and good reliability

- Suitable for all general purpose HFC refrigerants, as well as new low GWP refrigerants such as R22, R134a, R404A, R507A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R513A and more



### Danfoss ICM Motorized Valve

- Platform modular design
- Suitable for ammonia, HFC, HFO, CO<sub>2</sub> and other refrigerants



- Suitable for regulation, expansion, switching and other applications to achieve precise and efficient control of the system
- Meet the high-precision and fast-action requirements of NeoCharge® quantitative liquid supply for valves
- Electromagnetic torque coupling
- Built-in optical decoder to eliminate step loss problem



## Build the Future with You - Bitzer at CRH 2025

(Booth No.: E2G01)

Refrigeration and air-conditioning have become the quality guarantee of modern life, and compressors are the core components of refrigeration and air-conditioning systems. From April 27 to 29, 2025, BITZER will participate in The 36th International Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage to be held in Shanghai. The 325-square-meter large-area booth design allows customer experience and product display to be more effectively integrated, narrowing the distance between each other.

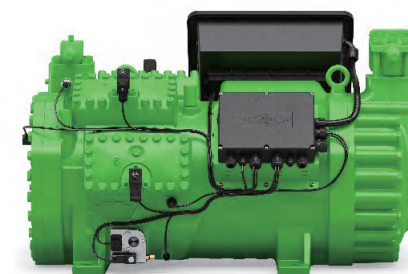
The uncertain challenges ahead may bring significant opportunities. Bitzer is doing everything in its power to ensure the success of its customers and partners. Especially in terms of refrigerants, energy efficiency and digitalization, we offer not only product-based solutions, but also conceptual ideas. Bitzer represents not just a compressor, but also green competitiveness. Bitzer has been and will continue to be committed to supporting customers and the Chinese market towards the future together!

### Fulfilling the “Carbon Peak and Carbon Neutrality” commitment, natural working fluids help industry development

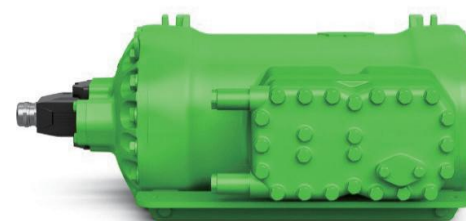
◆ Natural working fluid CO<sub>2</sub> products power heat pumps, commercial refrigeration and orbital applications

The 8-cylinder subcritical CO<sub>2</sub> piston compressor exhibited by Bitzer at CRH 2025 is equipped with energy regulation as standard, with a maximum displacement of 199.5 m<sup>3</sup>/h and a standby pressure of up to 80 bar. The larger displacement and integrated IQ module make the system design more compact and simplify integration into system control, providing better options for applications in commercial and industrial freezing.

CO<sub>2</sub> semi-hermetic piston compressors used in rail transit have compact structure, low noise, and high energy efficiency standards bring lower power consumption and longer endurance (long-distance operation). They are



Bitzer 8-cylinder CO<sub>2</sub> piston compressor

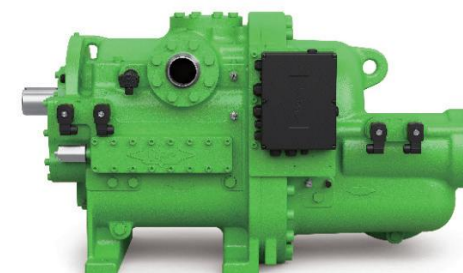


Bitzer R744Lite Piston Compressor for Orbital Air Conditioning

suitable for air conditioners and heat pumps for electric buses and rail transit. The practice of low carbon and high-efficiency provides a wider range of application solutions.

◆ Large cooling screw compressors for ammonia applications

The BITZER OS.A105 Series Open Screw Compressor is available in 3 displacements-1 400 m<sup>3</sup>/h, 1 700 m<sup>3</sup>/h and 2 000 m<sup>3</sup>/h (2 900 r/min), which enables a wider range of applications in the ammonia screw compressor portfolio for industrial refrigeration systems. The



Bitzer ammonia screw compressor OS.A 105 series

compressor is equipped with an IQ module, which can be used to efficiently operate dual sliders (stepless adjustment in the range of 10% ~ 100%) for mechanical capacity control and adjustment of variable internal volume ratio.

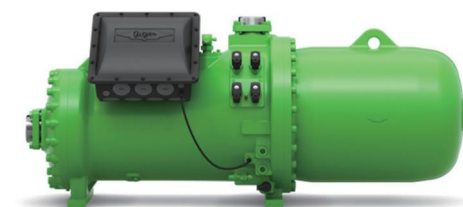
### Improve energy efficiency and make customers experience more comfortable cooling methods

◆ Efficient product solutions for air conditioners and heat pumps

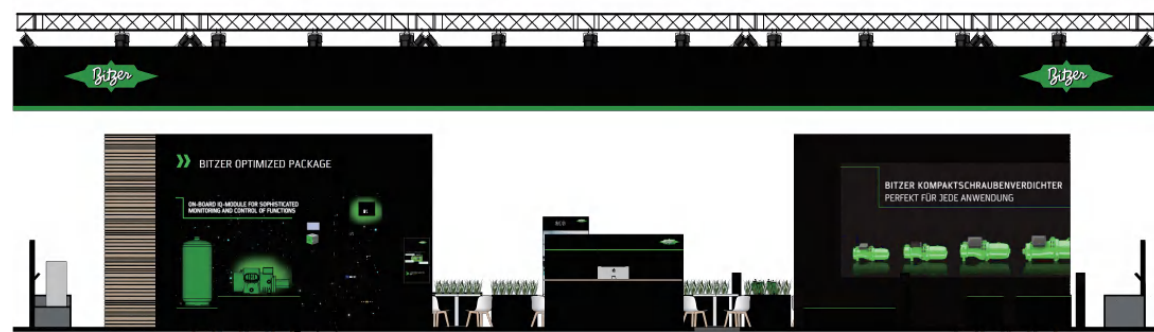
The CSD Series Scroll Compressor suitable for the Chinese market is specially optimized for the application of air-cooled units. The COP value of the 25 hp unit is as high as 3.39 and the IPLV value is as high as 3.86 under ARI conditions. CED/CEF Series Scroll Compressors adopt FIT technology (flexible injection technology)



Bitzer CSD/CED Series Scroll Compressor



Bitzer's screw series products suitable for the field of high-temperature heat pumps



Bitzer Booth Design

The CSH2T series of screw compressors suitable for the field of high-temperature heat pumps can correspond to condensation temperatures of up to 125 °C. Optimized for high-temperature applications in the high capacity range, this compressor is suitable for low GWP refrigerants R245fa and R1233zd (E).

### Advocate a digital Internet

Among the system solutions to match the vast after-service market, the construction of data platform is Bitzer's full layout focusing on the future. BITZER New Generation IQ Module CM-RC-02 not only covers all functions of the original compressor protection module, but also monitors the operation of accessories already installed on the compressor, providing a convenient window for digital services. The IQ module also simplifies and optimizes the installation, operation, repair and retrofit of compressors in refrigeration, air-conditioning and heat pump systems. It not only covers the features of the SE-B3 compressor protection device, but also opens up new ground for operating functions installed on the compressor, as well as new digital services.



IQ Module CM-RC-02 for Bitzer ECOLINE Piston Compressor

### Pay attention to integrated optimization solutions and build a complete service

#### “Green Point” system

BITZER Premium Package provides customers with new integration solutions

Bitzer has launched a high-quality complete set of

equipment portfolio for special natural working fluid projects, providing engineers and customers with another way of application solutions. The core components of the unit, such as compressor, oil separator, control cabinet, etc., are provided by Bitzer's optimized configuration. The highly matched core components can ensure the high-quality operation of the compressor unit.



BITZER Premium Package

#### Perfect “Green Point” service system

Bitzer not only sells compressors to customers, but also wants to provide full life cycle system solutions to customers in need, so that more professional and comprehensive knowledge can help friends from all walks of life. Let Bitzer's “Green Point” service center light up more industries. The launch of the new service company in China shows that Bitzer pays close attention to the whole life cycle of compressors and systems, and at the same time dares to take action.



Bitzer implements a more comprehensive service system concept

## Empowering Innovation, Embracing Low-Carbon Sustainability - Panasonic Electrical Equipment (China) Co., Ltd. at CRH 2025

(Booth No.: W4F15)

Panasonic Electric Equipment (China) Co., Ltd. was established in July 2021. The company is headquartered in Suzhou, with various branches located in dozens of cities across the country, including Beijing, Shanghai, Dalian, Chengdu, Chongqing, Hangzhou, Nanjing, Wuhan, Changsha, Zhengzhou, Jinan, etc., and has nationwide sales and service outlets.

With the goal of becoming a leader in healthy living space with air, light, water, and intelligent interconnection, we integrate Central Air Conditioning, fresh air system, lighting, building electricity, etc. to provide consumers with one-stop whole-house environment solution of “air, light, water and intelligent control”.

With Panasonic's unique technologies, excellent product quality and perfect service cycle such as nanoe™ and centrifugal water crushing, Panasonic Electrical Equipment (China) Co., Ltd. is committed to enhancing the added value of consumers' quality life, injecting fresh vitality into a healthy and beautiful life, and contributing to the realization of a “sustainable society”.

At CRH 2025, Panasonic focuses on “Empowering Innovation, Embracing Low-Carbon Sustainability”. With the theme of “Green Impact”, Panasonic's green and intelligent solutions in the commercial and residential fields are comprehensively presented. These innovative achievements are not only committed to improving customer experience, but also contribute to helping the world achieve the goal of carbon neutrality.

At CRH 2025, Panasonic will present a series of advanced refrigeration technologies and intelligent products, focusing on the two core business segments of commercial and household products. The highlights of the exhibition include blockbuster products such as the third-generation 6-constant system and Intelligent

Building Solutions, which fully demonstrate Panasonic's breakthroughs in key technical fields such as intelligent integration and low-carbon energy saving, covering all-round solutions from commercial air conditioners to residential comfort systems. Through these breakthrough innovations, Panasonic looks forward to discussing the future development direction of green technology with colleagues in the industry and injecting new vitality and new thinking into the industry.



## Smart Connection for Cooling and Heating is About to Begin

### PHNIX to Land at CRH 2025

(Booth No.: W2F31)

As one of the largest and most influential exhibitions in the global refrigeration and air-conditioning industry, the 36th International Refrigeration, Air Conditioning, Heating, Ventilation and Food Refrigeration Processing Exhibition will be held in 2025 with the theme of “Smart Connection for Cooling and Heating, Shared Future”. It was grandly opened at the Shanghai New International Expo Centre (SNIEC) from April 27 to 29, 2020. The total area of this exhibition is 115,000 square meters, bringing together more than 1,100 enterprises from 32 countries and regions, covering the whole industrial chain of refrigeration, air-conditioning, heating and ventilation, and building a super platform for technical exchanges and business cooperation for colleagues in the global industry.

### Star product matrix, will soon be unveiled at the industry's top events

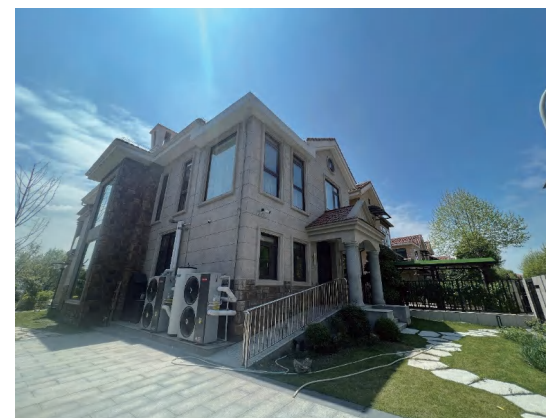
At CRH 2025, PHNIX will focus on air-source heat pump technology, bringing five major systems of whole-house heating, refrigeration, hot water, fresh air, water purification and intelligent control, and more than 20 star products will be unveiled. At the exhibition site, PHNIX will display its breakthrough energy-saving technological achievements in an all-round way, including star

products such as Kirin HP inverter low-temperature air-source heat pump, Intelligent-Drive Photovoltaic Heat Pump, and Super Polaris Unit, as well as 25 HP Tri-Function Unit, Cloud Cluster Control System, flame/luxury air-energy water heater, Central Soft Water and Purified Water Machine, Zero Dog Whole-House Intelligent Control System and other product series, bringing a more comfortable and healthy life experience to global consumers and adding a touch of bright green style to China Refrigeration Expo.

### Multi-scenario solutions to meet the needs of customers across the industry

With customer needs as the core, PHNIX has created multi-scenario energy-saving solutions. At the refrigeration exhibition, PHNIX's booth will be presented in an open design. Through simple, smooth and technological design, it will bring a comprehensive and immersive exhibition experience to customers in different industries. For living scenes such as residential areas, houses, schools, hotels, villas, and flat floors, PHNIX will customize exhibition areas such as heating systems, moisture-free household heating systems, clean closed hot water systems, and hotel free hot water systems. Through the combination of multiple

scenarios, customers can quickly find the products and solutions that best suit them. PHNIX has always focused on providing comprehensive energy-saving solutions for various industries by virtue of its excellent product performance and innovative technology, and has professional capabilities and deep reputation in the field of high-end air-energy heat pumps.



### As an industry leader, help “Carbon Peak and Carbon Neutrality” show its new outlook

Under the background of the “Carbon Peak and Carbon Neutrality” policy, PHNIX, as an international innovative enterprise in new energy and environmental protection technology, has always been at the forefront



of green development. Since its establishment, PHNIX has always focused on the field of high-end heat pumps, continuously increasing core technology research and development, optimizing product energy efficiency, and contributing to carbon neutrality. PHNIX products cover household, commercial, industrial and agricultural fields and other fields, providing global customers with healthy, comfortable and environmentally friendly environmentally integrated home appliances and comprehensive energy-saving solutions.

In recent years, PHNIX has actively planned its global layout and set up a factory in Thailand, taking an important step in its internationalization strategy. It is committed to promoting green and energy-saving solutions to the world and contributing to global sustainable development. With rich patented technology, high-end product experience and perfect service system, PHNIX has become the trusted choice of global consumers





## Blait Refrigeration Makes a Big Debut at CRH 2025 with New Products (Booth No.: E2D15)



Zhejiang Blait Refrigeration Equipment Co., Ltd. (established in 2013) is a professional manufacturing enterprise integrating compressor design, R&D, production and sales. Its headquarters and production base are rooted in Xinchang County, Zhejiang Province, and an independent R&D center has been set up in Hangzhou to build an innovation engine of “industry-university-research integration”. The company has been deeply involved in the entire industry chain of refrigeration compressors for more than ten years, focusing on the design, R&D and production of semi-hermetic piston compressors and semi-hermetic screw compressors. It is driven by an elite team of more than 100 people. The R&D team consists of a group of refrigeration engineers with rich professional backgrounds, leading core technologies such as thermodynamic simulation, refrigerant optimization and system energy efficiency improvement.

With the professional production line of compressor

body finishing with independent intellectual property rights, its unique design accuracy, efficiency and quality make Blait have a competitive advantage in the industry. Blait continues to adhere to scientific and professional testing methods, and has set up three refrigeration compressor performance testing benches, covering the whole series of semi-hermetic piston refrigeration compressors and semi-hermetic screw refrigeration compressors.

at CRH 2025, Blait will grandly launch a new product - CO<sub>2</sub> Subcritical Semi-hermetic Piston Refrigeration Compressor, which is a compressor technology that uses natural working medium carbon dioxide (R744) as refrigerant and operates under subcritical cycle (working pressure is lower than CO<sub>2</sub> critical pressure 7.38 MPa). This product has the environmental protection characteristics of zero ODP, extremely low GWP, and excellent energy efficiency performance. It is one of the key technical paths for the current refrigeration industry

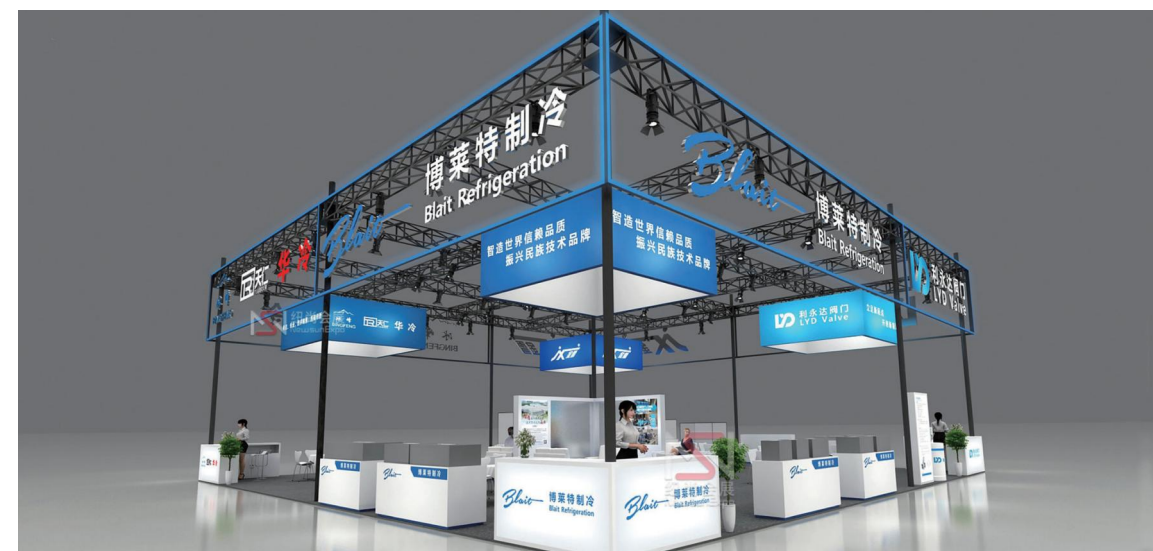
to achieve the “Carbon Peak and Carbon Neutrality” goal. It can be applied to typical refrigeration scenarios such as cold chain logistics, industrial refrigeration and commercial refrigeration. The core technical features of this product are mainly reflected in subcritical cycle adaptability, environmental protection and energy efficiency advantages, and high reliability design.

Of course, Blait also brings a variety of core products and technologies to this exhibition, including various models of semi-hermetic piston refrigeration compressors, semi-hermetic screw refrigeration compressors and single and double-stage screw refrigeration compressors. Among them, the core technologies of two-stage screw refrigeration compressors are mainly reflected in two-stage compression technology, screw rotor design, cooling system, inverter drive technology, intelligent control system, sealing technology, modular technology and multiple refrigerant compatibility. These core technologies make two-stage screw refrigeration compressors have significant advantages in refrigeration efficiency, reliability and environmental protection, and are widely used in industrial and commercial refrigeration fields.

From April 27 to 29, 2025, welcome everyone to visit Blait’s booth. At the same time, welcome to pay



attention to Blait’s official WeChat account and official website [www.zj-blait.com](http://www.zj-blait.com). We look forward to seeing you!





## Aowei Refrigeration - Let Temperature Better Serve Life Keep the Service Above Temperature (Booth No.: E1D15)



Its products cover CO<sub>2</sub> complete refrigeration system, intelligent box quick freezer, spiral cooling and freezing equipment, refrigeration screw compressor, air cooler, evaporative condenser and cold chain logistics access control series, etc., serving agricultural and sideline products, meat products, aquatic products frozen deep processing, condiments, food and beverage, cold chain logistics and other fields.

The company follows the national development strategy of "green, low-carbon, environmentally friendly and sustainable development",

The annual event of the refrigeration industry - CRH 2025 is about to kick off! As one of the most influential professional exhibitions in the field of refrigeration and air-conditioning, it brings together advanced refrigeration technologies, innovative products and industry elites from all over the world. Aowei Refrigeration will make a glorious appearance at CRH 2025 to explore the future of the refrigeration industry with you!

Yantai Aowei Refrigeration Equipment Co., Ltd. is a technology-based enterprise integrating refrigeration technology research and development, product design and manufacturing, refrigeration system application and installation of complete sets of services. The company is located in Qinshui Industrial Park, Muping District, Yantai City, Shandong Province. The company covers an area of more than 100,000 square meters and has a construction area of 52,000 square meters. The company focuses on the R&D and manufacturing of industrial and commercial refrigeration equipment and technology, and provides customers with overall system solutions.

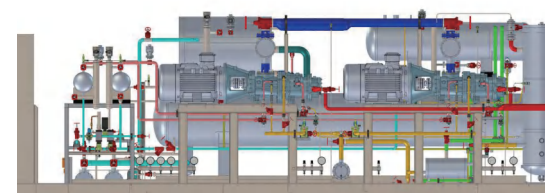
takes "saving energy and costs, protecting environment and resources, and creating safe and efficient products" as its R&D design concept, adheres to the road of high-end and integrated products, and realizes intelligent, digital and information-based products and systems, and uses new CO<sub>2</sub> refrigeration technology to create stable, reliable, energy-saving, environmentally friendly and easy-to-operate refrigeration system solutions for global customers, and provides one-stop value-added services.

The following is an introduction to some exhibits of CRH 2025:

### Exhibit Name: KELVIN ZERO

◆ On the high-temperature side, a three-stage throttling refrigeration system with double flash tanks is used, which uses ammonia as the medium, which is energy-saving and efficient.

◆ Carbon dioxide is used on the low temperature side to ensure that the end evaporator is oil-free and the



performance is stable without attenuation.

◆ Used in evaporative condenser system, the condensation temperature is lower than that of water-cooled system, and the energy-saving effect is remarkable.

◆ The ammonia single-machine two-stage opening screw compressor equipped with permanent magnet inverter motor is energy-saving and efficient in operation.

◆ The plate and shell oil cooler utilizes siphon refrigerant liquid for cooling, which is compact and compact in size.

◆ Equipped with vertical centrifugal oil separator with high molecular sieve structure, oil separation efficiency up to 3 ppm.

◆ The horizontal siphon liquid reservoir has both liquid storage and washing oil separation functions, so that the ammonia liquid entering the plate and shell condensing evaporator has no lubricating oil, ensuring heat exchange efficiency, eliminating the need for ejection oil return and complex oil return pipelines, and energy saving and efficient.

◆ The liquid-filled plate and shell condensing evaporator effectively reduces the height of the equipment and facilitates overall transportation.

◆ The carbon dioxide pump adopts one-use and one-standby mode to ensure the safe and stable operation of the system.

◆ The ammonia system has a small filling capacity and is safe and environmentally friendly.

◆ The safety protection measures are complete and fully automatic operation is supported.

**Exhibit name: Slide rail spiral cooling and freezing equipment**



◆ The mesh belt adopts a special structure to buckle and fit, which solves the belt turning problem of the spiral single freezer from the mechanical structure

◆ Without rotating cage design, the internal space is easier to clean and check.

◆ Realize single-screw low-end incoming and low-end shipping, and at the same time, realize a variety of inlet and outlet layouts.

◆ PLC automatic control + manual control is adopted to ensure the stable operation of the equipment.

◆ No tensioning device is needed, which not only reduces failure points, but also prevents damage to the mesh belt caused by excessive stretching.

◆ Suitable for aquatic products, carnivores, fruits and vegetables, conditioning food, etc

During CRH 2025, the technical experts of Aowei Refrigeration will also share the latest refrigeration technology and industry trends with you, and discuss the future of industry development together. Please pay attention to the official WeChat notice of China Refrigeration Expo. The CRH 2025 is about to open, Aowei Refrigeration is looking forward to your visit! Let us join hands to create a bright future for the refrigeration industry!

## McQuay Central Air Conditioning Appears at China Refrigeration Expo

### Century-old Intelligent Cold Technology Empowers “Two New” Futures (Booth No.:W2D01)

McQuay is one of the professional manufacturing companies of air-conditioning and refrigeration equipment across the world. It was established in Minnesota, USA in 1872, and has a history of more than 150 years. It is a world-renowned supplier of HVAC, refrigeration, purification and refrigeration equipment. McQuay is committed to creating new products, launching new solutions and meeting new needs through cutting-edge technologies in the industry, providing more possibilities for the development of the HVAC industry.

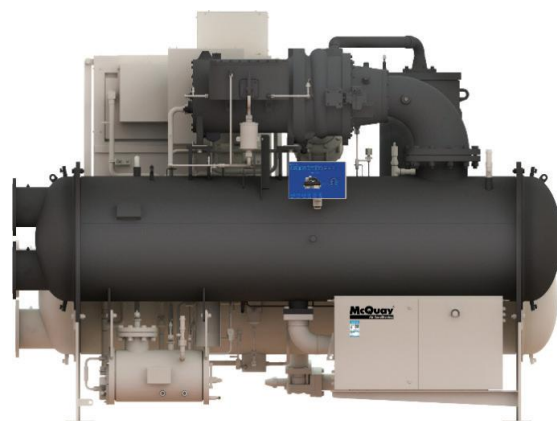
Since entering the Chinese market in 1992, McQuay has adhered to the localization business strategy of adapting to local conditions, and set up manufacturing bases in Shenzhen, Wuhan and Suzhou in 1992, 1995 and 2002, respectively, with a total area of more than 270,000 square meters; It has 26 sales branches, 15 offices, 800 professional stores, more than 3,000 special distributors, and more than 5,000 employees across the country.

At CRH 2025, McQuay presented more than ten new products and technologies to discuss the new future of industry development with industry colleagues.

#### WTCV Dual-Stage Direct-Drive Inverter Centrifugal Chiller

The WTCV Dual-Stage Direct-Drive Inverter Centrifugal Chiller independently developed by McQuay came into being under the energy efficiency requirements of GB 19577-2024. It has the characteristics of high performance. The entire system can reach the national first-class energy efficiency standard, and the highest COP @ GB can reach 6.8, IPLV can reach 9.5 (the data comes from the test results of CNAS accredited testing laboratory), which is especially suitable for projects with high requirements for energy efficiency; The built-in two-stage guide vane design ensures the stable operation of the unit, greatly reduces the surge problem of the

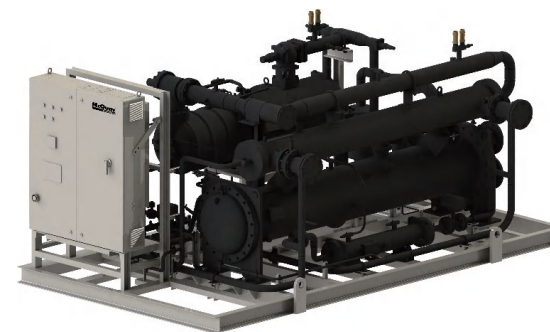
centrifugal chiller, and improves partial load efficiency; It can be adapted to R1234ze environmentally friendly refrigerant and is one of the best choices for energy saving and emission reduction of central air conditioners under the “Carbon Peak and Carbon Neutrality” goal.



#### WPS Screw-Type 120 °C Industrial High-Temperature Heat Pump Unit

McQuay's new WPS screw 120 °C high-temperature heat pump unit has a heating capacity range of 380 ~ 1090 kW. The unit adopts a modular design and uses industrial waste heat below 90 °C to produce high-temperature hot water of up to 120 °C; Equipped with flash evaporation and pressurization modules and expanded by multiple heat pump modules, it can meet the steam demand of 0.5 ~ 5 t/h and can be used in industrial applications such as printing and dyeing, papermaking, slaughtering, beer, and juice. The unit can integrate multiple functional modules such as heat pump units, water treatment, flash steam production, steam boosting, etc. for load

adjustment, so that the entire steam production process can maintain efficient operation and significantly reduce operating costs compared with industrial steam boilers. The unit uses R1233zd (E) refrigerant to optimize the design and production of compressors, heat exchangers and pipelines for high-temperature applications and industrial environments, which can be used as one of the important boosts to achieve the “Carbon Peak and Carbon Neutrality” goal for industrial applications that require steam.



#### MHZ Huizhi Series Inverter Air-Cooled Heat Pump Unit

McQuay has newly launched the MHZ Huizhi Series Inverter Air-Cooled Heat Pump Unit, with a cooling capacity covering 340 ~ 850 kW, which is accurately adapted to schools, office buildings, residential buildings and industrial and commercial scenarios. The unit innovatively integrates high-efficiency air-cooled heat pumps, machine room management systems and hydraulic modules. The integrated design significantly



improves energy efficiency performance, saves installation space, shortens construction cycles, reduces maintenance costs, and ensures stable operation of the system; The intelligent cloud control platform supports mobile phone/PC remote real-time monitoring, fault warning and energy efficiency analysis, helping users to efficiently manage the entire life cycle of equipment, and redefine green and low-carbon cooling and warming experience with the triple breakthrough of “energy efficiency optimization + space streamlining + smart operation and maintenance”!

#### MHAG Water-Source High-Temperature Heat Pump Steam Unit

McQuay MHAG Water-Source High-Temperature Heat Pump Steam Unit, by recovering low-grade waste heat as a heat source, stably outputs 40 ~ 125 °C hot water, and can be matched with a flash tank to generate 120 °C micro-pressure steam. Meet the needs of high-temperature hot water and micro-pressure steam in application scenarios such as distillation and brewing, beverage and dairy industry, waste gas treatment, and rotary dehumidification. By recycling waste heat and water resources, this unit not only significantly reduces operating costs, but also significantly improves environmental benefits, converts industrial waste heat into sustainable green resources, helps enterprises achieve green production transformation, and provides efficient solutions for industrial energy conservation and carbon reduction.





**MDX-C Constant Temperature and Humidity Retrofit Unit**

The MDX-C Constant Temperature and Humidity Retrofit Unit is specially designed for scenarios with high requirements for temperature and humidity control such as data centers and medical warehouses. In response to the needs of traditional system transformation, modular EC fans and outdoor unit fixed-frequency conversion technology can improve comprehensive energy efficiency, achieve energy saving and consumption reduction, and significantly shorten the investment recovery cycle. At the same time, the old system pipeline lines can be used, which greatly shortens the transformation cycle. The unit integrates an AI cloud management platform to open up the entire link of real-time environmental monitoring, intelligent analysis, and remote operation and maintenance, promoting the smooth upgrade of traditional systems to green and intelligent, taking into account rapid return on investment and sustainable operational value.



**MDS R Series Inverter Multi-Split System for Upgrades**

McQuay MDS R Series Inverter Multi-Split System for Upgrades focuses on the pain points of air-conditioning system transformation. It can transform and upgrade the old refrigerant systems such as R22 system, R410A system digital multi-split systems, inverter multi-split systems, high static pressure air duct units. The solutions offered include replacing only the outdoor unit, replacing the outdoor unit and some indoor units, or replacing the outdoor unit and all indoor units. Throughout the renovation process, the concept of "non-destructive renewal" is fully implemented — preserving the original building structure, reusing existing piping systems, avoiding demolition of interior finishes, and ensuring no disruption to daily operations. This helps commercial properties achieve a green transformation.



**Zhejiang Yilida Brings “Smart Wind” to CRH 2025 (Booth No.: W4F01)**

Zhejiang Yilida Ventilator Co., Ltd. (Stock Code: 002686) was founded in 1994 and is a Zheshang Asset Holding Enterprise under the State-owned Assets Supervision and Administration Commission of Zhejiang Province; Well-known Central Air Conditioning fan manufacturer and building ventilator (engineering fan) manufacturer. Adhering to the spirit of innovation, we are gradually moving from a traditional wind turbine manufacturer to a wind turbine and intelligent drive motor system integrator through the development of intelligent and high-efficiency motors, and striving to realize the brand concept of “Smart Wind”. After more than 30 years of persistent pursuit and reform and development, Yilida Group has actively integrated into the global economic and industrial ecology, and has become a green technology-based manufacturing enterprise integrating wind turbine manufacturing, new energy auto parts, lightweight materials, etc. With

innovative thinking, Yilida independently developed New EC technology with a well-known domestic level, and launched a permanent magnet brushless motor with low vibration, low noise, high-efficiency, high intelligence and more application value. To a greater extent, the practical needs of energy conservation and emission reduction are realized.

From traditional fans to energy-saving fans, Yilida continues to innovate and forge ahead. Through industrial thinking, it integrates all resources and gradually realizes independent research and development and production of all parts of fans, motors and control systems. We integrate fans, EC motors and integrated inverter motors to realize a full range of fan energy-saving solutions for refrigeration units and air-conditioning terminal products.



At CRH 2025, we will focus on exhibiting new EC fans.

◆ YUWA series, its characteristics are efficient, silent and reliable. Made of high-efficiency aluminum alloy material, innovative airfoil design optimizes aerodynamics and makes the impeller more efficient and low-noise. Synchronous operation prevents slip losses, and the use of permanent magnets can prevent hysteresis losses in the rotor, so this product has a high level of performance and efficiency while taking into account NVH characteristics. Insulated bearing system makes its operation safer and more reliable.

◆ YUWB series, customized to meet the diverse needs of customers, is made of high-efficiency aluminum alloy material, combined with innovative airfoil design, and has excellent aerodynamic level. The blade design has a large variable space, and the advanced intelligent production line supports diverse and flexible customization. Therefore, it has diverse configuration options to meet customers' individual needs and adapt to a variety of application scenarios.

◆ YUWE series, the impeller is made of plastic polymer material, which has been professional design optimization and has excellent aerodynamic level. Centrifugal fans optimized with Yilida EC technology ensure efficient, continuous and reliable delivery and transfer of air from the unit.

◆ AXF Axial Flow Fans have excellent silence performance, weather resistance and reliability, and are suitable for harsh outdoor environments. Its excellent

waterproof performance ensures its stable operation in outdoor use for a long time. Compared with ordinary products, the efficiency is significantly improved, the energy-saving effect is outstanding, and it still maintains quiet operation under high air volume.

◆ ZQ Dual-Outlet Shaft Fan will achieve multi-objective balance between efficiency and noise. The innovative solution of forward multi-blade centrifugal fan + dual-outlet shaft motor can avoid the uncomfortable noise caused by the high speed of traditional EC fan, and can seamlessly replace the "volute-less fan" + EC motor solution "to improve user comfort. At the same time, compared with the application of traditional Central Air Conditioning cabinet fans, the induction scheme transmission and permanent magnet scheme motor are more efficient. With less cost, the green and energy-saving transformation of HVAC can be realized.

◆ The PP series adopts advanced intelligent control technology, which can automatically adjust the air volume in real time according to the unit load, and regulate the temperature and energy consumption in real time and accurately to achieve efficient operation. The system has 92% ~ 95% adaptive adjustment capabilities, which can significantly improve comfort.

At CRH 2025, in the field of air supply and exhaust in building construction and industrial plants, we will focus on exhibiting engineering fans that combine traditional fans with EC motors, including volute-less fan boxes, roof ventilators, axial flow fans, and Yilida industrial fans.

## The Dual Play of AI and Low-Carbon Technology Hitachi Central Air Conditioning Debuts at CRH 2025 with New Products (Booth No.: W3F09)

Since Hitachi Central Air Conditioning landed in the Chinese market, China Refrigeration Expo has witnessed the transformation of Hitachi Central Air Conditioning from product sales to intelligent, humanized and scene-based solutions. Adhering to the bottom line of green development and condensing century-old precision quality, Hitachi Central Air Conditioning continues to promote the green, digital and intelligent transformation and upgrading of the industry through product and technological innovation.

In April 2025, the China Refrigeration Expo will once again focus on the global HVAC industry. Hitachi Central Air Conditioning will make its debut with the theme of "Make a comfortable low-carbon world with Jiyu AI", bringing SET-FREE RIII, SET-FREE Jiyu dual new products and villa space whole-house solutions to this grand event.

### Dual Star Products: SET-FREE RIII and Jiyu Series, reconstruct a comfortable low-carbon world

At CRH 2025, Hitachi Central Air Conditioning will launch the world's first two series of new products, SET-FREE RIII and SET-FREE Jiyu. SET-FREE RIII series renewal machine, no need to cross-dress and renew comfortably. This series of models adopts advanced piping adaptation and pressure adaptation technologies, and continues to use the original system piping of air conditioners to achieve non-induction replacement. In addition, the RIII series can be flexibly reorganized according to the space layout, freely increasing or decreasing the number of indoor units, providing convenient solutions for the space structure, smart, efficient and energy-saving, and enjoying comfort and worry-free.

The SET-FREE Jiyu Series breaks through the boundary of multi-split technology. Its condensation recovery system realizes the reheating of the outlet air temperature by recovering and reusing the heat

discharged during cooling, achieving the effect of controllable temperature and humidity; The remaining amount can also be used to produce free domestic hot water to reduce heat emissions. This series of innovative deep dehumidification technology, with a minimum dew point air outlet temperature of 5 °C and a fine control system, achieves "non-sensory comfort" in high-demand places such as laboratories and medical care, taking into account energy saving and ultimate comfort experience.

### Full-scenario product matrix: redefining suitability standards

at CRH 2025, Hitachi Central Air Conditioning further upgraded its product matrix and launched the SET-FREE AIII series to achieve perfect completion. The new large-horse side air outlet model is equipped with a strong power supply of an air-supplement enthalpy-increasing compressor to achieve a super-large space. Uniform temperature field coverage. The third-generation STEPPIN corrugated wide fin heating cycle capacity is increased by 10%, and the extreme temperature challenge performance is increased by 20%.

In 2024, water-source multi-split and Yuguang photovoltaic multi-split, which are well-known in the industry, will form a low-carbon matrix, fully adapt to industrial parks, super high-rise buildings and other scenarios, and redefine the "comfortable world" technology with multi-energy collaboration and AI energy efficiency management standard.

### Intelligent Villa Full-Sensing Water System: AI Empowers the Fifth Space Revolution of Home

For the high-end home improvement market, Hitachi Central Air Conditioning has brought a villa space solution this time. Based on the big data model of global users of Hitachi Central Air Conditioning, this solution integrates refrigeration, floor heating, fresh air,



dehumidification and humidification systems into one. The AI algorithm is self-running, self-sensing and self-processing, creating a comfortable ecological space with “thousands of people and thousands of faces” for villa users.

As an enterprise that realizes the full-link innovation of “air-conditioning hardware + AI energy-saving brain + spatial adaptation algorithm”, Hitachi Central Air Conditioning has always taken user needs as the core and driven by technological innovation, continuously

promoting low-carbon energy-saving and intelligent development, and promoting the industry’s transition to the AI low-carbon era. In the future, Hitachi Central Air Conditioning will continue to deeply cultivate AI low-carbon technology, empower the green and low-carbon transformation of the entire life cycle of buildings with more efficient, smarter and environmentally friendly product solutions, and work with industry partners to create a smart future. At CRH 2025, Hitachi sincerely invites global industry partners to witness the infinite possibilities defined by you in the comfortable world!






## THE 37TH INTERNATIONAL EXHIBITION FOR REFRIGERATION, AIR-CONDITIONING, HEATING AND VENTILATION, FROZEN FOOD PROCESSING, PACKAGING AND STORAGE

APR 8-10, 2026

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-  China Refrigeration and Air-Conditioning Industry Association (CRAA)
-  Beijing International Exhibition Center Co., Ltd. (BIEC)

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-  Beijing Chamber of International Commerce (BCIC)

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