



Business Case for
Natural Refrigerants

11-12/04/2018 – Beijing



Ammonia: The Self Alarming Refrigerant

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安全的且可持续地使用的天然制冷剂

Who we are



Promote the safe and sustainable use of Natural Refrigerants

Membership based technical society with broad Industry representation including manufacturers, design engineers, contractors, end users, academics, scientists, trainers, and consultants

- Started in 1971 to fight NEC regulation
- ANSI accredited standards developer
- Publish Technical Resources
- Provide Education
- Advocate for Natural Refrigerants



STANDARDS



IIAR 1 – 2012	Definitions and Terminology Used in IIAR Standards
IIAR 2 – 2014	Safe Design of Closed-Circuit Ammonia Refrigeration Systems
IIAR 3 – 2012	Ammonia Refrigeration Valves
IIAR 4 – 2015	Installation of Closed-Circuit Ammonia Refrigeration Systems
IIAR 5 – 2013	Start-up and Commissioning of Closed-Circuit Ammonia Refrigeration Systems
IIAR 7 – 2013	Developing Operating Procedures for Closed-Circuit Ammonia Mechanical Refrigerating Systems
IIAR 8 – 2015	Decommissioning of Closed-Circuit Ammonia Refrigeration Systems



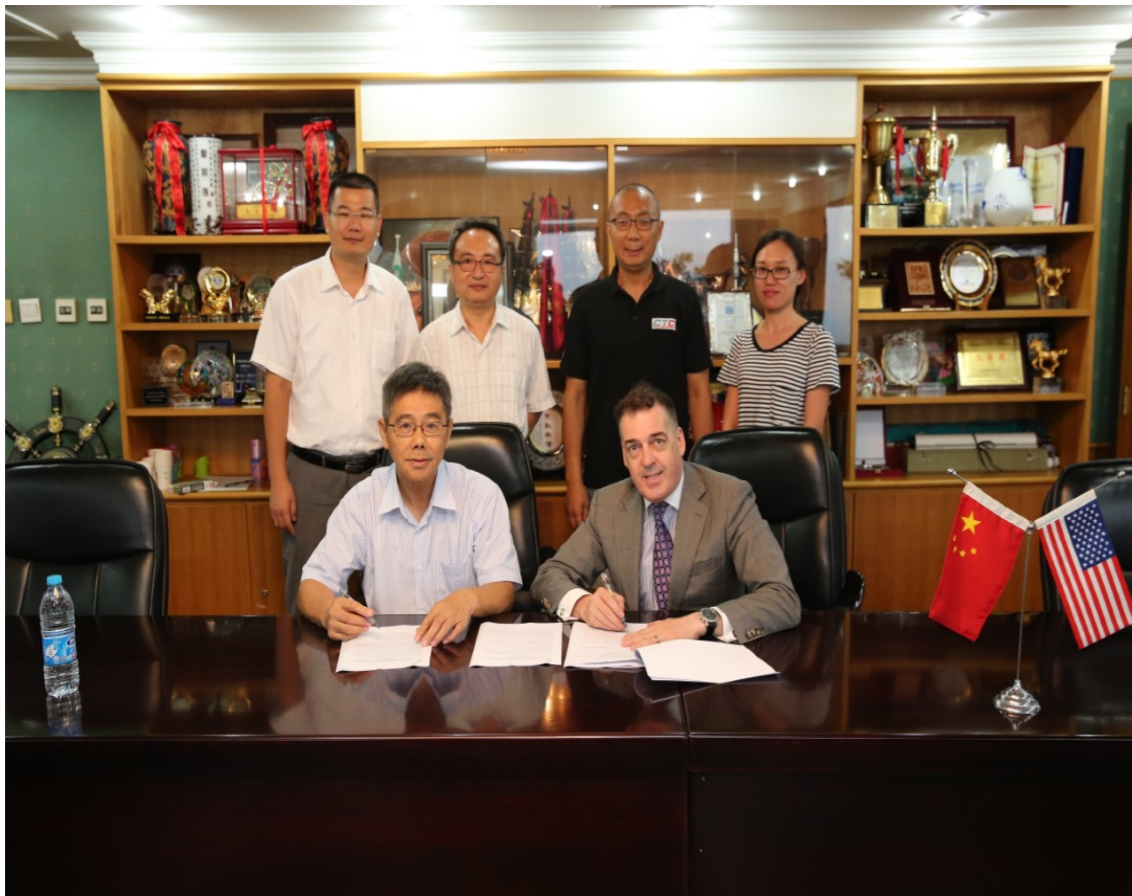


Why Ammonia?

- Self Alarming
- Natural Occurring
- Inexpensive and Readily Available
- Low Pressure – High Efficiency
- Environmentally Friendly
 - 0 ODP
 - 0 GWP



SAFE AND SUSTAINABLE USE OF
NATURAL REFRIGERANTS



IIAR and CAR have a 10 years + standing relationship

- Agreement between the IIAR and the CAR for the translation of IIAR's standards and training material in Mandarin.
 - Translation of IIAR Standard 2 in Mandarin
- 3 of the refrigeration related China GB standards are now translated in English and available to public.



Training program:

The IIAR to collaborate with Chinese authorities and strategic partners to establish a training program in China to promote best practices in the cold-chain sector with the following objectives:

- *Prevention*: To educate the community to prevent incidents such as the major leaks and fatality in 2013;
- *Formation*: This program will provide monthly or bi-monthly activities (i.e. Seminars, workshops, pilots, symposium)

Working together with CAR, other IIAR's publications will be translated into Mandarin as to provide internationally accepted standards and best practices for members of the refrigeration sector in China. Plans for 2018/2019:

- The IIAR's Standards 1, and 3 to 8 are planned to be translated in 2018 and 2019, starting by the safety standard,
- Before the end of 2018 , the translation of the Safety related Videos, starting with teh First 30 minutes.
- Other GB National Standards will also been translated;

Our focus in China:

- **Championing Safety**
- Training
- Technical Resources
- **Certification**
- Networking

Changes in Regulations and Laws for Refrigeration in China

There are actually 3 national standards GB that are in force in China:

GB28009-2011: Safety Code for Cold Storage

GB50072-2010: Code of Design of Cold Storage

GB18218-2009: Code of Identification of Major Hazard, Installation and Dangerous Chemicals

Updating of Standards GB

The Chinese Government is actually considering an integral update of its national standards, focusing on increased safety, and sustainable and green development (Green GDP).

China now recognizes the importance of providing its citizens a better quality environment and life.

This is an unique opportunity to play a advisory role in the amendment process

But updating the National Standards GB will not be a significant step unless it is fully enforced and training is also implemented.

We believe that the new initiatives will gradually have an impact, and that an aggressive concerted effort to lobby the **State Administration of Work and Safety** as well as other relevant organizations will generate business opportunities for IIAR and the industry.

The solution!

Lobbying the **State Administration of Work Safety** and organizations involved in the certification and training of trade workers is essential and is the only way to keep things moving forward.

Leveraging the leadership role that IIAR plays in the Ammonia and **Natural** refrigeration industry, IIAR could use political channels that local organizations may lack in order to promote the safe usage of ammonia in this market.



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Thank you very much!

