



## Vessels & Vessel Packages

*for the Natural Refrigeration Industry*

In refrigeration systems, vessels serve multiple functions: they store liquid refrigerant, absorb surges, and separate liquid from vapor. But we go beyond simply supplying vessels of a specified volume—we take a comprehensive approach. Our solutions are designed with the complexities of low-temperature refrigeration in mind, tailored to the specific needs of your application, and aligned with the critical safety requirements for operating with natural refrigerants.

### Unique Challenges of Natural Refrigerants

As experts in ammonia and other natural refrigerants, we prioritize safety in every aspect of our designs. From managing ammonia's toxicity to handling CO2 high pressures and mitigating the flammability of hydrocarbons, we employ rigorous techniques to ensure leak-free operation. Our vessels are engineered to withstand fluctuating pressures and temperatures throughout their lifespan, with strict quality control at every stage of fabrication.



### Plate and Pipe Cutting, Beveling and Scribing

In vessel manufacturing, precision is key. Manual methods for cutting, beveling, and scribing can lead to inconsistencies. That's why we use computer-controlled CNC processes. These automated systems deliver uniform bevels and precise joint configurations, resulting in stronger, more consistent welds and, ultimately, higher-quality vessels.

### Regulatory Considerations

We adhere to ASME (American Society of Mechanical Engineers), CSA B51 (Canadian Vessel Code), and IIAR (International Institute of Ammonia Refrigeration) standards, as required by job specifications and location. Compliance varies depending on the selected refrigerant and its characteristics. Our experienced engineers ensure that all work meets—or exceeds—these rigorous standards. With deep expertise in regulatory requirements across a range of refrigerants, we design systems that fully comply with applicable codes. Our commitment is to deliver high-quality solutions that ensure safe, reliable operation while exceeding customer expectations.

### Fitting the Space Requirements

In natural refrigeration systems, space limitations often pose challenges. Whether it's a tight installation site or the need to fit equipment into a specific layout, we work with you to find the best solution. Our team specializes in designing and fabricating systems tailored to your unique space requirements. We can:

- **Optimize vessel orientation:** We design vessels to fit your space—even in tight quarters.
- **Create custom enclosures:** Our outdoor-rated enclosures protect your equipment while minimizing your plant's footprint.
- **Develop flexible solutions:** We offer modular systems that are easy to install and adapt to evolving needs.

### Custom Capabilities - Design for Application

We go beyond production—we're a true refrigeration solutions partner, bringing deep expertise in natural refrigeration applications to every project.

Our focus on safety and performance ensures optimal outcomes. Unlike some manufacturers, we prioritize hygienic design with proper drainage to prevent corrosion and promote long-term system health.

We also understand the importance of proper insulation. Our designs include generous insulation clearances and accessible service points to support efficient operation and easy maintenance.

By choosing us, you're partnering with a team committed to delivering superior natural refrigeration solutions tailored to your specific needs, and exceeding expectations every step of the way.

### Committed to On-Time Delivery

Our LEAN principles guide our operations, emphasizing quality, planning, and waste elimination. This ensures your project is completed efficiently and on schedule, delivered on time and within budget. Our installation-oriented team coordinates closely with you throughout the entire process, from delivery to start-up, ensuring your on-site needs are met effectively.