

TOROMONT



Customized Industrial-Grade Cooling Solutions

FOR DATA CENTERS



DESIGN | ENGINEERING | MANUFACTURING | CONSTRUCTION | INSTALLATION | SERVICE



YOUR PATH TO ENERGY EFFICIENCY STARTS WITH A THOUGHTFUL DECISION

Cooling your data center is no small task—especially when up to 55% of energy consumption is dedicated to keeping IT equipment at optimal temperatures.

That's why choosing the right cooling system is a game-changer for reducing energy use and cutting carbon emissions. From selecting the ideal refrigerant to ensuring system longevity and scalability, and even capturing waste heat for reuse, the right solution can make all the difference.

When you prioritize energy efficiency and sustainability in your cooling strategy, you're not just reducing your carbon footprint—you're future-proofing your entire operation.



Data Force One (DF1) is the first-of-its-kind cooling system, tailored specifically to meet your data center's unique needs and sustainability goals. Built with industrial-grade components, DF1 delivers unmatched durability, often lasting up to 35 years with minimal maintenance.

What truly sets DF1 apart is its use of natural refrigerants, proven in high-demand industries and boasting a global warming potential of zero. This cutting-edge system is designed not only for performance and reliability but also to drive you closer to your energy efficiency and decarbonization objectives. With DF1, you're investing in a future where sustainability meets high-performance cooling.



A customized, robust natural refrigerant system made for data centers



Low-Charae Ammonia: Well-known refrigerant with proven favorable thermodynamic properties and lowest direct emissions possible (GWP = $0 \mid ODP = 0$)



Heavy-Duty Compressors: Industrial-grade parts designed for efficiency, versatility, serviceability, and safety.



Customized Automation:

maximize performance and efficiency.

Automatic Refrigerant Pump-Out: Automatically senses and contains refrigerant leaks.



(t)

Heat Recovery:

The ability to recover waste heat for use in other areas of the facility, reducing overall energy consumption.



Thermal Storage Compatibility: Connect heating and/ or cooling storage to reduce peak demand energy consumption and related costs.

Wide Operating Range:

Measuring, monitoring, and controlling the facility's equipment to

Allows for one extra component (compressor, pump, etc.) beyond the required capacity, ensuring reliability in critical applications.

Designed to operate efficiently in a broad range of ambient temperatures, ensuring consistent performance year-round.

Optimize PUE, Slash Emissions With The Right Refrigerant

Natural refrigerants are the key to unlock a whole range of benefits for your data center, including economic savings, sustainability, and operational efficiency.

Unmatched Energy Efficiency

When it comes to cooling your data center efficiently, ammonia's proven efficiency remains unmatched. Its lower compressor energy requirements, reduced operating pressures, and superior heat transfer capabilities mean more efficient cooling and lower costs for you.

A long-term investment

Industrial ammonia systems are known to be robust, lasting for many decades. This means you don't have to worry about prematurely replacing systems – either through breakages or forced phase-out regulations - significantly reducing the risk of unnecessary future expenses.

A Legacy of Reliability

Ammonia is a tried-and-tested refrigerant; it's been around for hundreds of years. When combined with CIMCO's design and engineering expertise, you can count on a system that delivers reliable and durable performance for decades.

Coefficient of Performance (COP)

One of the key advantages of ammonia is its high coefficient of performance (COP), which measures the efficiency of the cooling process. Ammonia has a high latent heat of vaporization and excellent heat transfer properties, allowing it to absorb and transfer heat more effectively. This results in a higher COP, meaning ammonia-based systems can achieve the same cooling effect with less energy consumption.





A smart choice for emission reduction

Ammonia is a natural refrigerant with zero ozone depletion potential (ODP) and zero global warming potential (GWP), significantly reducing all Scope 1/Direct Emissions. Its proven efficiency also helps lower energy use, thereby reducing related Scope 2/Indirect Emissions.

CIMCO: Experts in Mission Critical Cooling

Cooling is mission critical to data centers – without it, the show simply cannot go on. That's why it is so important to choose the right cooling partner, one with experience and expertise to match, one like CIMCO.

CIMCO has 114 years of experience working with mission-critical cooling projects spanning various industries and sectors, no matter the size of the facility. We have experienced every possibility when it comes to refrigeration, helping us engineer robust systems that truly stand the test of time.

What Makes Us Different?

Built to Last

Our custom-built systems are engineered for longevity, designed to perform reliably for decades. This durability ensures a positive return on investment, far surpassing the lifespan and value of many off-the-shelf solutions.

Peace of Mind

With CIMCO, you get comprehensive coverage across the entire value chain of a thermal system – from design and engineering to ongoing service. Our systems are thoughtfully designed with both present and future needs in mind, ensuring you are protected against any unforeseen circumstances.

Cost Efficiency

As the largest thermal system supplier in North America, we benefit from a strong buying power, a benefit we pass on to our customers.

In-House Manufacturing

Unlike other suppliers, we have our own manufacturing facilities (in Canada and the US), helping us deliver solutions on time, on budget.

Ke

Responsive Service

With 550+ service mechanics and technicians around North America and 24/7 emergency support, we deliver quality service when and where you need it.

SOME OF OUR CUSTOMERS

TELUS®

SaskTel

THE CIMCO ADVANTAGE

At CIMCO, we understand that large heating and cooling projects are complex and that each project is unique, there is no off-the-shelf product that provides the ideal solution. Our goal is to work with the stakeholders on each project to understand the unique challenges and opportunities, so we can leverage our unparalleled skills and capabilities to find the optimal tailor-made solution for you.



🖉 GREEN SERIES

Thermal Solutions That Save Money and The Environment



One







Heat Pump





Scan to learn more

СІМСО





ECO CHILL



Smart Transfer

Compressor Package



TOROMONT

CIMCOREFRIGERATION.COM