

The Future. Today.

YZ MAGNETIC BEARING CENTRIFUGAL CHILLER



The YORK® YZ Magnetic Bearing Centrifugal Chiller is a revolutionary advancement that challenges everything about conventional chiller design. Built upon decades of industry-leading chiller expertise, our engineers questioned every component and challenged every assumption. The result is the first chiller fully optimized for ultimate performance with a next generation low-GWP (global warming potential) refrigerant, delivering superior real-world performance, lower cost of ownership and a new definition of sustainability.



Proven Firsts

Groundbreaking YORK® innovations refined over decades of real-world use have been brought together to create a revolution in chiller design and optimization. It's everything we've learned to-date, and then some.

Variable-Speed Drive:

Four decades ago, YORK® introduced the first variable-speed drive (VSD) chiller. And we've since installed more VSD chillers than all other manufacturers combined. A VSD is standard on the YORK® YZ.

Magnetic Bearing Driveline:

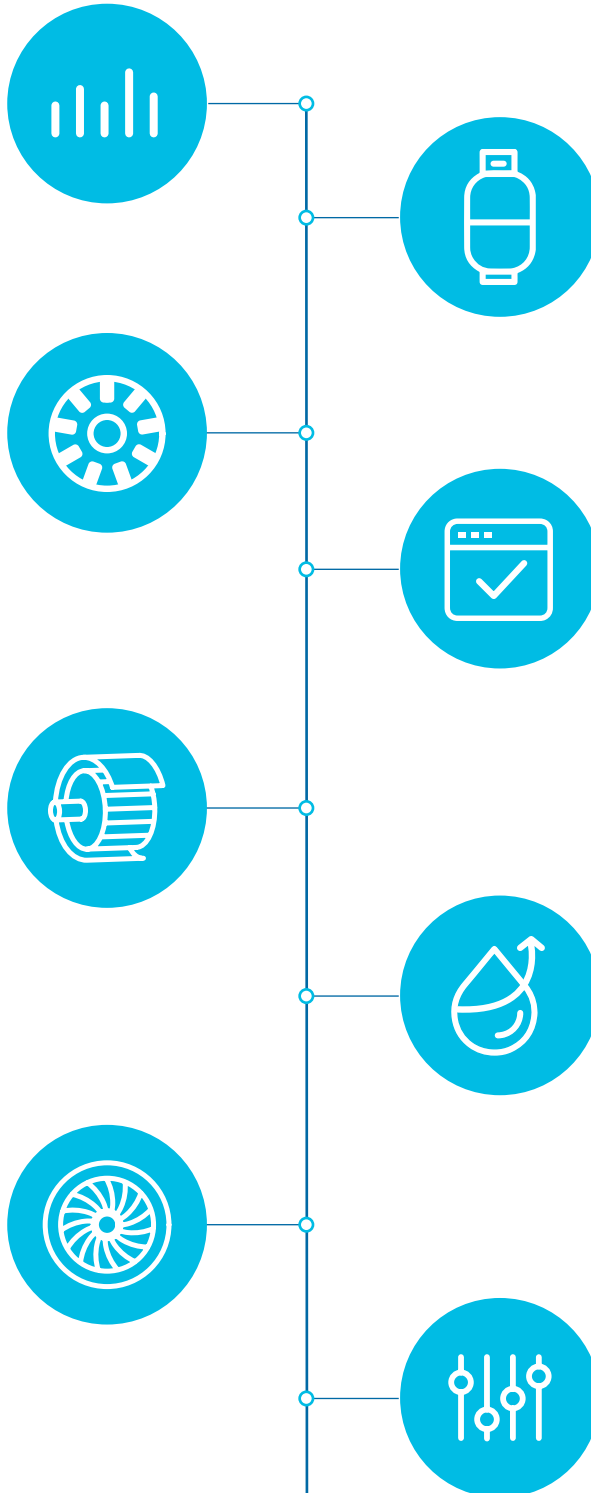
In 1998, YORK® Navy Systems pioneered reliable magnetic-bearing technology to cool submarines. The same durable and efficient technology is used on the YORK® YZ.

High-Speed Hermetic Induction Motor:

YORK® was the first to combine low-maintenance, hermetically-sealed induction motors with variable-speed drives in 2004 to directly drive the compressors in air-cooled chillers. The YORK® YZ builds on this reliable, proven technology to power our latest generation of centrifugal compressors.

Optimized Compressor:

An optimized, single-stage design enables YORK® chillers to provide the best possible real-world energy efficiency. YORK® YZ compressors also lead the industry with the widest operating range at off-design conditions where systems most often operate.



Low-Pressure Chiller:

For most of the past century, the YORK® centrifugal chiller portfolio has offered low-pressure refrigerants to deliver high-efficiency chillers. The YORK® YZ is designed to maximize the efficiency of a new, low-GWP, low-pressure refrigerant.

OptiView™ Control Panel with Connected Service:

The full-color, interactive OptiView™ control panel of the YORK® YZ offers over 100 setpoints, readouts, alerts and trending reports. In addition, data can be securely connected to the cloud-based analytics platform for remote monitoring and predictive diagnostics – another innovation first brought to you in YORK® chillers.

Falling Film Evaporator:

The YORK®-patented falling film design of the YORK® YZ reduces refrigerant charge up to 60%, and reduces evaporator shell size up to 20%, compared to other flooded, low-pressure refrigerant designs. The YORK® patented falling film design also eliminates the need for a refrigerant pump.

Capacity Control Logic:

This patented YORK® control technology provides rapid response to the load on the building, ensuring the YORK® YZ Chiller does not waste energy or work harder than needed.

Optimized for Ultimate Performance

We took a holistic approach to system design and engineering, optimizing every component around a carefully selected next generation refrigerant for ultimate performance.

Magnetic Driveline Superiority: The YORK® YZ uses a variable-speed drive and advanced magnetic bearing technology to deliver extraordinary efficiency, superior durability and simplified maintenance.

A Legacy of Leadership: With the YORK® YZ, efficiency is improved up to an impressive 7% at part-load and as much as an additional 5% at full-load versus our most efficient previous designs.

Better Efficiency in Every Operating Condition: By providing superior off-design efficiency, the YORK® YZ delivers up to 35% annual energy savings versus traditional fixed-speed oil bearing chillers.

Dramatically Lower Ownership Costs

To maximize value, the YORK® YZ design has been specifically optimized for use with a new, low-GWP refrigerant. The goal: minimize operating costs by leveraging the benefits of a new refrigerant.



Real-World Savings: The amount spent on energy costs over the life of a chiller is typically 8-10 times the initial chiller cost; investing in the real-world efficiency of the YORK® YZ is the quickest way to save money.

Reduced Maintenance Costs: YORK® YZ magnetic bearing technology uses fewer moving parts and eliminates the lubrication system with pumps, valves and filters that wear and require maintenance.

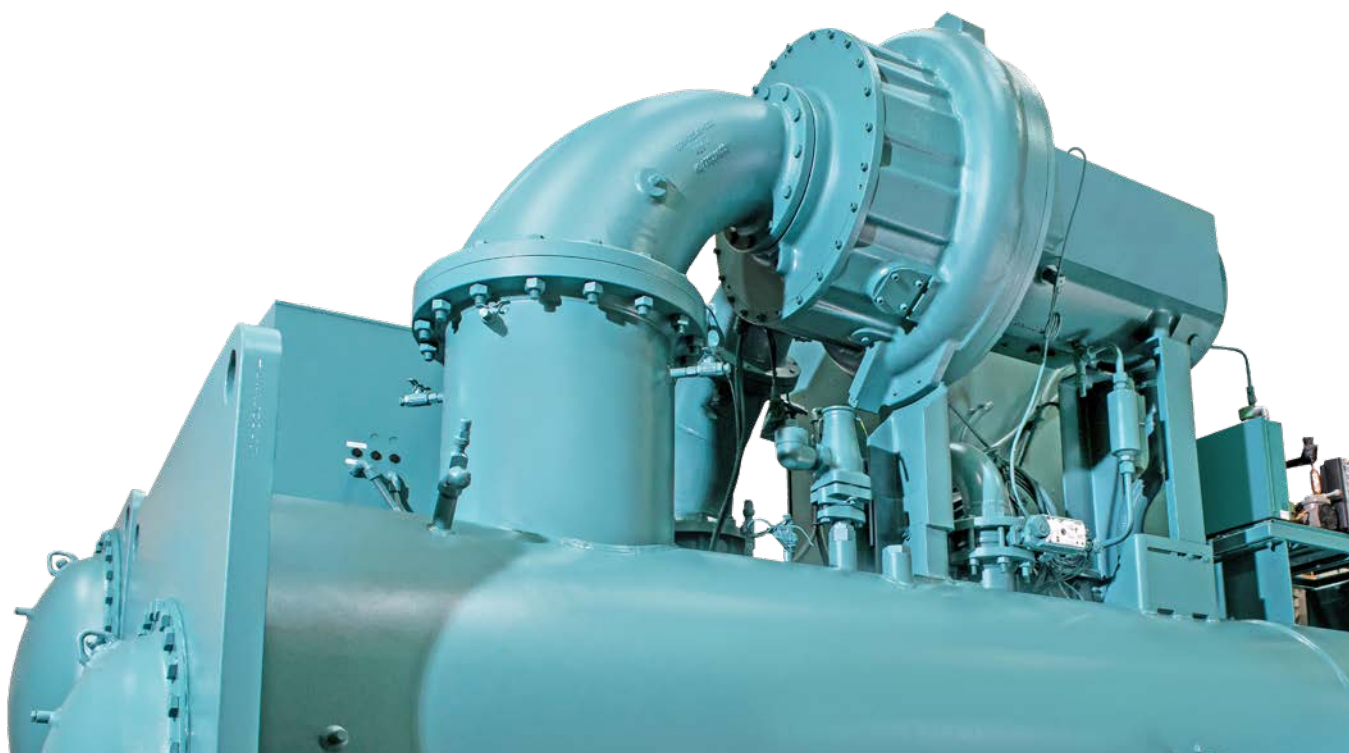
Long-Term Peace-of-Mind: Available Smart Connected Chiller technology uses cloud-based analytics to proactively diagnose issues and reduce unplanned shutdowns up to 66%.

The New Definition of Sustainability

True sustainability means the lowest total emissions – from beginning to end. Adapting a chiller design to a new refrigerant is not enough. That's why the YORK® YZ was specifically designed to maximize the potential energy efficiency of a low-GWP refrigerant. Our design optimization for the highest possible efficiency combined with a low-GWP refrigerant makes the YORK® YZ the best choice for the environment.

From the Name You Trust

When you invest in a chiller from YORK®, you're getting a solution from the chiller experts. With a wider operating envelope for exceptional efficiency, low-GWP refrigerant for superior sustainability and magnetic bearings for class-leading reliability, the YORK® YZ is a perfect example of our industry leadership. Only one company makes a chiller like this, because only one company can. The YORK® YZ Magnetic Bearing Centrifugal Chiller is tomorrow's chiller, available today.



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