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.

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.

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.

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.

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.

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.

Visit YORK.com/Next for more information