



Overview:

The Kimbell Art Museum in Fort Worth, TX hosts one of the rarest European and Asian art collections in the state of Texas. Although the museum only houses approximately 350 works of art, each are considered to be of the highest quality and excellence. The European collection includes Michelangelo's first known painting, The Torment of Saint Anthony, which is the only painting by Michelangelo on exhibit in the Americas.

The building itself is an architectural and artistic feat, designed by Louis I. Kahn in 1966 and touted as one of the most significant architectural works of recent times. Widely recognized as one of the best environments for viewing art, the Kimbell Art Museum's wash of silvery natural light across its vaulted gallery ceilings make it especially unique and notable in quality.

Project:

Although the Kimbell Art Museum is home to ancient relics and art that are thousands of years old, it needs a state-of-the-art HVAC system to protect its priceless artifacts. The scope of the project included an overhaul of the entire HVAC system over the course of several months to bring it up to current codes, retrofitting equipment to match existing infrastructure, and the need for redundancy of equipment in case of emergency outages.

Technical Solution:

The Texas AirSystems team was able to make use of the extensive line card of products to apply high-quality, top-of-the-line equipment solutions to the staggered upgrade in the museum's mechanical rooms. After taking inventory of the current infrastructure and prioritizing phases with the help of engineering partner Arup, the first stage of the upgrade included the introduction of three Chilled Water Armstrong Series 4030 End Suction Pumps, three Heating Water Armstrong Series 4030 End Suction Pumps, and two YORK YMC2 250 Ton Magnetic Bearing Centrifugal Water Chillers. The YORK chillers include an upgraded monitoring system with advanced tracking for temperature and humidity control, answering the call for redundancy and accuracy to protect the priceless artwork.

The final stage of the project included two AERCO BMK 2500 Platinum Boilers, equipped with onAER™ monitoring technology to assist in the system's precision control.



Summary:

In collaboration with Arup and Humphrey & Associates, Texas AirSystems was able to bring the Kimbell Art Museum up to code and assist in preserving millions of dollars' worth of ancient art pieces by applying high-quality and technology-forward products and systems to existing infrastructure.

Front-end monitoring for the applied equipment means that the museum's engineers have advanced control over each part of the system, allowing for easy and exact adjustments, while multiple chillers, pumps, and boilers ensure the safety of the art in the case of an unprecedented equipment failure.