HazLoc Vortex A/C Offers High Reliability at Low Costs

Based out of Austin, TX, Applied Rigaku Technologies (ART) is a division of the global Rigaku Corporation. Rigaku's ART division designs, manufactures, and distributes energy dispersive X-ray fluorescence (XRF) spectrometers globally. XRF spectrometers are used to determine the elemental composition of materials in a wide variety of applications. These products are used across many different markets including petroleum, chemical, agriculture, food, and metals.

The Challenge

Applied Rigaku Technologies faced the challenge of effectively and efficiently cooling their NEX OL Process Elemental Analyzer while meeting their customers' price expectations. When exploring potential cooling options, the team at ART found that most air conditioning solutions were cost prohibitive. They needed a cooling solution that not only provided the necessary cooling capacity, but also adhered to the specific location classification requirements of their customers. Finding a solution that met these criteria and fit within their pricing requirements was no easy task.

The Solution

The team at ART worked with their distributor, ISC Sales, to explore their options. After evaluating the necessary criteria and pricing requirements, ISC Sales suggested the Vortec HazLoc Vortex A/C enclosure coolers, available with cooling capacities ranging from 900 to 5,000 BTU/hour. For their NEX OL Process Elemental Analyzer, the Rigaku team selected the 2500 BTU/hr HazLoc Vortex A/C. The HazLoc Vortex A/C is UL Classified for Class I Div 2, Groups A,B,C and D, Class II Div 2, Groups F & G and Class III, making it the perfect solution for the application.







The Results

After receiving and installing the HazLoc Vortex A/C, ART was extremely satisfied with the reliability and quality of the product. "The Vortex A/C line gives us a good balance of reliability, cost, and cooling capacities that we need for specific projects," states President and CEO of Applied Rigaku Technologies, Robert Bartek. With the robust design and no moving parts, Vortex A/C units require no maintenance, making it a reliable, hassle-free solution. Bartek went on to state that when looking at the rate of "BTU per dollar spent" the Vortex A/C is a much less expensive option than other alternatives.

How the HazLoc Vortex A/C Works

The HazLoc Vortex A/C uses compressed air and vortex tube technology to create clean, dry, low-pressure cold air to cool an electronic enclosure. The HazLoc Vortex A/C utilizes a built-in non-adjustable mechanical thermostat to monitor the temperature inside an enclosure. The thermostat regulates an air valve to the vortex cooler to keep the enclosure's temperature between 80 and 90°F (27 to 32°C). The cold air pressurizes the enclosure slightly to keep any contaminants or humidity out of the enclosure. All models can be mounted on the top or side of an enclosure and install in a matter of minutes. All Vortex A/C models are available in cooling capacities from 900 to 5000 btuh (263 to 1465 watts). The HazLoc Vortex A/C is UL Classified for Class I Div 2, Groups A,B,C and D, Class II Div 2, Groups F & G and Class III.





