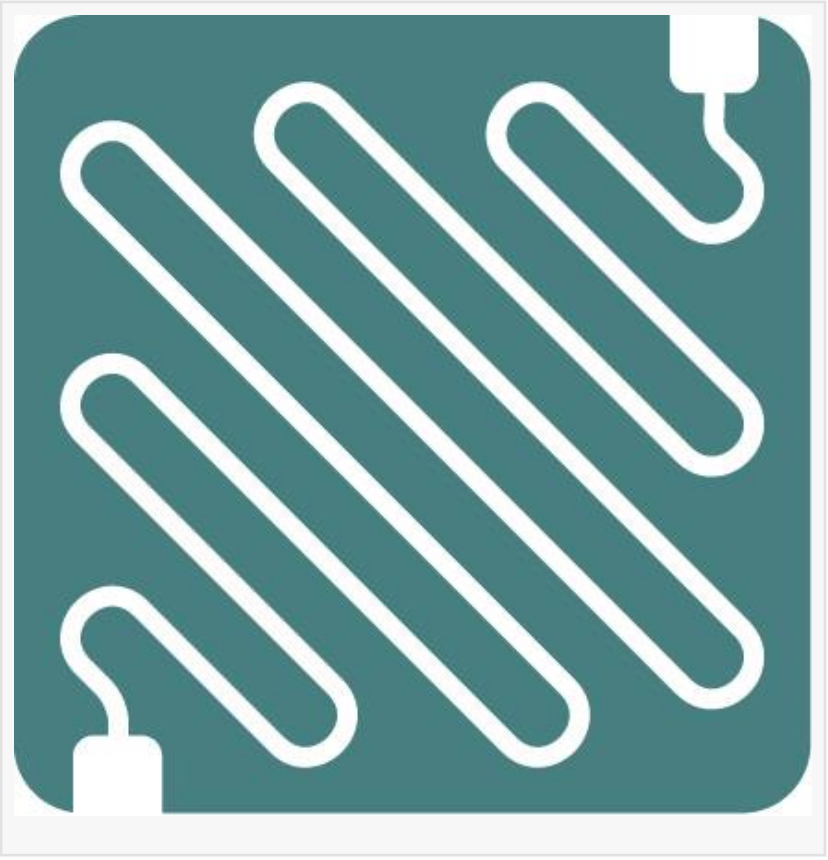
Ohmcraft High Voltage Resistors Enable Explosive Trace Detection in Airport Security Screenings

ROCHESTER, NY, UNITED STATES, September 28, 2017 /EINPresswire.com/ -- Modern-day air travel involves advanced security screenings that have become commonplace for the nearly 740 million passengers subject to them each year. Part of these screenings can involve the random use of explosive trace detection (ETD) equipment, which the Transportation Safety Administration (TSA) relies on to test passengers' hands and/or luggage for the presence of explosive residue.



ETD technology utilizes ion-mobility spectrometry (IMS) to separate and analyze molecules based on the speed in which they move, identifying potential explosives. The ionization chamber and drift tube—both critical components of IMS—utilize high voltage resistors from Ohmcraft to ensure the accuracy and reliability of the explosives detection.

Ohmcraft, a global leader in thick-film, high voltage, high precision resistor design and manufacturing, has worked closely with manufacturers of ETD equipment to develop custom resistors to meet their needs. The Ohmcraft high voltage resistors included in the IMS technology are rated at 20kV.

"The stability and reliability of Ohmcraft's precision resistors are critical to providing the extremely uniform and stable electrical field required in IMS applications," said Eric Van Wormer, Vice President of the Ohmcraft division of Micropen Technologies. "If the resistor inside the IMS were to shift or fail, the ETD equipment would be completely incapable of identifying the molecules—explosive or otherwise."

About Ohmcraft
Ohmcraft's thick-film, surface mount resistors are engineered to meet application specific needs. Our proprietary Micropen printing technology is the foundation for Ohmcraft's family of resistor products. Ohmcraft precision leaded resistors are manufactured with our patented Micropen technology to create a unique serpentine design that withstands voltages up to 100kV and provides an unmatched level of performance and stability. For more information, visit Ohmcraft.com.

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