Floating roof tanks are commonly used to store large quantities of petroleum products. The contents held within floating roof tanks is precisely the reason why protecting them from a threat of fire is essential. There are various causes of fires in floating roof tanks for fuel storage. Many fires have been reported due to lightning strikes where escaped vapors ignite. In addition to environmental factors, fires from overfill and leakage from inlet and outlet tank piping are also common. Maintenance on a site, such as welding, cutting, and soldering can cause a fire condition as well. Installing an early detection system with Protectowire Linear Heat Detection on both the inside and outside of tanks can minimize a potential fire incident caused by any of these conditions.

In a typical special hazard application, such as a floating roof tank, certain criteria must be met for the installation. Protectowire control equipment with intrinsic safety barrier options and appropriately rated components in conjunction with the proper Protectowire control drawing for that equipment is crucial for to maintain product listings. In floating roof tanks, the PHSC-XCR or CTI-X series detector is recommended as the fluoropolymer outer jacket has excellent resistance to the environmental factors typically found in this application (UV, chemicals, fluids, etc.). The detector is typically supported using a stainless-steel L-bracket (RMC-3) & stainless-steel JD-1 mounting clip so it can be positioned just above the rim-seal and around the perimeter of the floating roof.

When installing the detector on an existing tank and drilling or hot work is not permitted, we recommend our BC-2 and the JD-1 mounting clip. It is important to note that when protecting an internal floating roof tank, accessibility to the installed Protectowire is always required for testing and inspection. If accessibility is not an option, the floating roof tank can be protected as a fixed roof tank. Whether it be an internal or external configuration, installation for tanks is straightforward and cost-effective.

Protectowire Linear Heat Detection is a simple and practical way to minimize loss due to a fire caused by various risks in special hazard applications such as floating roof tanks. Because every floating roof tank application has unique requirements, the most effective combination of Protectowire products for the installation may vary. Please consult our factory to find the right Protectowire products to meet the needs of any field condition.

Questions?
If you have further questions please visit protectowire.com or call 781-826-3878.