

## WHY ARE LIQUID TIGHT ELECTRICAL ENTRIES SO IMPORTANT?

How can electrical entries undermine a leak-tight containment system?

We know that it's important to keep liquid out of containment systems; if water can get into containment systems, then fuel can leak out. Depending on local regulations this can result in failed compliance tests, but regardless of location a fuel leak can result in expensive clean-up costs. A large marketer can spend millions of dollars a year resolving problems caused by liquid in containment spaces.

It seems contradictory then for station owners to pay close attention to fuel system containment without paying the same attention to electrical and data containment. Why would anyone go through the trouble of achieving liquid-tight entries using the UPP™ electrofusion welding process, only to undermine it with their electrical entries?



The photo above shows a perfectly installed UPP™ system which will provide zero leak paths for the life of the site. Beside it an electrical duct has been roughly installed with an unknown sealant. This duct could potentially develop a leak, which would undermine the protection offered by the overall leak containment system.

### TOTAL COST OF OWNERSHIP

Aside from the costs of decontamination, should liquid enter the containment sumps or fuel leak into the ground, poorly installed electrical containment can incur a host of other expenses. Poorly designed sites often utilize too many transition chambers, which can lead to considerable cost

implications for the site owner/operator. In addition, in-efficient duct sizing and routing can cause installation difficulties and unnecessary costs due to congestion of underground services.

Non-vapor-tight sealing of the duct internals can also create a serious health and safety hazard, as it can allow vapor to track back to the electrical cabinet in the kiosk.

### SYSTEM LIFE

When it comes to electrical and data wiring, it is important to provide a containment environment that can prevent these cables and wires from having a short field life. When the environment around cables is not maintained it can significantly impact the life of the wires; possibly causing them to become brittle and fail. Failed wires are costly to replace and cause further problems by disrupting whatever device is connected to that cable. By bringing cable and wiring containment up to the same containment integrity as petrol piping, it is possible to minimize the total cost of ownership for a site and improve the lifetime of the wiring systems.



### CABLE-TIGHT™ WIRE MANAGEMENT SYSTEM

The images above show the installation of the UPP™ brand Cable-Tight™ Wire Management System from Franklin Fueling Systems. This system provides a true end-to-end solution for electrical, sensor, and data wiring containment. Franklin has applied all the benefits of the field-proven electrofusion welded pipework system to this crucial part of the forecourt installation to ensure a fully liquid- and vapor-tight underground system containment. The offering includes a system for 32mm conduit, 75mm conduit and 110mm ducting, direct bury, and rigid conduit applications.

## ALLAN BUSCH (Product Manager, Global Pipe and Containment Systems)

In my 12 years with Franklin I have held multiple roles within the company. In my current role as Global Pipe and Containment Product Manager, I've focused on supporting and growing the UPP™ branded products for EN markets in every corner of the world. What I enjoy most about my job is meeting new people and educating them on why using our products helps them attain the lowest total cost of ownership for their site.



### Do you have a question for a Product Manager?

If you have a question for one of our product managers, please submit your question to [info@franklinfueling.com](mailto:info@franklinfueling.com).