Safe and Easy Overfill Prevention





The bottom drop tube threads onto the OPV.

A Shell Petrol filling station in Huddersfield, West Yorkshire, UK was scheduled for refurbishment in 2015. Find out how the Defender Series™ OPVs provide safe, fast and accurate installation and testing.

CHALLENGE

As part of ongoing network investment, a complete refurbishment of this site was scheduled in 2015. Franklin Fueling was asked how to improve Health, Safety, Security and the Environment (HSSE) performance in and around access chambers. Franklin recommended the Defender Series™ overfill prevention valve (OPV) as a critical piece of equipment to meet these goals.

SOLUTION

The Defender Series™ OPV prevents the overfill of an underground storage tank during a gravity-fed product delivery. A revolutionary magnetically-coupled actuator system provides positive shutoff with no penetrations in the valve, making it both vapor and leak tight. The Defender Series™ OPV avoids the risk of spills due to overfilling an underground storage tank.

A remote testing tool allows fast visual inspection to be conducted by a single person in minutes, without the need to enter the access chamber or remove the OPV; unlike other legacy equipment.

RESULTS

An error proof roll-crimp and thread installation method helped achieve a perfectly in-line installation, while a double O-ring top adapter was used to attach the drop tube without any drilling, riveting, epoxy or flaring tools. This made installation easy, safe and approximately 60% faster. The Global Team at Shell recognized the Defender Series™ OPV as a major HSSE improvement. Following the successful trial the Defender Series™ OPV was added to Shell's Global Design Standards.

This OPV, combined with the testing tool, will enable OPV testing without the need for a second engineer.

Kevin Airey, Regional Operations Manager, Johnson Controls

PRODUCTS

Defender Series™ Overfill Prevention Valve

