LW Series Dual-Agent Foam Chamber

The Dual-Agent Foam Chamber from WILLIAMS FIRE & HAZARD CONTROL is a direct response to a challenge discovered in the field mitigating fires in internal floating roof tanks. It is one tool that addresses both threats occurring during an internal floating roof tank fire — the surface fire (fuel-in-depth), and the potential vapor air explosion due to residual flammable vapor above the pan.

Once alight, the vapor trapped in the space inside and above the floating pan is challenging to extinguish and to "evacuate" from outside the tank. The surface fire inside the tank can be controlled by foam solution discharged from conventional foam chambers but the flammable vapor trapped inside the tank still poses a huge fire or even explosion risk.

LW series dual-agent chambers combine both foam and dry-chemical applications to the internal fire. First a foam application will extinguish and secure the surface fire, then a secondary dry-chemical (such as WILLIAMS FIRE & HAZARD CONTROLS' PKW) discharge dispels any residual flammable vapor above the foam blanket — rendering the internal space inert thus allowing safe follow-up risk mitigation and recovery operations.

These dual agent chambers are modified Williams LW series foam chambers, each fitted with additional piping and discharge tips for dry chemical. Each unit releases about 20 lbs/sec (9.1 Kg/sec) of dry-chemical which is multiplied by the number of units fixed around the tank. Used around the perimeter of a storage tank at a spacing of 80 feet (24.4 m), the dual agent chamber works in tandem with this network of adjacent foam chambers to apply a powerful dry-chemical attack that eliminates residual flammable vapors in the space above the foam blanket. This network of dual agent chambers can be powered by WILLIAMS FIRE & HAZARD CONTROLS' Gorilla 500 lb (227 Kg) dry-chemical system which can be located outside the tank's retaining area for safety.

LW series dual-agent foam chambers are a simple retrofit. It is compatible with the mounting dimensions and hardware for WILLIAMS FIRE & HAZARD CONTROLS' LW Series foam chambers.

Ordering Information

Part Number	Model Number	Deflector Type
12059	LW-9 Dual-agent foam chamber	Split
12060	LW-17 Dual-agent foam chamber	Split
12061	LW-30 Dual-agent foam chamber	Split
12062	LW-55 Dual-agent foam chamber	Split

Notes:

Foam chamber size, number of foam chambers required, and orifice size are project dependent. When ordering, please provide following information:

- Product in storage tank
- Tank configuration
- Tank diameter