



# CHOOSING THE RIGHT FIRE SUPPRESSION SYSTEM

# THERE IS NO "ONE-SIZE-FITS-ALL" SOLUTION

There are many factors that determine the proper fire suppression system for a piece of mobile equipment, including the size, operation and unique hazards of the industry. Every AFEX fire suppression system is purpose-built to withstand the abuse of your work environment. There are three main types of fire suppression systems:

- Dry chemical systems
- Liquid agent systems
- Dual agent systems (dry and liquid)

So, how do you choose the system that is best for your machine? This document will walk you through the features of each type of fire suppression system and introduce a Fire Risk Assessment to aid in your selection.

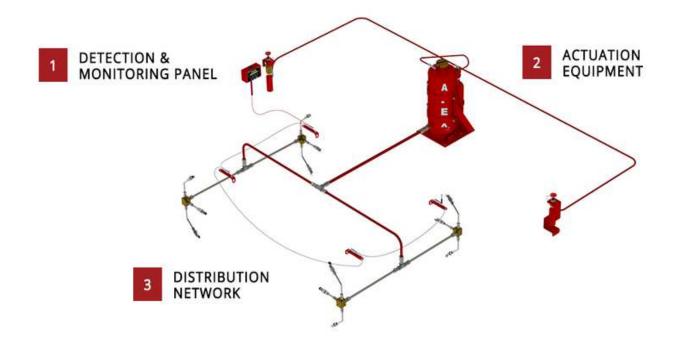




#### **DRY CHEMICAL SYSTEMS**

Dry chemical fire suppression systems provide the fastest fire knockdown and greatest total coverage, making them the industry standard for heavy equipment applications. Dry chemical systems provide fire protection against Class A (debris), Class B (fuel), and Class C (electrical) fires. This system is effective by flooding a volume of space, such as a vehicle engine compartment, with a fire fighting agent to suffocate the flame.

- Total-flooding, especially in well-enclosed areas
- Unparalleled fire knockdown speed
- Spring-loaded hinges keep nozzles clear of debris with minimal maintenance
- Manual and automatic system discharge
- Small footprint
- Available in 20, 30, 60, 125 lb. sizes

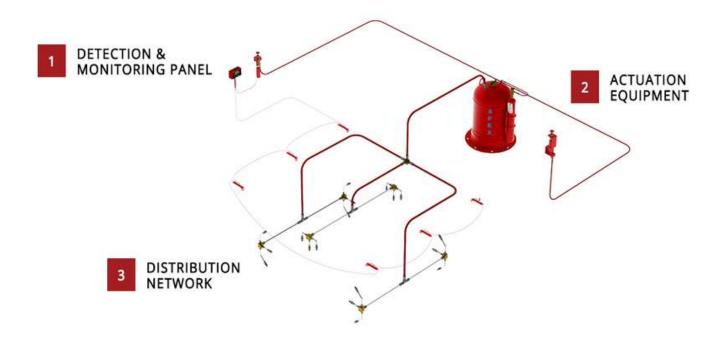




#### **LIQUID AGENT SYSTEMS**

Liquid chemical fire suppression systems provide exceptional cooling abilities to suppress Class A (debris) and Class B (fuel) fires. The liquid agent works by cooling hot surfaces, separating fuel hydrocarbon molecules to prevent fire reignition, and form a layer of foam to suffocate flames. Liquid systems are especially designed to protect high-risk vehicle components, such as turbochargers, exhaust components, and Tier 4 aftertreatment components.

- Effective at cooling hot surfaces in open areas
- Fight against fire reignition
- Penetrates debris and suppresses pooled fuel fires
- Manual and automatic system discharge
- Available in 5, 15, 30 gal. sizes

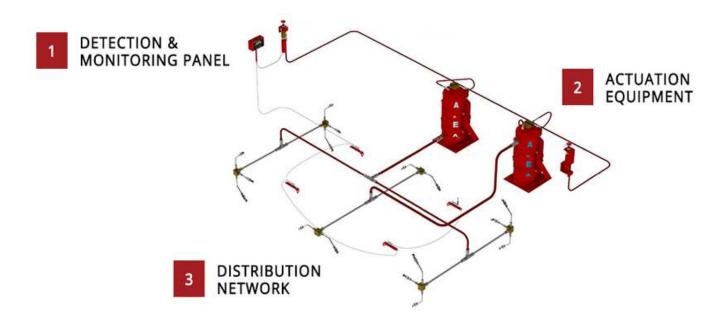


#### **DUAL AGENT SYSTEMS**

As technology advances, equipment manufacturers are designing machines that are more powerful and productive while also reducing emissions. The downside to these advancements is a growing risk of more severe fires due to increased heat throughout the engine compartment and hydraulic systems.

Dual agent systems join the best features of our dry and liquid chemical vehicle fire suppression systems for the ultimate protection against fire. Our dry chemical system provides fast fire knockdown and total flooding of enclosed compartments, while the liquid chemical system targets hot surfaces for fast cooling and protection against fire reignition. Dual agent systems are so effective that the National Fire Protection Agency (NFPA) requires them for large hydraulic shovels.

- Total-flooding, especially in well-enclosed areas
- Unparalleled fire knockdown speed
- Effective at cooling hot surfaces in open areas
- Fight against fire reignition
- Small footprint
- More economical than liquid chemical systems alone
- Penetrates debris and suppresses pooled fuel fires
- Manual and automatic system discharge





### SYSTEM COMPARISON

HAZARD	DRY CHEMICAL	LIQUID AGENT	DUAL AGENT
Debris	<b>√</b>	<b>√</b> √	<b>//</b>
Flammable Liquids	<b>V</b>	$\checkmark$	<b>//</b>
Hot Surfaces	$\checkmark$	<b>V</b>	<b>V</b>
Electrical Fires	$\checkmark$	×	<b>V</b>
Enclosed Areas	<b>V</b>	$\checkmark$	<b>V</b>
Open Areas	✓	<b>V</b>	<b>V</b>

## FIRE RISK ASSESSMENT

To maximize safety and productivity, we perform an assessment that analyzes the unique fire risks of your heavy equipment; the safety concerns of your operators; and the potential financial impact of a fire. Our Fire Risk Assessments allow us to work together to design and implement a custom fire suppression system to address the specific risks to your operations. These assessments benefit distributors, manufacturers and vehicle owners alike.

# **APPROVALS & CERTIFICATIONS**

AFEX fire suppression systems have been tested by:

- Factory Mutual FM HDME (Heavy Duty Mobile Equipment)
- Australian Standards AS 5062 (Fire protection for mobile and transportable equipment)
- European CE standard
- ISO 9001 certifies standardization and quality assurance