



# APPLICATION PROFILE

## PROTECTING FLAMMABLE LIQUIDS WITH FK-5-1-12

### INDUSTRIES SERVED

- Automobile Manufacturing
- Industrial Plants
- Process Plants
- Refineries/Chemical Plants

### INTRODUCTION

Flammable liquid storage facilities are found in many industrial and chemical plants as well as production facilities that use flammable liquids in various processes. These facilities store the flammable liquids used in processes such as painting, lubrication, fuel, and oil in special, segregated areas due to the careful handling storage required for volatile substances.

### THE PROBLEM: RAPID FIRE GROWTH

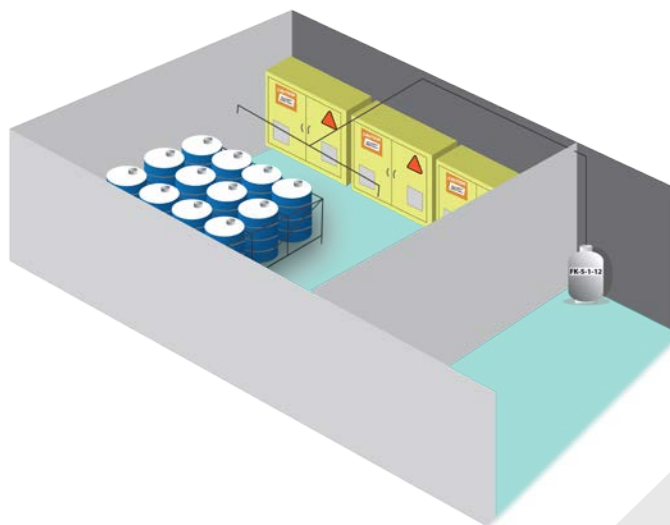
Because of their critical nature, the potential fire problem in a flammable liquid storage facility gets special attention. Sprinkler systems provide good back-up protection, but if a fire should occur, it must be quickly suppressed before there is a major interruption in production or severe damage to the facility. The quantity of flammable liquid alone can contribute to fires that can destroy an entire facility. Flammable liquid fires grow very rapidly because it is the fuel vapor that actually burns, creating a tremendous amount of heat. This can result in the instantaneous ignition of other flammable liquids stored in the hazard.

### THE SOLUTION: FIKE FK-5-1-12

FK-5-1-12 provides for minimal clean-up and rapid suppression, and it is safe for employees working in the protected space. Because FK-5-1-12 discharges as a gas, it extinguishes a fire without spreading the liquid. It also does not require provision for drainage and containment, as is the case with water-based suppression systems. In a flammable liquid fire it is important to detect and suppress the fire quickly which makes FK-5-1-12, along with its 10 second discharge time, an optimal choice.

In a fire suppression system, FK-5-1-12 is stored as a liquid in steel storage containers. When activated by detectors and a control panel, the agent will flow through a pipe network and will immediately change from a liquid to a vapor as it is released through the discharge nozzle.

To provide proper fire protection for a flammable liquid storage facility, it is imperative that a well-designed, fast responding, and trouble free automatic fire detection system be installed. In many cases vapor or flame detection will be used. Detection and control systems are carefully designed for each unique protected space, to provide rapid detection and extinguishment in the very earliest phase of a fire event.



*A Fike FK-5-1-12 system protecting flammable liquids stored in an adjacent room.*