

# FIRE SUPPRESSION SYSTEM

# CHEMICAL POWDER FOR INDUSTRIAL HAZARDS

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**ORDINARY COMBUSTIBLES** 



FLAMMABLE LIQUIDS



ELECTRICAL EQUIPMENT

## SYSTEM DESCRIPTION

The purpose of the chemical powder fire suppression system for industrial equipment is to spray the extinguishing agent into the work area as well as the plenum and ventilation duct, if applicable.

When the dry chemical is discharged, the suppressant will act on the fire by separating the fuel from the oxygen in the area. The agent is stored in one or more cylinders. The quantity required is determined by evaluating several parameters associated with the risk that requires protection. This type of system is suitable for a range of risks by means of total immersion, local suppression, or protection of open front paint cabins.

These systems are regulated under NFPA 17.

#### **FIRE SUPPRESSION METHOD**

Dry chemical powder puts out the fire by coating the burning material with a thin layer of dust, thereby separating the fuel from the oxygen in the air. The powder also works to interrupt the chemical reaction of fire, so these extinguishers are extremely effective at putting out the fire.

### **HOW THE SYSTEM WORKS**

Following the detection of excessive heat via mechanical, electric or pneumatic detection devices, or via a manual actuator,the suppression agent will be activated by the system's release mechanism. A release panel will be required when the detection is electric.

The suppressing agent will then be driven from the cylinders to the nozzles through a fixed piping network. Following the activation of the system, an alarm signal will be transmitted to the building.

#### **COMMON APPLICATIONS**

- Industrial paint booth (standard or open front)
- Storage room for flammable liquids or other fuels
- Soaking tank
- Industrial processes

