



# HAZARD CONTROL TECHNOLOGIES, INC.

FIRE, VAPOR, AND CONTAMINATION CONTROL SOLUTIONS

## F-500 Encapsulator Dragon

Hazard Control Technologies' Encapsulator Dragon combines the firefighting power of F-500 Encapsulator Agent with water mist technology for unsurpassed fire control on Class A, B and D fires. Encapsulator Dragon is a water mist delivery system designed to deliver F-500 EA in the most effective way possible to ensure rapid extinguishment. The Encapsulator Dragon system can be a stationary unit or mounted on a portable truck bed or trailer.

### *Technology<sup>2</sup>*

- *Water Mist Technology*
- *F-500 Encapsulator Technology*

Encapsulator Dragon systems are individually customized to meet your specific needs. The size of the device depends on the application. The amount of F-500 EA required for a given hazard and the distance and surface area to be protected are all part of the equation. Whichever model you need, the F-500 Encapsulator Dragon will have the throw distance you need.

Generally, stationary units are tower mounted, up to 20 feet high. Encapsulator Dragons have full motion capability, oscillating 359° back and forth with variable tilt. Directional controls can be programmed or manual. Service baskets and climbing rungs provide accessibility. Most units are fully automated and can be programmed from a color touchscreen HMI in the control panel.



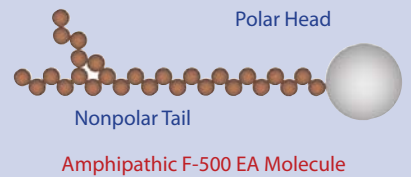
### **Power Plant Applications:**

- Under Turbine Lube Oil
- Transformer Protection
- Cable Trays
- Boiler Fronts
- Overhead Conveyors
- Reclaim Tunnels
- Combined Cycle Engines
- Cooling Towers
- Storage Batteries - Lithium-ion



### How Does F-500 Encapsulator Agent Work?

F-500 EA is an Encapsulator Agent. The F-500 EA molecule is a large amphipathic molecule, meaning its ends act independently. One end is a hydrophylic polar head which attaches to water and the other end is a hydrophobic nonpolar tail, that is repelled by water and seeks hydrocarbon molecules. When you mix F-500 EA with water, the F-500 EA immediately reduces the surface tension of the water creating smaller droplets that are more capable of penetrating solid fuels with more surface area to absorb heat energy. Then, the polar heads attach to the water droplets. These F-500 EA molecules prevent the water droplets from instantly evaporating as steam and allow them to absorb the heat energy through the tails of the F-500 EA molecules into the droplets. The nonpolar tails protrude from the droplets and attach to hydrocarbon liquid and vapor molecules, completely enveloping them and forming "micelles" or cocoons. The protective shells around the hydrocarbon molecules render the hydrocarbons nonflammable and nonignitable.



## HAZARD CONTROL TECHNOLOGIES, INC.

150 Walter Way  
Fayetteville, GA 30214

TEL: 770.719.5112  
FAX: 770.719.5117

www.hct-world.com  
info@hct-world.com