Engineered Corrosion Solutions
Complete Corrosion Control.

ECS Topical Outline for SFPE (August 2018)

Evolution of the Corrosion Requirements from Industry Governing Bodies

- NFPA 13 – wet system vent requirements for corrosion mitigation
- UFC/GSA – no galvanized pipe, nitrogen generators on all dry and preaction
- New C Factor benefit for using nitrogen generators on dry and preaction systems in DoD facilities (UFC update March 2018)
- FM Global – new corrosion data sheet 2-1, strong endorsement of nitrogen for pressure maintenance on all dry and preaction systems, nitrogen generators at FM training centers

Benefits of Using Automatic Air Vents on Wet Pipe Systems

- Why automatic venting of the trapped air works so well to prevent corrosion
- Effective placement of automatic venting devices on the sprinkler piping
- Differences in commercially available wet pipe vent designs

Nitrogen Inerting for Dry and Preaction Fire Sprinkler Systems

- Evolution of nitrogen generator design for dry and preaction fire sprinkler systems
- Why "Fill and Purge" breathing is so important to controlling oxygen corrosion
- Why dry pipe vent design and vent location are critical to controlling corrosion
- Wall mounted nitrogen generators – plug and play simplicity
- **Case Histories** – 10 years of successful installations

Nitrogen Inerting for Wet Pipe Fire Sprinkler Systems

- Fill and Purge Breathing to completely remove oxygen from the piping
- Trend toward using nitrogen generators on-site as "plant" nitrogen for wet pipe nitrogen inerting on larger properties
- 1.6MM sq ft mall, Big Box Retailer, Mission Critical Manufacturing, Large Warehouse
- **Case Histories** – 9 years of successful installations

Using FM Approved Nitrogen Generators as Replacement for Dry Air Pac™ in Cold Storage

- Nitrogen generators produce very dry gas (-70°F dewpoint)
- Nitrogen generators easier to install and commission, less maintenance, lower purchase cost, lower operating costs, also provide corrosion control
- **Case Histories** – 2 years of successful installation