

## Engineered Corrosion Solutions

### Pre-Engineered Nitrogen Generation System for Dry/Preaction Fire Sprinkler Systems

# N<sub>2</sub>

*This changes everything*

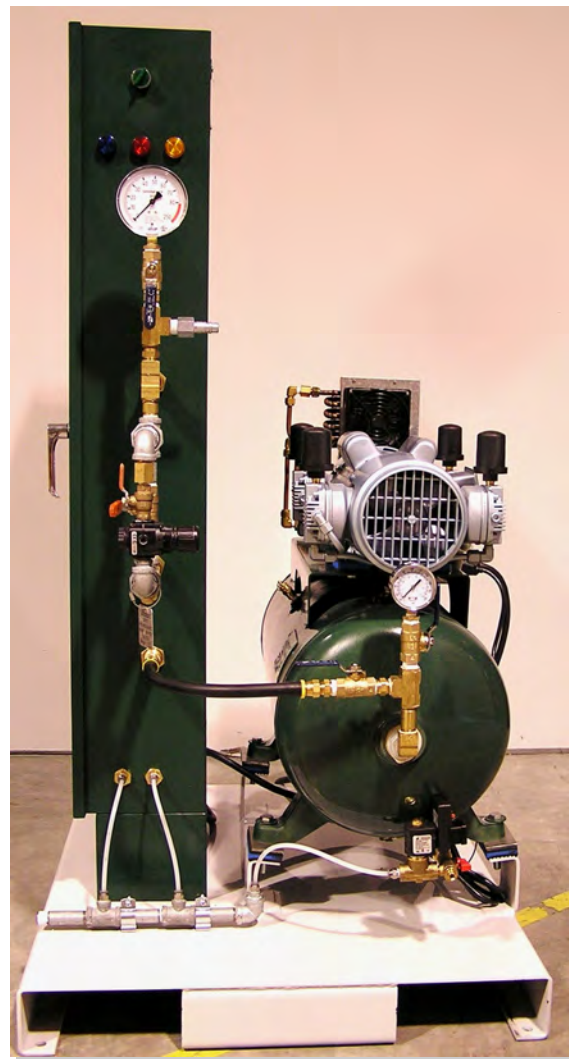
The **Engineered Corrosion Solutions Pre-Engineered Nitrogen Generation System (PENGS)** is a pre-engineered nitrogen generation system that is designed to purge oxygen from the pressure maintenance gas in dry and preaction fire sprinkler systems with capacities up to 600 gallons.

#### BENEFITS

- Provides quiet, reliable source of nitrogen pressure maintenance for dry and preaction fire sprinkler systems of 600 gallons or less capacity
- Completely controls oxygen corrosion in both black steel and galvanized steel piping systems
- Simple installation with no fire sprinkler system add-ons required – built in air maintenance device – plumbs to a mechanical tee on the system riser
- Runs on 110v AC power which should be readily available in most riser rooms
- Simple to maintain with very low maintenance costs – annual filter cartridge change out
- On existing systems, original compressor and air delivery lines can be closed off and left in place as redundant back up air supply

#### SPECIFICATIONS

- Dimensions: 36" (L) X 30" (W) X 58" (H)
- Weight: 450 lbs
- Power Requirement: 110V AC on dedicated 20 amp circuit
- Tie-ins:  
(air/nitrogen supply): ½" FNPT  
(condensate drain): ¼" FNPT



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 **fpsCMI**  
Fire Protection Systems  
Corrosion Management, Inc.  
"The Engineered Solution"

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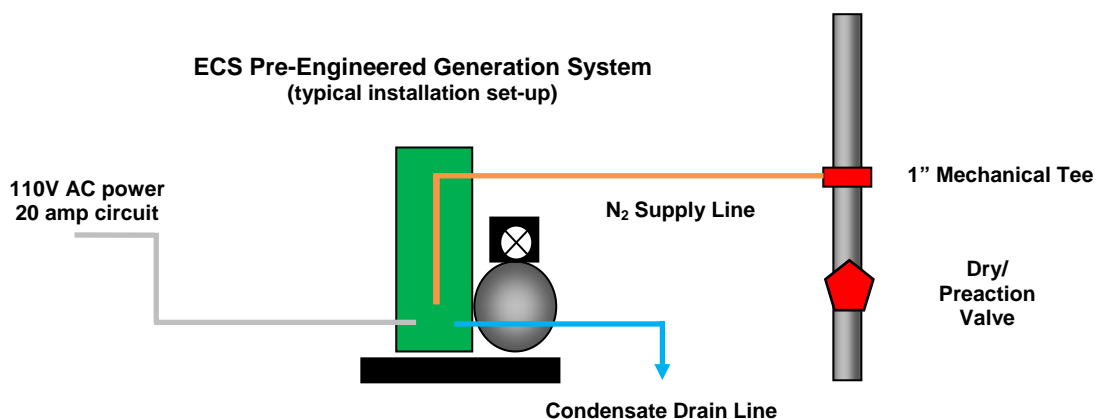
## Pre-Engineered Nitrogen Generation Systems

### FILL & PURGE

The Engineered Corrosion Solutions **Pre-Engineered Nitrogen Generation System** (PENGS) provides automatic “fill and purge” breathing to virtually remove all oxygen from the fire sprinkler system piping network and over time the PENGS will also act to remove trapped moisture from the system. After a period of time of up to two weeks, the fire sprinkler system piping will be completely inerted with nitrogen gas at which point oxygen corrosion is completely controlled. Thereafter, the PENGS stops the “fill and purge” process but continues to automatically provide nitrogen gas that is sufficient for pressure maintenance of the fire sprinkler system.

### FEATURES

- Membrane nitrogen generator produces a continuous stream of up to 44 scfh of 98%+ N<sub>2</sub> gas
- On-board oil-less compressor with 20 gallon receiver tank
- After-cooler to capture moisture from the compressor air supply
- Automatic condensate drain to provide blow down of collected condensate
- Built in air maintenance device with on-board pressure regulator (preset at factory)
- Built in ECS Protector Automatic AirVent to facilitate “fill and purge” breathing process
- Maximum single zone capacity 600 gallons
- Meets the NFPA 13 30-minute fill requirement for dry and preaction fire sprinkler systems



### ABOUT fpsCMI

Fire Protection Systems Corrosion Management, Inc. (fpsCMI) is the preeminent provider of corrosion control solutions for water based fire sprinkler systems. fpsCMI delivers world class technology for corrosion problems that are perceived to be the most difficult challenges and that bear the most significant cost risks associated with fire protection system pipe failures.

fpsCMI is also the recognized leader in the design and application of nitrogen generator systems for corrosion control for the fire protection industry. fpsCMI nitrogen generators have become the “standard” for the fire protection industry.

**An Engineered Corrosion Solutions/Holtec Gas Systems Joint Venture**



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