

COMBUSTION SYSTEMS CO INC

Features:

- EPA Compliant for TRI Gases
- NFPA Area Classification
- Data Logger for EPA Compliance
- Active Thermal Combustion Control

Fugitive Emissions Thermal Oxidizer For Destruction Of Fugitive Emissions & EPA Toxic Release Inventories Gases (TRI)

Emission Rx™ Thermal Oxidizer



Thermal Oxidizer

Applications:

- Natural Gas Processing Plants
- Analyzer Measurement Shelters
- Tank Farm
- Marine Gas Offloading
- Analyzer Vent Line Manifolds



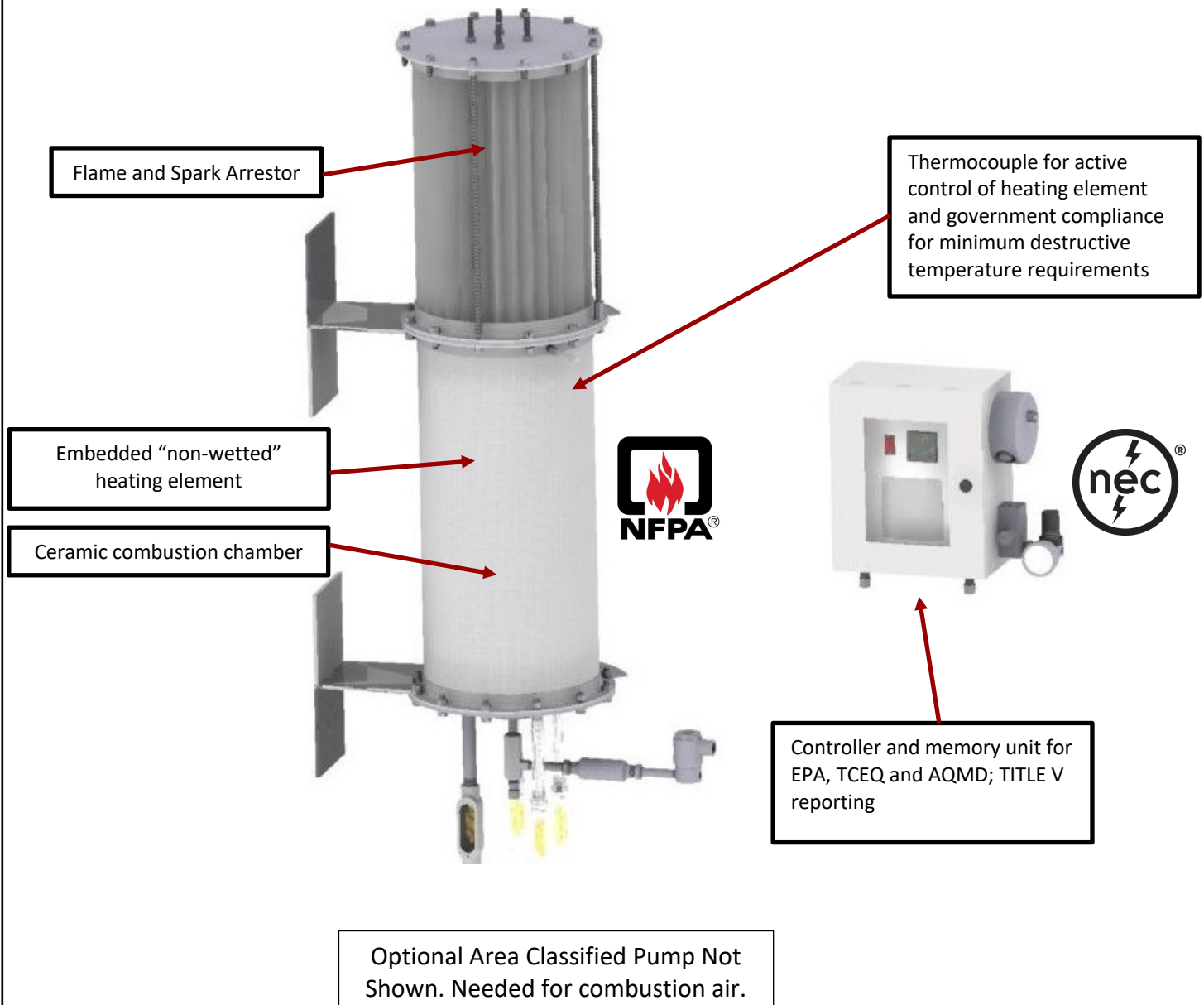
Controller with optional Z-Purge



Built to NEC and NFPA Standards for Thermal Oxidizers

Methodology

Patent pending combustion chamber utilizing the Venturi effect along with a long life heater element that is not exposed to the combustion chamber to extend the life of the heating element (MTBF est. 3.3 yrs.), while being able to maintaining the minimum combustion temperature requirement of 1400°F [760°C] for the destruction of Fugitive Emissions & TRI gases at a 99% destructive efficiency. The Emission Rx™ Thermal Oxidizer will report the combustion temperature to comply with the regulatory requirements for a minimum combustion temperature to maintain at the 99% combustion efficiency needed to be in compliance. A data logger is used for compliance reporting compliance.



SPECIFICATIONS

THERMODYNAMIC LOAD

- Base rated for 0 – 15,000 BTU/hr
- Optional load ranges up to 100,000 BTU/hr or more

FLOW RATE

- Base rated for inert gases: 0 – 332 LPM [0 – 56 CFH]
- Base rating flow rate for hydrocarbons is based on BTU/hr thermodynamic load – contact for your specific calculation

BACK PRESSURE

- <3.0 in.W.C @ 1.9 LPM [4CFH]
- <6.0 in.W.C @ full capacity flow rate from source

WETTED MATERIALS

- Stainless Steel
- Refractory Ceramic

CONNECTION

- Gas Inlet: ¾”(in.) NPT

AREA CLASSIFICATION

- Thermal Oxidizer has NFPA 86 rating
- Designed for: Class 1, Division 2, Groups B, C and D, Built to NEC and NFPA Standards for Thermal Oxidizers
- Electrical Panel Z-Purged option for Class 1, Division 2, Groups B, C and D (NEC classification without Z-Purge)
- Exterior Surface temperature rating T4 135°C [275°F]
- Optional CSA Site Approval For Electrical Panel: Class 1, Division 2, Groups B, C and D (Z-Purge Option Needed)
- Optional Pump has CSA, FM for Class 1, Division 2, Groups B, C and D

UTILITY REQUIREMENTS

- POWER: 110Vac @ 15.6Amps for Thermal Oxidizer, 110Vac @ 4.5Amps for optional Pump
- AIR: Instrument Air for optional Z-Purge Panel 20 psig (1.4 Bar) minimum, water and oil-free, -40°F (-40°C) dew point, particles <5µ, ISA grade and hydrocarbon free

CONTROLLER

- LCD Display Interface
- Data Logger; data collection for EPA, TECQ and AQMD; TITLE V Reporting
- Digital outputs and optional web portal (cloud) data collection

TEMPERATURE

- -10 TO +60°C (Controller)

OUTPUTS

- RS-485 Modbus
- LCD Display

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