

# **ETCO Series**

## **Electric Catalytic Oxidizers**



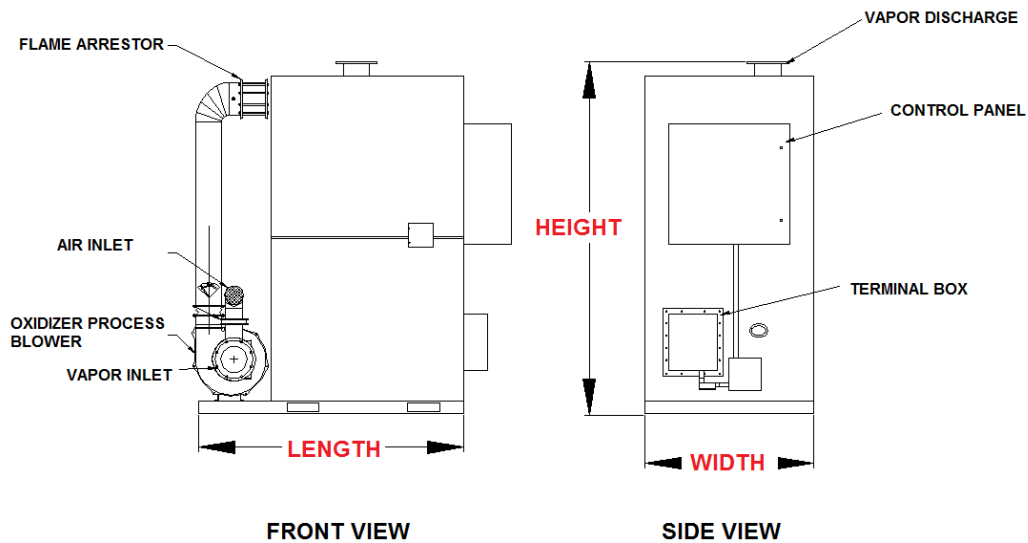
### **Features & Specifications**

- 1350-1600°F thermal operating temperature range with a maximum hydrocarbon throughput of 40% LEL
- All Welded Steel reactor shell construction, ASTM A-36 7 gage sheet with epoxy finish
- 6" Thick 2200°F mineral fiber board insulation
- 304 Stainless steel zero incidence exhaust stack with sampling port
- Completely assembled and tested gas train with: main shutoff, safety, and blocking valves, main gas regulator, high/low safety gas pressure switches, gas control valve with electrically modulated control actuator, leak test cocks & manual ball valves in accordance with NFPA 86, indicating pressure gages with shutoff cocks for incoming, regulated, pilot, & burner gas pressure
- Gas train meets NFPA 79, 86, & 54 & is suitable for FM approval
- Natural gas or propane direct fired secondary air burner
- Exothermic burner control & temperature alarms
- Welded steel skid, enamel finish & fork pockets
- Flame arrestor on vapor inlet with spiral crimped ss ribbon matrix
- UL 508 listed NEMA 4 main control panel with: inner door mounted displays and switches, main door interlocking electrical disconnect, control power transformer, motor starter, and overload protection for the blower
- Allen Bradley Micro 1000 PLC with single touch visual display with first out alarm indicator
- Flame rod with approved safety programmer with built in purge timer
- Solid state, digital indicating PID temperature controller
- Thermocouple temperature control monitoring burner temperature and exhaust temperature
- Panel mounted and wired on oxidizer skid, all wiring meets NEC for non-classified area
- Optional Noble metal catalysts insert with maximum operating temperature of 1200oF minimum operating temperature 600oF, maximum 25% LEL throughput in catalytic mode

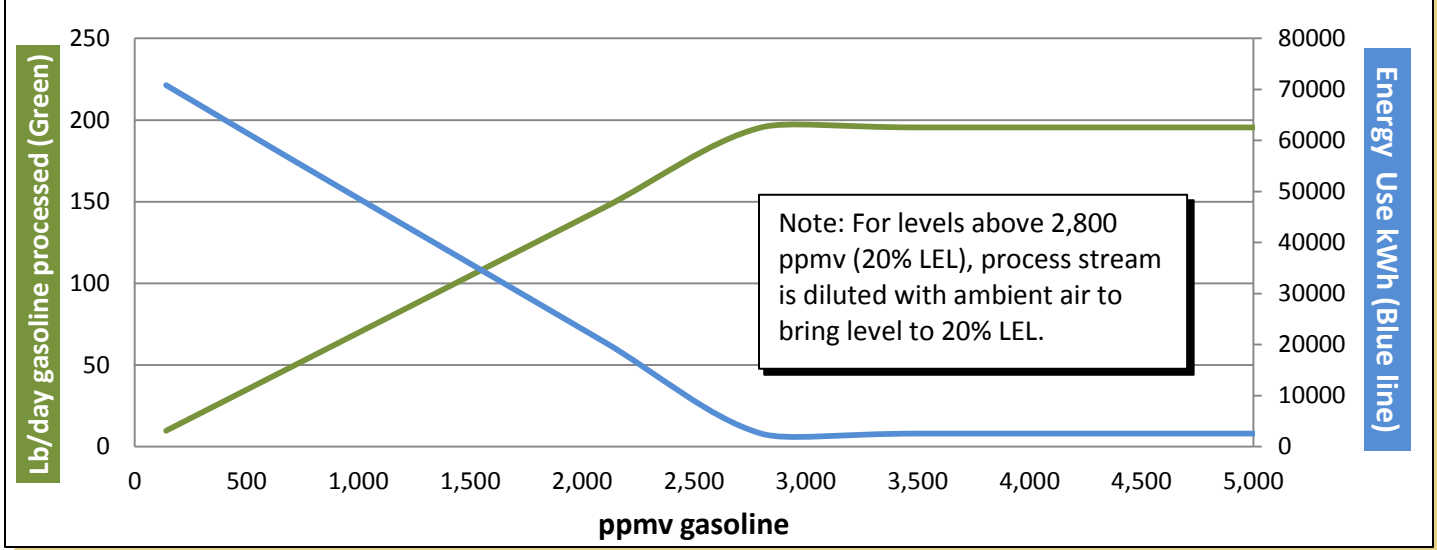
### **Applications**

- Remediation Industry
- Free phase hydrocarbon product recovery systems
- Air stripper off gas treatment
- High concentration dissolved phase hydrocarbon recovery systems
- Bio Venting & Bio-pile systems
- Off gas treatment from dual phase, soil vacuum extraction and soil venting systems

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**Electric Oxidizer Energy Use and Treatment Capabilities per 250 SCFM Flow**



**Note: When mixing multiple streams**

1. Inlet Vapor Stream % LEL = Source 1 % LEL ( % total flow) + Source 2 % LEL ( % total flow) + Source 3 % LEL ( % total flow)
2. If maximum % LEL is exceeded then ambient air must be introduced and the highest LEL stream must be reduced to achieve desired maximum % LEL.



**Options**

- 2-pen (or more) chart recorder for recording, burner and exhaust temperatures
- LEL sensor, to measure inlet vapor %LEL
- 95% or 99% destruction efficiency drop in catalyst, noble precious metal with ss ribbon matrix
- Flow, pressure, level & temperature gages or transmitters
- Air flow meter or transmitter