

Thermal Oxidizers/Afterburner Firecat™



Description

AEREON's Flare Industries' FIRECAT™ Thermal Oxidizers are enclosed flares that incinerate the process or waste stream while maintaining a precise destruction temperature. The control scheme for this type of enclosed flare precisely monitors and controls a blower, assist gas, and combustion chamber temperature. This control system consists of a PLC, UV scanner, thermocouples, pressure switches, and a multitude of other control components depending on the complexity of the system.

The thermal oxidizer is ideal for sensitive areas due to the following benefits: reduced flame visibility, minimal heat and noise, emissions sampling ease, and smokeless combustion.

AEREON's Flare Industries' FIRECAT™ Thermal Oxidizer attains extremely high destruction efficiencies by assuring the required residence time at an exact temperature. Thermal oxidizers may require supplemental assist gas streams depending on whether the process stream can sustain combustion.

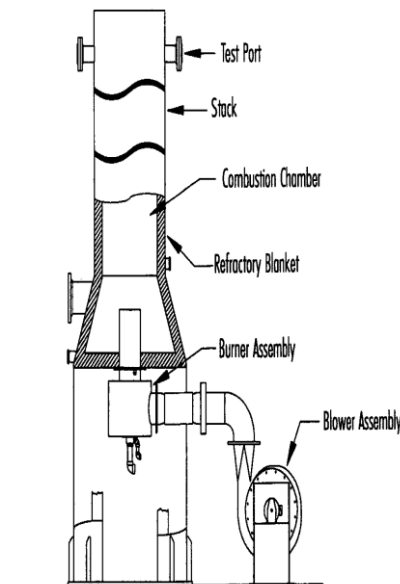
Advantages

- Reduced flame visibility due to enclosed burner shroud
- Minimal noise
- Minimal heat radiation due to ceramic insulation
- Ease of emissions sampling and testing
- Extremely high destruction efficiencies
- Smokeless combustion
- Greater control of combustion temperature
- Reduced stack visibility due to low profile

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Principal Applications

- Refineries
- Chemical plants
- Truck loading terminals
- Gaseous waste from process plants
- Marine loading facilities
- Dehydration units
- Compressor stations



Specifications

Length	15' - 80' (4.5 x 24.2 m)
Diameter	30" - 156" (0.76 — 4 m)
Radiation Level	None (no visible flame)
Noise Level	76 — 85 dBA
Destruction Efficiency	>99%

Design Features

- Flare Industries' high efficiency burner design
- Forced or natural draft designs available
- Fuel efficient pilot especially designed for enclosed flares
- 2300° ceramic fiber blanket used for stack insulation
- < 200° cold face skin temperature eliminating personnel burn hazards
- Temperature monitoring
- UV flame safeguard
- Control schemes using industry standard PLC brands