



Description

AEREON's Certified Ultra-low Emissions Burner (CEB®) technology is a vapor combustor, unlike any other in the market. The CEB® utilizes a proprietary premixed surface combustion technology to burn VOC-laden waste gases with extremely high efficiency.

The primary advantage of the CEB® versus an open or conventional enclosed flare is the exceptionally high combustion efficiency it is able to achieve from the premixing of the waste gas (fuel) and the combustion air. It is the efficiency of the combustion reaction that enables the CEB to achieve VOC destruction efficiencies of up to 99.99%, while generating less than 15 ppmv of NOx and 10 ppmv of CO, both corrected to 3% oxygen.

In addition to its ultra-low emissions, the CEB also has a compact footprint, short stack height and no smoke, soot, or visible flame. Making it the ideal vapor combustor for operations in urban areas or that doesn't want their vapor control device to stand out.

The CEB® is the most important technology you'll never see

Advantages

CREATING A CLEANER PLANET

- DRE up to 99.99%
- NOx ≤ 15 ppmv at 3% O₂
- CO ≤ 10 ppmv at 3% O₂
- No luminous flame
- No odor
- No heat radiation
- No smoke
- Short Stack Height
- Small footprint
- Heat recovery available

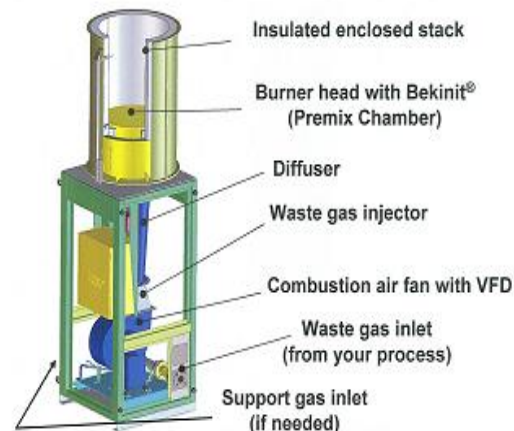
Specifications

Capacity*	898,000 SCFD or 898 MSCFD 25,500 (Nm3/day)
Maximum thermal capacity*	39 MMBTU/hr. (12.0 MWth)
Turndown ratio**	10:1
Footprint and height***	5' 10" x 6' 3" x 24' (178 x 191 x 731 cm)
Approximate weight	8,300 lbs. (3,770 kg)
Waste gas supply pressure	10 – 80" WC (25 – 200 mbar(g))
Fan motor size	40 hp (30 kWe)
Waste gas connection	4" ANSI 150 lbs. RF
Support gas connection	2" ANSI 150 lbs. RF
Ignition System	Spark or pilot ignition
Operating temperature	1,800 to 2,200°F (982 – 1204 °C)
Ground temperature	Ambient during operation

*Capacity is based on natural gas with gross heating value of 1,069 BTU/scf (39.8 MJ/Nm3)

** Turndown ratio can be increased for specific projects with customized units

*** Stack height is based on minimum height that meets EPA's protocol for position of the testing ports



Principal Applications

Onshore upstream and midstream oil and gas

- Associated gas from tank batteries
- Associated gas from three phase separators

Liquid terminal industry

- Marine loading operations
- Tank, railcar or truck loading operations
- Tank degassing operations

Petrochemical and chemical industries

- Process waste gas
- Reactor, dryers and other process vents
- Tank breathing
- Tank loading
- Tank or pipeline degassing

Design Features

Achievable emissions levels at 3% Oxygen*:

- NOx ≤ 15 ppmv; ≤ 0.018 lbs/MMBTU (31.7 Mg/Nm³)
- CO ≤ 10 ppmv; ≤ 0.01 lbs/MMBTU (12.5 Mg/Nm³)
- CxHy ≤ 10 ppmv; ≤ 0.005 lbs/MMBTU (7.06 Mg/Nm³)

Combustion efficiency:

- Up to 99.99% DRE over full operating range.

*Emissions based on reference gas methane.