

MODEL:CH8435

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ENCLOSED  
COMBUSTOR

EPA Certified & Fully Compliant  
Combustor Solutions

## Combustion Chamber

- ◆ 84" Diameter x 35' overall height
- ◆ 4" Thick Ceramic Fiber Stack Insulation
- ◆ Guy wire supported
- ◆ Damper Air Inlet

## Burner Assembly

- ◆ 304 Stainless Steel Cast Burner Assemblies
- ◆ Proprietary Multiple Arm Burner Design with Staged Burner Design
- ◆ 6" Flanged inlet connection
- ◆ 1/2" pressure tap

## Gas Pilot

- ◆ Stainless steel nozzle & body
- ◆ Pilot removeable from outside combustor
- ◆ High voltage Ignition
- ◆ Ionization flame detection

## Standard Controls

- ◆ 3" and 4" Waste gas pneumatic butterfly valves
- ◆ Pilot gas solenoid valve
- ◆ Stack temperature monitoring
- ◆ Arrestor flashback monitoring (*optional item*)

## Burner Management System (BMS)

- ◆ NEMA 4X enclosure
- ◆ LED display with navigation buttons
- ◆ Remote monitoring / Modbus interface
- ◆ Remote start / stop contacts
- ◆ Fully automated BMS
- ◆ 24/7 pilot monitoring / auto re-light
- ◆ Pilot data logging (*optional item*)
- ◆ Stack high temperature shut down

## Required Site Utilities

Pilot Gas : Natural Gas: 15 SCFH @ 5 psig or Propane: 6 SCFH @ 3 psig

Electric : 120VAC (3 Amps) or 12VDC Battery / Solar

Instrument Air / Gas: Waste gas valve can operate on instrument air or gas

## 3<sup>RD</sup> PARTY VERIFIED TEST EMISSION RESULTS

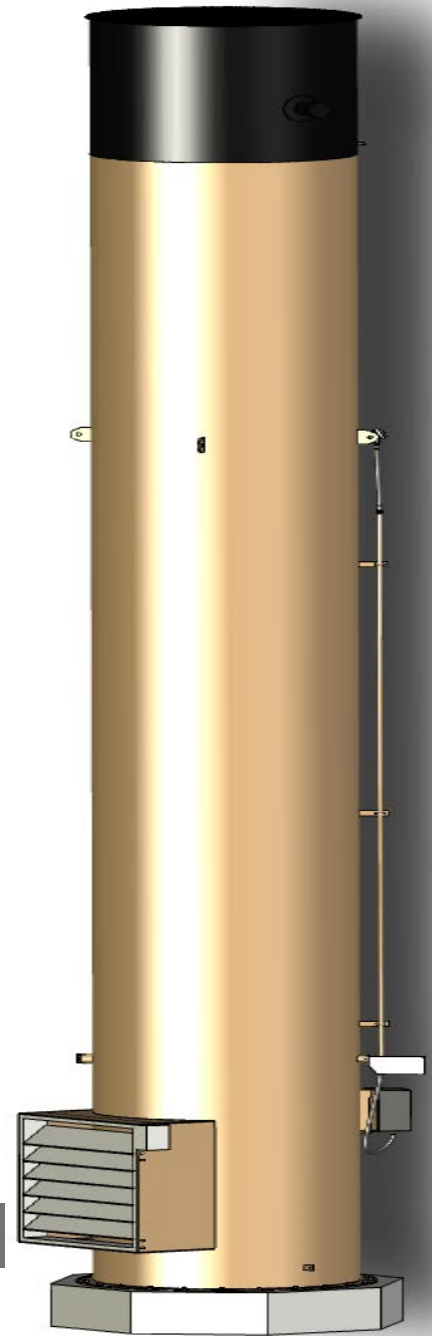
Destruction & Removal Efficiency (DRE) :	99.5+	%
Visual Emissions Observed :	None	Per method 22
Carbon Monoxide :	< 10	ppmv

## HERO PERFORMANCE GUARANTEE

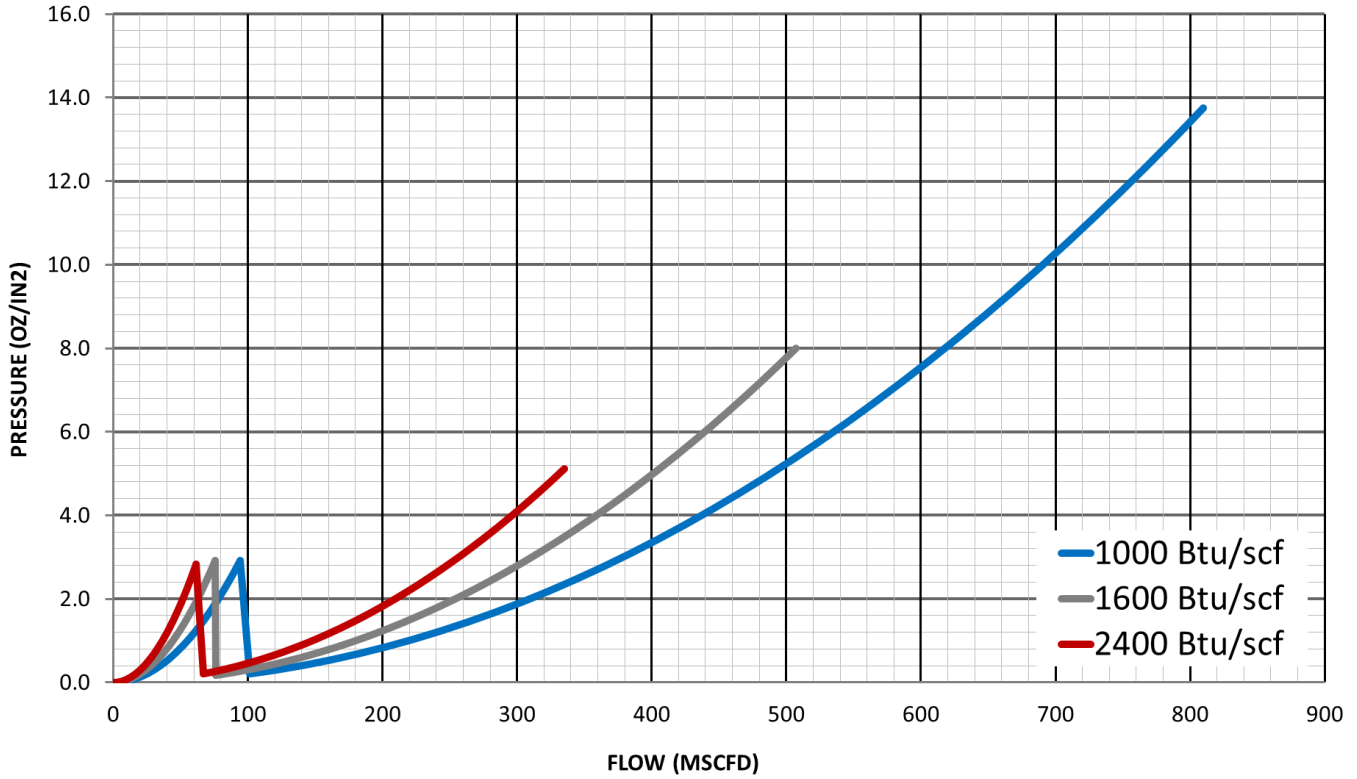
Maximum Design Flow Capacity :	335	MSCFD
Maximum Design Heat Capacity :	33.5	MMBTU/HR
Waste Gas Net Heating Value (NHV):	2,400	BTU/SCF
Min. Allowable Gas NHV:	200	BTU/SCF
Waste Gas Temperature:	60 to 220	F
Destruction & Removal Efficiency (DRE):	> 98	%
Continuous Monitored Gas Pilot	Yes	

## PERFORMANCE GUARANTEE NOTES

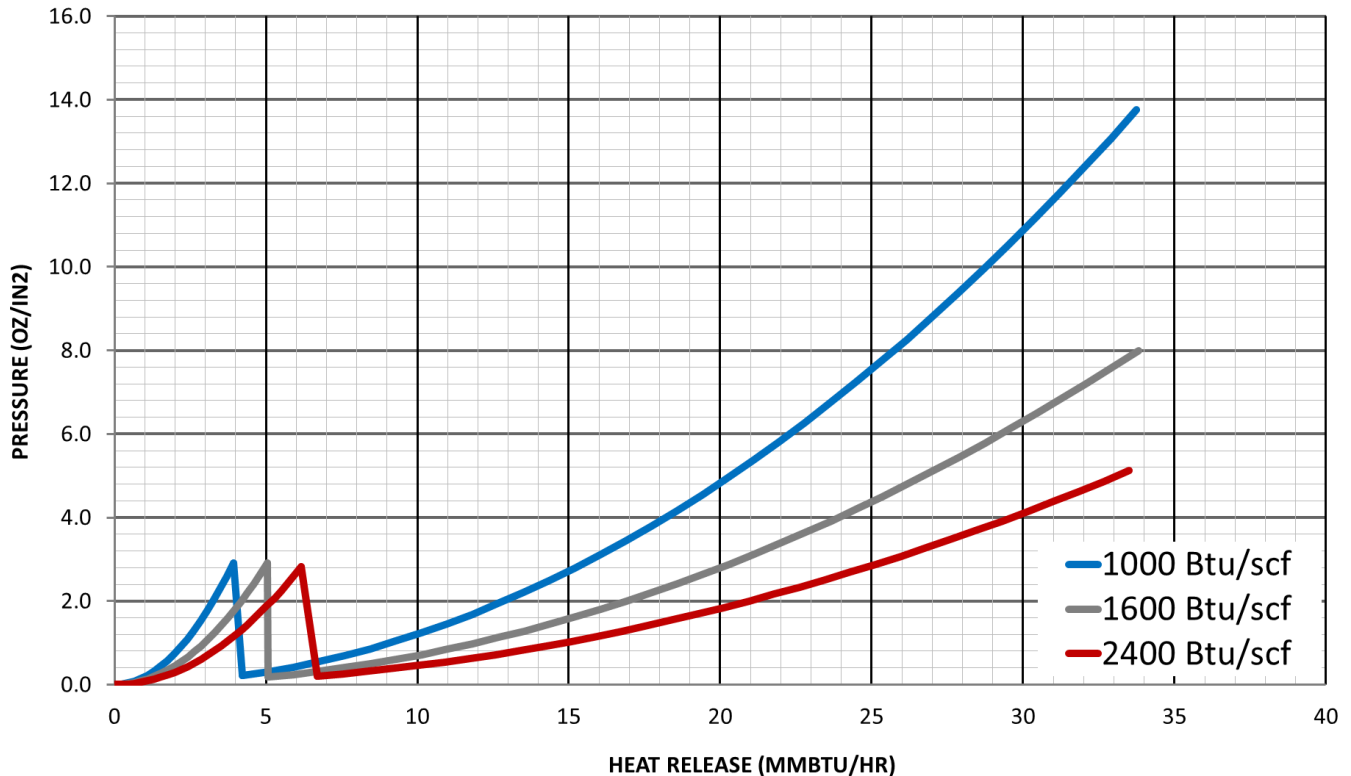
1. The Hero performance guarantee for this unit is lower than the flow rates tested during the mfg. test per EPA standards CFR 60.5412b & CFR 60.5413b to allow for field conditions vs. test conditions (*i.e. taller stack required during EPA testing to measure stack emission samples vs actual certified stack height*).
2. Refer to Hero CH8435 flow curves to identify maximum flow rate & pressure required for your specific net heating value (NHV) if other than 2,400 Btu/scf.
3. If combustor performance is needed for site-specific design parameters contact Hero at [sales@heroflare.com](mailto:sales@heroflare.com) for assistance



**Capacity Flow Curve**  
 Model CH8435  
 (Quad O Compliant)



**Heat Release Curve**  
 Model CH8435  
 (Quad O Compliant)



\*Stepped flow curve shape is due to the opening of the second stage burner at approximately 30oz/in<sup>2</sup> of inlet pressure.