

# ENCLOSED GROUND FLARE



**BURNERS | FLARES | THERMAL OXIDIZERS  
VAPOR CONTROL | RENTALS | AFTERMARKET**



# ENCLOSED GROUND FLARE

## Enclosed flame, open record.

Enclosed smokeless flaring of waste gases in populated, tightly controlled, or small footprint plants calls for our proven ZEECO® Enclosed Ground Flare. Designed and staged to fully utilize the available pressure in the waste stream, our enclosed ground flare provides smokeless operation without steam, even when flaring hydrocarbon gases as heavy as butadiene. If your plant space is limited or located near a population center or environmentally sensitive area, the experienced team at Zeeco will custom design an enclosed ground flare system to minimize visible flaring impacts at the plant boundary. From the ground up, our enclosed ground flares protect facilities, employees, reputations, and the environment worldwide.

Proprietary, proven Zeeco investment cast burner heads using free-jet theory promote smokeless flaring with easy maintenance. Our innovative labyrinth shield design eliminates any line of sight into the combustion chamber. Our shield design creates more efficient air induction. This allows our flare to achieve higher destruction efficiencies compared to competing technologies. In fact, our enclosed ground flare is engineered for better air intake and is the quietest flare choice without any radiation at grade.

As a worldwide leader in combustion technology, Zeeco has both the extensive engineering experience and intensive testing capabilities you need to ensure a superior enclosed ground flare solution. These systems are complex; choose a provider with proven expertise in the design, installation, and commissioning of the equipment. At Zeeco, we ensure smokeless operation under varying amounts of pressure, flow, and gas compositions. Reduce noise and eliminate radiation at grade without sacrificing land or compromising efficiency.

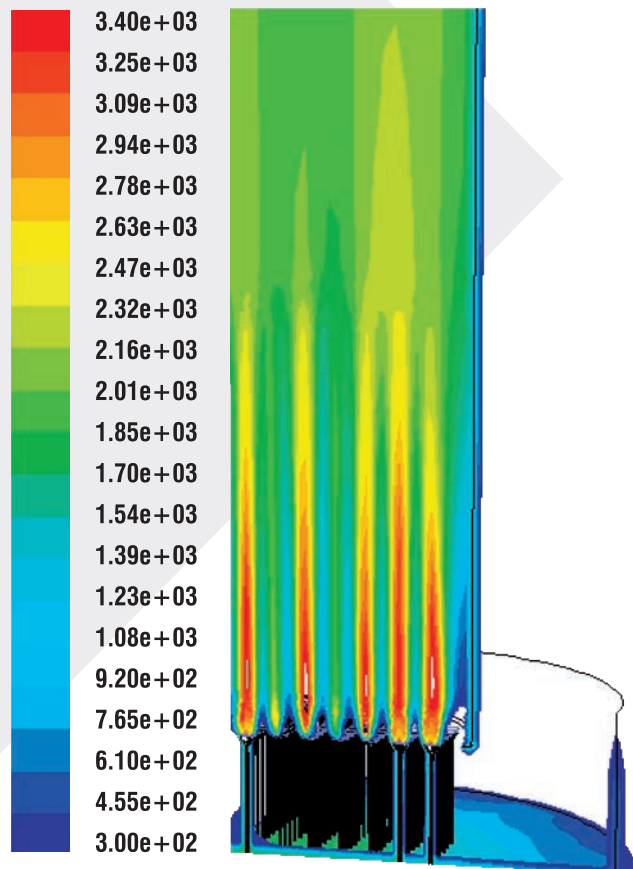
## Our testing smokes the competition.

Zeeco's expert engineering group goes the extra mile with every smokeless enclosed ground flare solution we design and our standard approach is anything but "standard." We use advanced Computational Fluid Dynamics (CFD) to model your specific process

conditions against actual equipment design, allowing us to accurately simulate flame behavior and interaction under varying wind and weather conditions, fuel types, and flows. We use wind tunnel testing to accurately predict how wind will affect live performance. The result? A system with reliable, superior results and flares that last significantly longer.

The same commitment to excellence applies to our complete combustion testing process. Our Combustion Research and Test Facility was the first in the world to become ISO 9001-2000 certified, and our staff stays ahead of rapidly changing regulations and emission requirements. With our flare testing facilities and multi-fuel capabilities, from natural gas to butadiene and more, Zeeco can simulate flare system performance in a variety of conditions.

Temperature (°F)



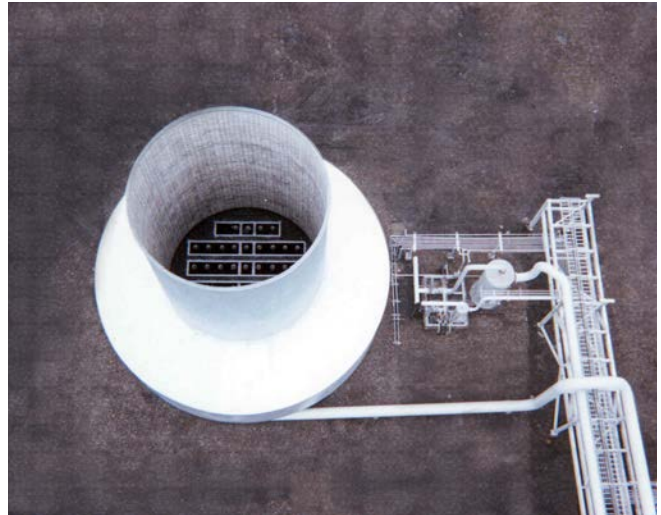
CFD No Wind Results – Centerline Temperature (°F)

## Design Features

- Engineered for longer life and reliable service
- Lower maintenance cost from investment cast burner heads

## Typical Applications

- Small plant footprints
- Populated areas
- Locations requiring reduced environmental impact (noise, radiation, or visibility)



*100% Xylene Testing in Zeeco's Test Facility*



*Enclosed Ground Flare with Interior Chamber Cast*



## The Zeeco Difference

By concentrating on what we do best, Zeeco has grown into a worldwide leader in combustion and environmental solutions. We are a privately held company whose ownership stays highly involved in daily operations, with upper management comprised of the world's leading combustion experts.

When you call Zeeco, we answer. When you make a request, you get a quick, efficient response. We are lean and efficient, able to make decisions quickly, without bureaucracy and red tape. Our sales, engineering, and purchasing groups work hand-in-hand to deliver highly competitive quotes and heroic turnaround times. We stand ready and willing to travel anywhere in the world to discuss upcoming projects firsthand, and to ensure that every existing project runs seamlessly.



Visit [zeeco.com/contact](https://zeeco.com/contact) for additional Global Location contact information



Choose to work with our dedicated, flexible, and innovative team, and you won't be disappointed. Call or email us today to request a quote or to learn more about our proprietary combustion systems.

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REGISTERED  
ISO 9001:2015

Certification applies to  
Zeeco Headquarters.