On Demand Ignition Solutions.

We understand the costly consequences of downtime and the pressure to reduce overall emissions. The advanced ZIP Ignition System offers a safe, reliable, and flexible on demand flare system ignition solution that minimizes emissions, operates effectively under challenging weather conditions, and can eliminate the need for continuous pilot fuel gas supply.

Zeeco is the only combustion and environmental equipment supplier in the world to provide flaring systems, flare gas recovery units, and on demand ignition systems. From concept to commissioning, rely on one partner to deliver a multitude of technologies and services – from engineering and manufacturing to the design and installation of your equipment. No matter how complex your system requirements, rest assured Zeeco will equip you with the people, products, and services you need for seamless execution, every time.

How It Works.

The ZIP Ignition System utilizes a compressed nitrogen launching system to propel zirconium-filled pellets through a guide tube to the flare tip. Upon exiting the guide tube at a high velocity, the pellet impacts a striker plate, showering the flare tip exit with sparks and igniting the flare gas stream. Because Zeeco high pressure pellets require a minimum impact velocity for ignition and have no internal explosive materials, they will not detonate if dropped during loading or fragment collecting – creating a safer alternative to low pressure systems on the market. Pellets are regularly tested to ensure safety, reliability, and quality.

To reduce maintenance and provide a reliable spark, all electronics and movable parts are mounted in the launching cabinet located a considerable distance away from the flare tip. The launching cabinet includes the following items:

- Moving parts
  - Pellet carousel
  - Charge system
  - Launching system
  - 2 or 4 stage nitrogen booster system as required

- Electronics
  - Automatic initiation sequence
  - System status monitoring
  - Integration with flaring system and flame monitoring

Design Features.

- Nitrogen booster system arrangement eliminates potential overheating and enhances equipment life
- High pressure fittings and tight tolerances increase the overall system reliability
- Can meet local and international standards, including NORSOK, INMETRO, ATEX, PED, and ASME
- Can be applied to all types of flares (elevated, offshore, burn pits, etc.)
Safety Features

- Minimum impact velocity for ignition
- Provides direct feedback into DCS
- Launch is only permitted after unit is pressurized and charge valve is closed
- High integrity self-contained enclosure for launching system

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.