# VAPOR RECOVERY UNIT

Controlling Your Emissions Capturing Your Losses



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

CLIENT: Samudra Engineering
END USER: Kertih Terminals
ZEECO QUOTE #: 2024-03037VA-04
OUOTE REV #: 3 (Engineering Study)

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## CONTROLLING YOUR EMISSIONS CAPTURING YOUR LOSSES

### **Zeeco:** experts in vapor control systems for the terminal market

Whether you are loading trucks, rail cars, or marine vessels, you know your operation can generate regulated Volatile Organic Compound (VOC) emissions, which are not only harmful to the environment but represent unnecessary losses of valuable products as well.

Zeeco's advanced Vapor Recovery Units (VRU) are designed to be the most reliable, environmentally friendly, and financially sound means of achieving equivalent VOC destruction efficiencies (DRE) up to 99.99%.

#### **Key features of ZEECO® VRUs**

- Recovers 1 to 2 gallons per 1,000 gallons of product load
- No combustion means zero NOx or CO emissions
- State-of-the-art dry vacuum pumps ensure the reliability of the system and quality of the recovered product
- Capable of 0 to 100% turndown

- Optional Continuous Inlet Monitor (CIM) for measuring the number of hydrocarbons coming from the loading rack to the VRU
  - » Can be used to start up VRU at terminals with intermittent loading
- Continuous Emission Monitor (CEM) for measuring VOC emissions from a vent stack
  - » Optional paperless chart recorder for storing data
  - » Optional PC for additional data recording
- Designed for a minimum pressure drop to ensure backpressure on the truck rack is less than 18" WC
- · Standard emissions:
  - » VOC DRE: 98% up to 99.9%
  - » NOx: 0 lbs./MMBtu
  - » CO: 0 lbs./MMBtu
- · PLC-based control system with HMI for ease of control

#### **Typical product vapors recovered:**

- Gasoline
- Benzene
- Ethanol

- Crude Oil
- Xylene
- MTBE

- Naphtha
- Toluene
- ETBE

- Condensates
- Methanol



#### Modular design:

- Motor operated valve skid, including all valves needed to direct the vapors through the process
- Pump skid, including vacuum pumps, absorbent return pump, and absorber column
- · Carbon beds mounted on a concrete pad
- Allows Vapor Recovery Unit (VRU) layout to be tailored to your site

### Global Field Services: single-point solution for servicing and maintaining your VRU equipment

Our products are only part of the equation. It is the people behind the products – experienced engineers and highly skilled service technicians – that elevate our Vapor Control and Global Field Services teams from the role of a mere supplier to that of a true partner in your long-term success. With the fastest growing service team in the industry, Zeeco's Global Field Services professionals are highly trained in the service and maintenance of carbon bed VRUs.

## Call 844 GO ZEECO (Int: +1 (918) 258 8551) for 24/7 service requests, including:

- Preventative maintenance inspections
- Quarterly oil changes for vacuum pumps
- · Repairs and component replacement
- · Carbon replacement and adsorption testing
- Wet to dry vacuum pump upgrades
- Process control upgrades
- Equipment relocation

Zeeco's Global Field Services professionals take part in the highest level of industry required safety training and will arrive to your site equipped with full PPE. Zeeco is registered with ISNetworld®, PICs, DISA, and many other safety regulators. To learn more, contact your local Zeeco representative today or visit zeeco.com/vapor for more details.







#### **The Zeeco Difference**



Our only business is the combustion business. By concentrating on what we do best, Zeeco has grown into a worldwide leader in combustion 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.







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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Learn more at zeeco.com



