

# ZULE<sup>®</sup> BIOGAS FLARE

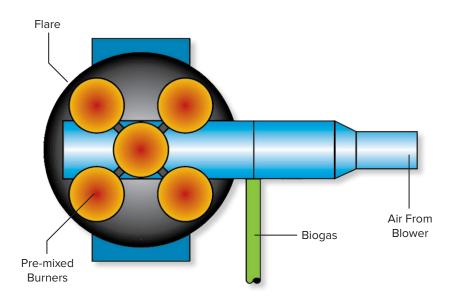
ZINK ULTRA LOW EMISSIONS

## Advanced Technology, Field-Proven Performance

The ZULE (Zink Ultra Low Emissions) Flare delivers superior performance for biogas markets through exclusive, advanced technology. No other solution has more units in operation or a longer history of proven performance. The ZULE flare offers the lowest achievable NOx emissions in the industry, tested as low as 3–4 ppm, and near-zero CO emissions for temperatures as low as 1200°F.

## More Features, More Control

- > Field-proven and tested performance for both landfill and digester gas applications
- > Successful service record with systems in operation since 1998
- > Greater than 99.5% overall (99.9% methane) DRE expected
- > As low as 0.018 lb/MMBtu NOx achievable
- > Capacities up to 6,000 SCFM with a single ZULE flare
- > Lower operating temperatures and less noise than standard enclosed flares
- > Adjustable excess air to meet stringent emission requirements



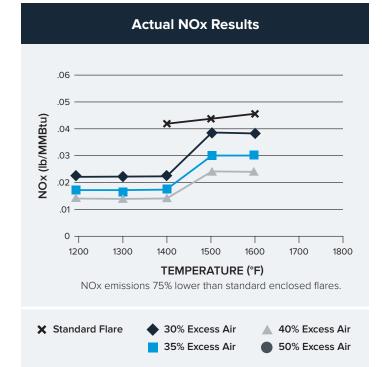
### **Proven Performance**

The ZULE flare offers the lowest achievable NOx emissions in the industry.

## **How It Works**

The biogas and air are uniquely blended, pre-combustion, to achieve superior emissions. With the ZULE flare, the air rate is calculated and controlled through the control panel and changes automatically through variable speed drives, depending on your biogas flow rate.

The ZULE flare has a specialized burner design specifically related to the pre-mix technology that offers greater flame stability and extra safety measures for flashback prevention.



#### **Actual CO Results Compact Footprint** .9 8 » Our short air-to-gas mixing Standard Flare .7 CO (Ib/MMBtu) chamber offers a compact .6 footprint with optimal 5 performance .4 .3 .2 0 1200 1300 1400 1500 1600 **TEMPERATURE (°F)** The CO "spike" associated with low operating temperatures is eliminated. 30% Excess Air 35% Excess Air 40% Excess Air

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