

NANOZOX™ INLINE GENERATOR

“TURN YOUR PIPELINES INTO TREATMENT PLANTS”

Kerfoot Technologies introduces a Nanozox™ inline generator system for treatment of chlorinated solvents, 1,4 dioxane, petroleum hydrocarbons, and BTEX compounds, or for bacterial disinfection of transported liquids for pipelines of 4- to 8-inch diameter of .25- to 1.0-inch thick HDPE which have lengths of 1 to 10 miles.¹ Flow rates commonly range from 50 to 200 gallons per minute .

The generator receives ozone gas and peroxide from a trailer-mounted system or from the generator housed in a small shed near the pipeline. Ozone and peroxide loadings are matched to the target compound mass which flows through the pipe.

Advantages

- Low capital equipment costs
- Low operating costs (~ \$8/day)
- Installation requires minimal site disturbance
- Quiet operation, below 20 db
- Peroxide volume/day at 5-10 gallons, 8% solution
- PLC controller
- At 175 gpd pipeflow, cost is \$.0006/gallon (\$.025/barrel)

The Nanozox™ system generates nanobubbles containing ozone with a hydrogen peroxide coating which is a highly reactive chemical oxidant. The main reactive surface is a film layer around the nanobubbles formed by Criegee ozonides and hydroxyl and associated radicals. Special coatings allow the oxidative/reduction potential to be controlled to avoid material degradation. The ozone/peroxide destroys organic chemicals through the process of chemical oxidation, breaking targeted organic chemical and daughter products into carbon dioxide and water as end products.



¹U.S. Patents 6,984,329; 7,264,747; 7,572,368; Others pending.

Specifications:

Model 9600 Nanozox™ Inline Generator

Product Characteristics:

- ½ hp high pressure compressor
- 60 gm/hr ozone output with O₂
- PSA oxygen concentrator
- Peroxide pump

Power Requirements:

- 220 VAC, single phase, 20 amp
- 50 KWH per day
- 1500 KWH per month

Physical Characteristics:

- Nanozox™ panel
Dimensions: 29.5"H x 40"W x 12"D
Weight: 75 lbs.
- Oxygen concentrators (2)
Dimensions: 27"H x 18"W x 10"D
Weight (each): 55 lbs.

Approvals:

- UL Listed: U.S. and Canada #E241880

