Rotary Concentrator

The LOWEST COST Technology for controlling VOC emissions from low concentration exhaust streams.

A continuously slow rotating rotor made of corrugated mineral fiber material coated with synthetic zeolite adsorbs the organic pollutants. The adsorbed pollutants are then desorbed with a small hot air stream and directed to an oxidizer.

The zeolite rotary concentrator reduces the solvent laden process stream by a factor of 5:1 to 20:1, depending on solvent type, temperature and concentration. The smaller air stream with higher solvent concentration is treated by the oxidizer which means significantly less energy operating cost compared to any thermal oxidation technology including RTO.

Synthetic Zeolite Media Properties

- Hydrophobic (water resistant)
- Effective in high relative humidity
- Non-flammable
- Inorganic-inert substance
- VOC capture efficiency up to 97%
- Concentration ratio up to 20:1
- Process stream inlet temperature up to 120 degree F
- Process stream inlet relative humidity up to 80%
- Acid corrosion resistant
- Standardized proven design

Each system is designed for a condition of a specific application. Catalytic Combustion’s rotary concentrator systems have been successfully applied in numerous industrial applications.