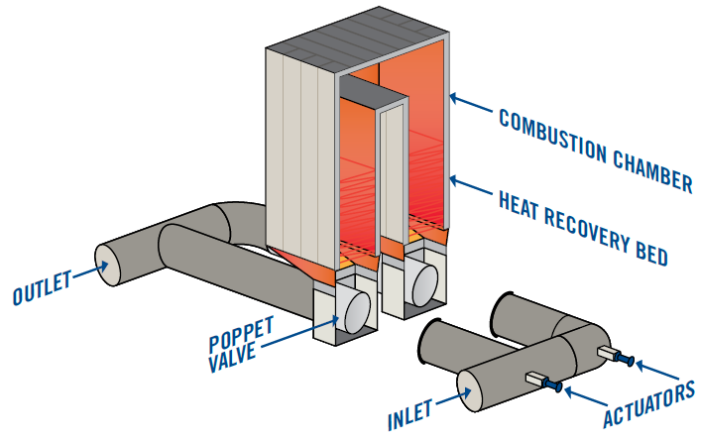
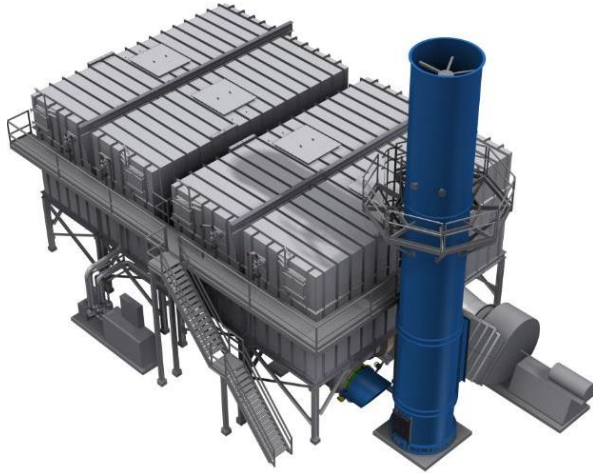


RTO: REGENERATIVE THERMAL OXIDIZER



GEO THERM® II RTO: SIMPLICITY MEETS PERFORMANCE

GeoTherm® II Features

- Fast Acting Poppet Valves
- Advanced Cold Face Design With Distribution Tubes
- Multiple Heat Exchange Media Options
- State-Of-The-Art Burner Systems
- CFD Modelling
- Simple & Rugged Design

CONTACT

Lundberg
13201 Bel-Red Road
Bellevue, Washington 98005
425.283.5070
www.lundberg-us.com

Regenerative Thermal Oxidizers (RTOs) destroy volatile organic compounds (VOCs), Hazardous Air Pollutants (HAPs) and other organic substances from a variety of industrial processes. Lundberg's GeoTherm® II Regenerative Thermal Oxidizers (RTO) and GeoCat® II Regenerative Catalytic Oxidizers (RCO) are a proven economical and energy efficient family of Oxidizer technologies designed to meet this challenge.

The GeoTherm® II RTO uses a simple state-of-the-art design to achieve high thermal and destruction efficiencies. The units are available in two canister and multi-canister arrangements to provide the smallest footprint for a wide range of design flow. The RTO units are available in forced draft or induced draft configurations with fast acting poppet valves. Multiple heat recovery media options are available. The Geoenergy® team has the expertise to determine whether structured media, monolith, or random type media is the best fit for the application while providing low system pressure drop. The GeoTherm® II RTO is capable of VOC destruction efficiencies of 99%+ and thermal efficiencies up to 97%.

Some applications require filtration of particulate matter before the process gas is treated in the RTO. The Geoenergy® E-Tube Wet Electrostatic Precipitator (wet ESP) is the industry leading device for this pre-cleaning.

LUNDBERG'S AREAS OF EXPERTISE

BY-PRODUCT RECOVERY

- Tall Oil Soap
- Turpentine
- Acidulation
- Condensing
- Storage
- Storage

CHEMICAL HANDLING AND STORAGE

- Sulfur
- Caustic
- Acids
- Sulfur Dioxide
- Storage
- Vaporization

CHEMICAL GENERATION

- Sulfur Dioxide
- NSSC Pulping Liquor
- Sulfite/Bisulfite Pulping Liquor

EVAPORATORS FOR PULPING LIQUOR

- Multiple-Effect
- Strong Liquor Concentrators
- Pre-Evaporation
- Falling Film
- Vapor Recompression
- Crystallizer
- REX Technology

FOAM CONTROL

- Washer Filtrate
- Foambreaker for Light Foam
- Soap Concentrator for Heavy Foam and Soap
- Weak Liquor Storage
- Soap Skimming

HEAT RECOVERY AND UTILIZATION

- Blow Heat
- Pre-Evaporation
- Digester Heaters and Circulation
- Direct Contact Gas Coolers
- TMP
- Heavy Liquor Heaters
- Waste Heat Boilers
- Condensers
- Hot Water
- Systems
- Steam Generation

LUNDBERG CUSTOM EQUIPMENT

- Pressure/Vacuum Relief Valves (PVRV)
- Flame Arresters
- Jacketed Valves
- Lundberg Soap Separator/Soap Skimming Rake
- Heat Exchangers
- SO₂ Gas Fans
- Heavy Liquor Heaters

POLLUTION CONTROL

- Black Liquor Oxidation
- Condensate Stripping
- Noncondensable Gas
- Direct Fired Oxidizer (DFO)
- Plywood Industry
- Regenerative Thermal Oxidizer (RTO)
- Wet Electrostatic Precipitator (ESP)
- Weak
- Steam
- TRS
- Collection
- Strong
- Heat Exchangers
- Strong
- Air
- MeOH / BOD
- Incineration
- Dilute
- COD
- Scrubbers
- SOG
- Steam Tunnel Condensate Evaporator
- Regenerative Catalytic Oxidizer (RCO)

SPECIAL SYSTEMS

- White Liquor Oxidation
- Sulfur Addition – Kraft Liquor
- Reausticizing – White Liquor
- Ash Treatment Systems – Saltcake
- Air
- Molecular Oxygen

TURNKEY

- Engineering
- Complete EPC