

EPSILON Regenerative Thermal Oxidizer (RTO)

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Avril 2009 - 00

MEGTEC SYSTEMS also offers:

- Other Thermal Oxidizers include:
 - KATEC Recuperative
 - MAGNUM Catalytic
 - VOCSIDIZER Single-Bed Flameless RTO
 - CLEAN SWITCH RTO with a single rotary valve
- Solvent Recovery
- Carbon Adsorbers
- Biofilters & Bioscrubbers
- Dryers
- Web Transportation

MEGTEC's Engineering Service Division can provide (also available for Non-MEGTEC installations):

- Turnkey-Installations
- In-house pilot line testing
- Optimisation of Process Energy Management
- Equipment optimization
- Relocation of equipment
- Ceramic Media Upgrade on RTOs (including Non MEGTEC RTOs)
- Heat recovery systems
- Process energy audits
- Maintenance
- Measurements of Emissions



MEGTEC SYSTEMS EPSILON meets regulatory emissions compliance with its multiple canister design depending on the application and requirements of the customer. MEGTEC SYSTEMS has the experience of installing more than 4.000 VOC control systems in a diverse range of industrial applications in countries throughout the world.

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The bottom line is process knowledge

EPSILON

Regenerative Thermal Oxidizer (RTO)



Installation of an EPSILON 3-can for 60,000 Nm³/h within two weeks starting from the arrival to start-up

EPSILON OPERATING SPECIFICATIONS

| | |
|---------------------------|--|
| Multiple can RTO | 2,3, 4, 5 or more cans according to customer needs |
| Innovative dampers | MEGTEC's own Poppet Valves Design, with 15 years field experience |
| Flow capacity | 5,000 – 200,000 Nm ³ /h |
| Thermal efficiency | 92 to 98%, |
| Autotherm Operation | 1 – 2 g/Nm ³ |
| Emission Limit | <20 mg C/Nm ³ or lower |
| Turndown ratios | 1:5 to 1:10 dependant on the no. of cans |
| VOC concentration | Up to 25% LEL by using the optional hot side bypass |
| Secondary energy recovery | According to customers needs, i.e. air, water, oil, steam, electricity |
| Installation at site | Minimized by pre-assembled & prewired equipment parts |
| Relocation of units | Designed for ease of disassembling, in most cases, no media removal is necessary |

EPSILON RTO

Regenerative Thermal Oxidizers (RTOs) are the most thermally efficient Volatile Organic Compounds (VOC) emission control systems available.

Thorough engineering of the EPSILON has led to an innovative compact design together with low operating and capital costs with guaranteed VOC destruction efficiencies.

The EPSILON is an innovative system that features structured ceramic heat exchange media as well as integrated inlet & outlet air channels and MEGTEC's own proven low leakage poppet dampers for air routing through the EPSILON.

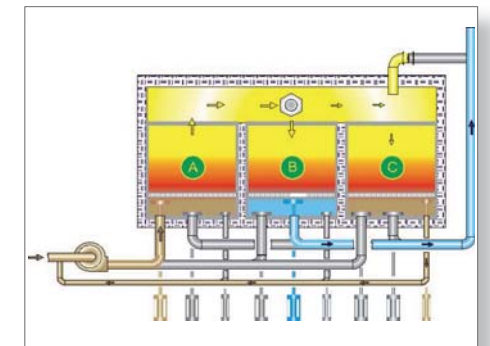
The PLC monitors and controls the temperature in the heat exchanger beds and in the combustion chamber via multiple thermocouples located in the system, which helps assure a long design life and compliance with the most stringent emission limits.

A Hot-Side Bypass can be fitted to control the heat exchange efficiency in the presence of high solvent loads, limiting pressure drop and the systems internal temperatures.

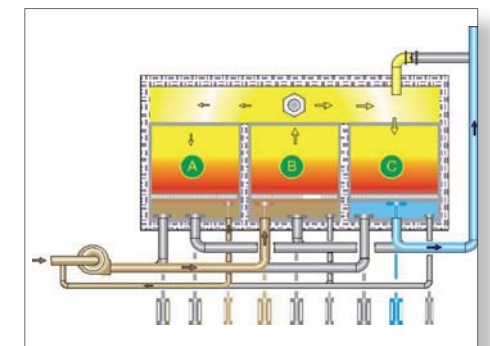
Secondary heat recovery systems can be used to recover the thermal energy within the clean exhaust air stream, or in the Hot-Side Bypass, to heat air, water, thermal oil or steam.

Worldwide experience in wide range of applications

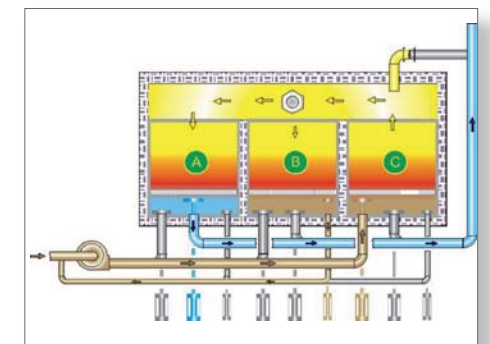
- Graphic Arts Industry
- Flexographic Printing
- Rotogravure Printing
- Chemical Industry
- Automotive Industry
- Sewage Treatment
- Odour Control
- Coil Coating
- Spray Booths
- Pharmaceutical Industry
- Petrochemical Industry



Mode No. 1:
Inlet path – Canister A
Outlet path – Canister B
Purge – Canister C



Mode No. 2:
Inlet path – Canister B
Outlet path – Canister C
Purge – Canister A



Mode No. 3:
Inlet path – Canister C
Outlet path – Canister A
Purge – Canister B

