

Solutions for VOC Oxidation



MEGTEC Systems is a recognized world-class, global supplier of VOC and odour control systems with 4000 installations over a 35-year period. While many suppliers offer equipment, MEGTEC has the process and industry knowledge to review your emission control needs and offer a total solution. MEGTEC is committed to working with our customers to provide best value systems for regulatory compliance.

The bottom line is process knowledge

Solutions for VOC Oxidation



MAGNUM® Catalytic Recuperative Oxidizer gives reliable performance with minimal CO and NOx emissions



A VOCSIDIZER® RTO for VOC emissions from flexo printing processes and odours removal



CLEANSWITCH® RTO unit for VOC treatment from flexible packaging plant

MAGNUM® Catalytic Recuperative

- High-efficiency burner design
- Combustion air from process
- Integral heat recovery
- Proprietary catalysts
- Temperature control system
- Maintenance-free exterior
- State-of-the-art control package
- Easy maintenance design
- Optional turnkey installation

VOCSIDIZER® RTO

Unique, single-bed, flameless regenerative thermal oxidation in a compact, modular design with low running costs.

- Wide range of heat exchange media allows optimisation of pressure drop and thermal efficiency
- Innovative, simple and reliable system with low maintenance
- No open flame hence very low CO and NOx
- High operating temperature for complete oxidation
- Support energy can be by gas injection or electrical heaters

CLEANSWITCH® RTO

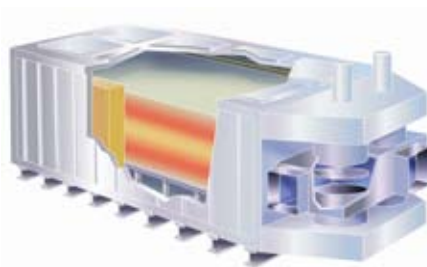
Two-can regenerative thermal oxidiser (RTO) for high volume flows, which offers exceptional VOC destruction.

- Single valve
- Structured ceramic media
- Two-bed design to minimise the investment and the maintenance costs
- Optional hot side by-pass for high VOC loads
- For units lower than 45000 Nm³/h: installation in 3 days
- Pre-connected and pre-wired

MAGNUM Characteristics	
Flow capacity	4,700-47,300 Nm ³ /hr (3,000-30,000 SCFM)
Standard VOC destruction	98
Standard thermal efficiency (%)	70
Optional thermal efficiency (%)	75
Standard catalyst	936 (proprietary)
Catalyst operating range	500°F - 650° F

VOCSIDIZER Characteristics	
Treatment capacity	2,000-110,000 Nm ³ /h (1,300-69,800 SCFM)
Media thermal efficiency	95% to 98% according to the type of media used
Energy feeding	Gas or electricity only
Energy recovery	Air
Heat exchanger	Ceramic

CLEANSWITCH Characteristics	
Treatment capacity	31,500- 141,900 Nm ³ /h (20,000-90,000 SCFM)
Media thermal efficiency	95% nominal
Energy recovery	Air, warm water; with hot side bypass, hot water, thermal oil
Heat exchanger	Structured ceramic media





Millennium RTO offers operating cost and performance advantages for low flow process applications



Enterprise RTO for a wide range of industrial applications



Secondary heat recovery system returns energy to process or other plant energy requirements

MILLENNIUM® RTO

The Millennium RTO's unique, compact system meets the need of a variety of industrial applications at flows extending to 15,000 SCFM.

- Energy efficient variable frequency drive (VFD)
- Low pressure drop ceramic media
- Simple, touch-screen controls
- Modem Support
- Purge/idle makeup air damper

Optional Equipment

- Recirculation systems
- Hot-side bypass
- Secondary heat recovery

MILLENNIUM Characteristics	
Flow capacity	up to 15,000 SCFM (23,700 Nm ³ /hr)
VOC Destruction	98-99%
Thermal Efficiency	95%
System Fan	Forced draft w/VFD
Optional Secondary Heat Recovery	Yes
Heat exchange media	Ceramic

Enterprise® II RTO

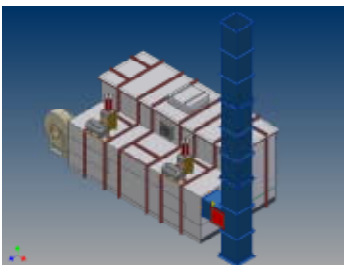
The two-can regenerative thermal oxidiser for high flows offering exceptional efficiency

- Dual ceramic media optimises thermal efficiency and pressure drop
- Two-can design minimises capital and maintenance costs
- Optional hot-side by-pass for high VOC loading
- Optional VOC entrapment system for improved VOC destruction

ENTERPRISE Characteristics	
Flow Capacity	15,000-70,000 SCFM (23,700-110,400 Nm ³ /hr)
VOC Destruction Efficiency (%)	98.5 (Optional 99)
Nominal Thermal Efficiency (%)	95 Optional (85, 90)
System Fan	Forced draft with AC variable-speed drive
Valves	Pneumatic Poppet-style
Standard Media	Ceramic Media

Secondary Heat Recovery

MEGTEC offers secondary heat recovery for applications where higher solvent loading yields more heat than is needed to sustain oxidation. The recovered energy can be returned to process applications or used to reduce other plant energy requirements.



Solutions for VOC Oxidation

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MEGTEC's three interrelated businesses draw on common core competencies--environmental sciences, liquid and materials processing and thermal air management - to provide significant synergies for high performance products across a broad range of industrial processing applications.

MEGTEC Products

Drying and Conditioning

Air flotation dryers

Air flotation dryers with integrated oxidizer

Roll support dryers

Thru-air dryers

Catenary ovens

Festoon-style ovens

Chill stands

Silicone coaters

Environmental Compliance and Sustainability

Regenerative thermal oxidizers (RTO)

Regenerative catalytic oxidizers (RCO)

Recuperative catalytic oxidizers

Recuperative thermal oxidizers

Direct thermal & catalytic oxidizers

VOC biological treatment systems

Solvent recovery/carbon adsorption systems

Distillation systems

Heat recovery systems

Energy production from methane

MEGTEC Services

24h/7d TeleCare Center

Condition monitoring

Preventive maintenance programs

Spare parts & upgrades

Training programs

Project management

Turnkey installation

Equipment optimization

Equipment rebuilds

In-house pilot line testing

Process energy audits

Environmental compliance assistance

Catalyst testing & supply

In-house laboratory analysis

Roll and Web Handling Equipment

Match-speed splicers

Zero-speed splicers

Butt splicers

Register splicers

Web guides

Roll loading systems

Rewinders

Infeeds

Air turns

Web stabilizers

High-speed sheeters