

# ENTERPRISE® II



*The Advantages of Regenerative Thermal Oxidation at Affordable Costs*



**R**egenerative thermal oxidizers (RTOs) are the most thermally efficient VOC emission control systems available. Until now, few industries could justify the high capital cost required to get the benefits that RTOs provide. The ENTERPRISE II from MEGTEC changes the economics of RTOs. First, the ENTERPRISE II puts innovative design and engineering into a compact system that costs less to own and operate. Second, we offer a comprehensive choice of options that adapt the primary system to the needs of a wide range of industrial processes. No other RTO system has as much flexibility and range of application.

*The bottom line is process knowledge*

# ENTERPRISE® II



*Modern service provides remote troubleshooting capabilities to maximize uptime and lower service costs*



*Pre-assembly and testing in the factory can provide you with significant savings in time and money during installation and start-up*



*Exhaust from a flexible packaging plant is purified by an Enterprise II regenerative thermal oxidizer*

## Performance Benefits

- VOC Destruction
- 95% Nominal Thermal Efficiency
- Costs-effective, Adaptable Design
- Minimal CO and NO<sub>x</sub> Emissions

### Innovative Two-Canister Design

The ENTERPRISE II achieves regulatory compliance with a compact two-canister system. This design offers significant capital cost savings compared to conventional three-column RTO designs. The ENTERPRISE II also operates on longer cycle times, at higher temperatures and with fewer moving parts. The result-ENTERPRISE II provides high efficiency, wide application, simple operation and low maintenance. With innovative standard features and unique options, the ENTERPRISE II does the job in situations where other RTO designs may not.

### Efficient Heat Exchange Media

The ENTERPRISE II uses engineered ceramic heat exchange media. This material provides even process air distribution across the column while promoting turbulence to ensure thorough VOC destruction and has the additional advantage of lower pressure drop and electrical operating costs. MEGTEC engineers will help you determine the best media for your specific application.

### Minimized VOC Spikes

The ENTERPRISE II achieves a standard VOC destruction rate of up to 99%. This level of cleanup meets most regulatory requirements. With extended cycle times and fast-acting poppet valves, VOC spikes in the system exhaust are kept to a minimum.

### Exceptionally Low Operating Costs

The standard thermal efficiency of the ENTERPRISE II is nominal 95%. Energy saving features like AC variable-speed drives, forced draft design and low pressure drop media reduce operating costs. The simplified engineering, durable design and rugged components offer long, reliable life with low maintenance costs.

### Forced Draft Fan

The system fan is located between the process and the oxidizer. In this position, the fan acts as a buffer. Upstream pressure fluctuations due to valve actuation are minimized, thus maintaining smooth process operation. Additionally, forced-draft positioning means the fan moves cooler process air. The fan operates at lower temperatures, is small in size and requires lower horsepower.

### Built-in Quality and Efficiency

The system's design provides significant cost savings during manufacturing and field installation. Oxidizers are shipped in pre-assembled modules for ease of field assembly. Electrical cabinets are pre-assembled and factory tested to minimize start up time.

### Option Packages for Specific Applications

The ENTERPRISE II option packages meet the needs of specific industries and regulatory environments. A MEGTEC technical consultant will evaluate your situation and help you determine the ENTERPRISE II configuration that best fits your particular situation.



Enterprise Narrow unit 40,000 SCFM  
EIIN-400



Enterprise Narrow unit 15,000 SCFM  
EIIN-150  
Rooftop installation



Enterprise Narrow unit 25,000 SCFM  
EIIN-250

### Increased VOC Destruction

The standard ENTERPRISE II satisfies clean air requirements in most situations. However, when higher control is needed, an optional VOC Entrapment System raises VOC destruction to 99%+. An installed ENTERPRISE II can be retrofitted with a VOC Entrapment System if regulations become stricter.

### Self-Cleaning Media

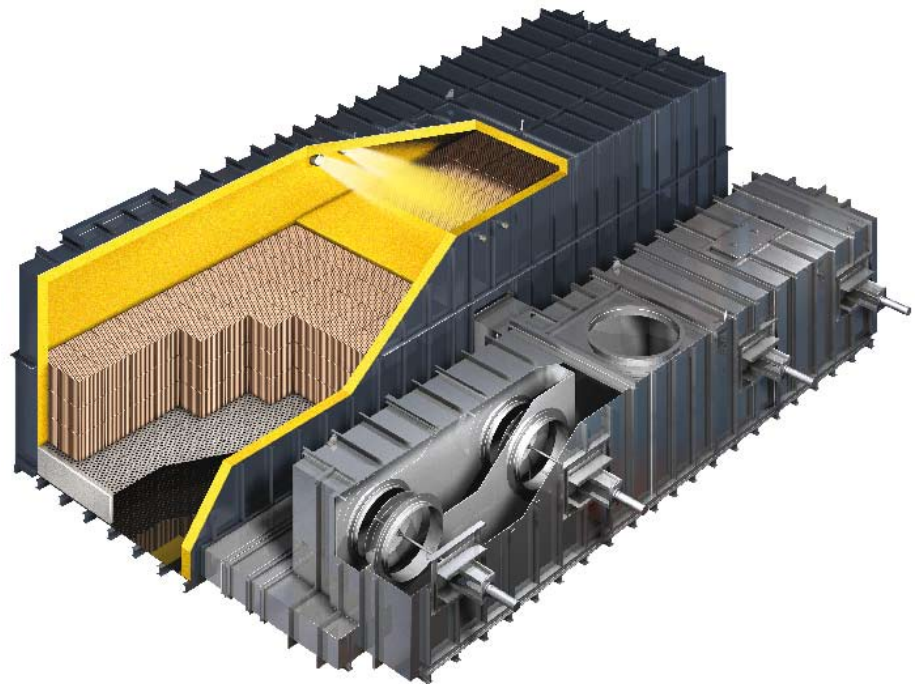
The ENTERPRISE II's optional bake-out feature removes condensed organic materials from the media. In the bake-out mode, the media at the bottom of the column is raised to a temperature high enough to burn off any condensed materials, much like a self-cleaning oven.

### Hot Air Recirculation

In applications using condensible solvents, or where acid dew points are a concern, a Hot Air Recirculation System is available. This option prevents condensation at the exhaust fan, supply plenums and valves.

### Secondary Heat Recovery

Optional secondary heat recovery systems extract thermal energy from the oxidizer exhaust. The recovered heat can be used to produce steam, or heated air, water or thermal oil.



*ENTERPRISE II, from MEGTEC Systems... Superior Thermal Efficiency and VOC Cleanup Effectiveness for a Wide Range of Industrial Applications.*

<b>ENTERPRISE Characteristics</b>	
Flow Capacity	15,000-70,000 SCFM (23,700-110,400 Nm <sup>3</sup> /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

# ENTERPRISE® II

## AMERICAS

### United States

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**www.megtec.com**

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## MEGTEC Equipment Offerings



*Dryers and Ovens*

### DRYING & CONDITIONING

- Air flotation dryers
- Roll support dryers
- Thru-air dryers
- Catenary dryers
- Web cooling and conditioning systems
- Silicone Coaters



*Match Speed and Zero Speed Splicers/Pasters*

### ROLL & WEB HANDLING

- Match speed splicers/pasters
- Zero speed splicers/pasters
- Infeeds
- Roll handling systems
- Web guides



*Regenerative Thermal Oxidizer*

### VOC Abatement

- Integrated/separate oxidizers
- Regenerative thermal oxidizers (RTOs)
- Recuperative catalytic oxidizers
- Recuperative thermal oxidizers
- Biological treatment systems
- Solvent recovery & distillation systems

## MEGTEC Services

### EQUIPMENT REBUILDS/ OPTIMIZATION

- Dryer rebuilds
  - Controls upgrades
  - Burner/plenum retrofits
  - Air bar/nozzle upgrades
- Oxidizer rebuilds
  - Heat exchanger repair
  - Media replacement
  - Controls upgrades
- Splicer rebuilds
- Engineering studies
  - Mechanical/Electrical
  - CFD modeling
- In-house pilot line testing
- Equipment relocation

### CUSTOMER CARE SUPPORT

- 24/7 TeleCare hotline
- Customized customer care programs
- Customized training programs
- Regional service support

### ENERGY MANAGEMENT

- Energy audits and optimization
- Secondary and tertiary heat recovery
- Process & plant heating/cooling
- Air, water, steam, thermal oil



*Customer Care*

### REPLACEMENT PARTS/ UPGRADE KITS

- Dryers, oxidizers, splicers
- Replacement parts for equipment:
  - MEGTEC, TEC, Enkel/Amal, MEG, Wolverine, Thermo Wisconsin and others

### PREVENTIVE MAINTENANCE

- Equipment upgrades
- Thermocouples/instrumentation calibration
- Summary report
- Component photo library
- Thermal imaging

### INSTALLATION SERVICES

- Contractor supervision
- Turnkey installations
- Ductwork and equipment platforms
- Project management



*Engineered Aftermarket Solutions*

### CATALYST SALES & TESTING

- Bead and monolith retrofits to any catalytic oxidizer
- Complete analyses by in-house laboratory
- Periodic testing as required by MACT standards
- Disposal services

### ENVIRONMENTAL COMPLIANCE & TESTING

- VOC air compliance
- assistance/FID testing
- EnviroMonitor® monitoring and reporting system

### THERMAL AIR MANAGEMENT

- Air flow dampers
- Burners and burner management systems
- Custom industrial air handling equipment