

CLEANSWITCH® Regenerative Thermal Oxidizer (RTO)



Make the Switch to Low Cost Clean Air Compliance



Regenerative thermal oxidizers (RTOs) have the potential to achieve nearly 100% VOC removal. However, most standard units only reach 98%. While flush systems allow higher VOC destruction rates, they add hefty capital cost and complicate control and maintenance. Now there is a better way!

The bottom line is process knowledge

CLEANSWITCH®

Regenerative Thermal Oxidizer (RTO)



15,000 scfm unit



25,000 scfm unit



50,000 scfm unit

Operating Specifications/ Performance Benefits

The CLEANSWITCH Modular RTO Gives You:

- Effective regulatory compliance with 99+% VOC destruction efficiency
- Up to 95% thermal efficiency to minimize fuel costs
- Up to 20% lower electrical costs
- Sizes up to 90,000 scfm, (142,000 Nm³/hr)
- 1–3 day installation time
- Trouble-free operation for low maintenance costs
- Prepiped and prewired
- State-of-the-art control system

Optional

- Skid-mounted control house with HVAC unit

The CLEANSWITCH Modular RTO from MEGTEC offers 99+% VOC Removal

With thermal efficiencies of up to 95%, CLEANSWITCH provides exceptional operating economy. In fact, for many applications the CLEANSWITCH will run in a self-sustaining mode. That means no additional fuel is required to destroy VOCs and achieve clean air compliance. How was MEGTEC able to increase efficiency, durability, and reliability?

99+% VOC Removal

The CLEANSWITCH takes its name from MEGTEC's patented valve that keeps cleaned air totally separate from dirty process exhaust. The valve utilizes a double-air seal. This means the integrity of the valve is maintained for the life of the equipment.

Smooth Process Integration & Operation

The CLEANSWITCH valve design virtually eliminates pressure spikes typical of poppet valve systems. Smooth flow transition between heat recovery chambers eliminates process upsets resulting from pressure changes during a valve switch. This makes the CLEANSWITCH unit applicable for even the most pressure-sensitive processes.

Quality Assurance

MEGTEC directly controls the quality and performance of all our units. We pre-assemble and pre-test modular components in our factory to provide significant savings of time and money during installation and start-up.

Cost-Saving, Flexible Modular Design

The CLEANSWITCH gives you the cost benefits of modular design — with improved performance. In addition, the CLEANSWITCH design retains the flexibility needed to adapt easily to the specific needs of your application. We've been building VOC control systems for more than 30 years. So we understand both the regulations and the needs of the customers we serve. This means you get a system that delivers the optimal solution to both your process and compliance situation.

Standard Features

- Energy efficient VFD
- Low pressure drop ceramic media
- Simple, touch-screen controls
- Modem support

Optional Equipment

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



(3) 60,000 scfm units



(3) 65,000 scfm units



90,000 scfm unit



CLEANSWITCH...
The most efficient, cost-effective and trouble-free VOC removal system you can buy

Six Sigma Quality..
 MEGTEC Systems uses DFSS (Design for Six Sigma) methodology to ensure the quality of our equipment and services



To ensure quality and integrity, CLEAN SWITCH oxidizers are fully assembled before leaving the MEGTEC manufacturing plant



Control housings are skid-mounted to simplify and speed installation while improving access



Units are prewired and prepped at the factory for improved quality control and trouble-free start-up

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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