CLEANSWITCH® Regenerative Thermal Oxidizer (RTO)

High-Efficiency VOC Destruction

B&W MEGTEC

ENERGY | ENVIRONMENTAL

CLEANSWITCH® RTO

The CLEANSWITCH® regenerative thermal oxidizer (RTO) from Babcock & Wilcox MEGTEC (B&W MEGTEC) delivers simplicity and cost-effectiveness in a two-chamber, single vessel with 99+% VOC destruction. With thermal efficiencies of up to 97%, the CLEANSWITCH® RTO provides exceptional operating economy. For many applications, the CLEANSWITCH® RTO will run in a self-sustaining mode with no additional fuel required to destroy VOCs.

Patented Switch Valve

The CLEANSWITCH® RTO takes its name from the B&W MEGTEC patented switch valve that keeps cleaned air totally separate from dirty process exhaust. The valve utilizes a double-air seal and is the only moving part in the unit. The simple oscillating design promotes uniform air distribution and results in a maintenance-friendly unit.

The unique design of the CLEANSWITCH® RTO, along with the switch valve, virtually eliminates pressure spikes, resulting in a smooth flow transition between heat recovery chambers. The innovative design makes the CLEANSWITCH® RTO unit the best solution for pressure-sensitive processes.

Simple, Modular Design

Designed to reduce complexity, the CLEANSWITCH® RTO provides cost benefits with its flexible, modular design. Units up to 65,000 SCFM are supplied skid-mounted for fast installation time. These units are 99% factory assembled for a simple and economical installation. A climate-controlled, skid-mounted control room is included for easy access to controls in any type of weather.

25,000 SCFM

30,000 SCFM

CLEANSWITCH® RTO

Single unit, low capacity:	20,000 to 90,000 SCFM
VOC destruction efficiency:	99+%
Thermal efficiency:	95% to 97%
Autothermal operation:	3-4% LEL

Design Features and Performance Advantages

- Proven design — over 300 installations since 2000
- VOC destruction efficiencies of 99+% to help meet stringent regulatory codes
- Thermal efficiency up to 97% provides reduced operating fuel costs
- Single valve — non-contacting, non-wearing, positive sealing via high-pressure air provides trouble-free operation, resulting in low maintenance costs
- Electric valve drive delivers quiet operation and reliable performance even in severe climate conditions
- Climate-controlled, skid-mounted control room simplifies installation and provides easy access to the controls
- Smooth valve switching with negligible pressure fluctuation for better energy efficiency
- Factory pre-assembled, pre-wired and pre-tested to provide significant savings of time and money during installation and start-up
- Media chamber — positive separation of media beds without metal divider walls
- Ceramic media bake-out for easy removal of organic deposits
- Cost-effective, engineered ceramic heat exchange media beds with low-pressure drop reduces electrical operating costs
- Optional secondary heat recovery by air, hot water, thermal oil, steam, electricity generation or adsorption cooling
- Multiple fuel options include natural gas, propane, butane, fuel oil, and gaseous or liquid bio fuels
- Optional hot-side bypass system for use in high-solvent load applications

35,000 SCFM

40,000 SCFM

50,000 SCFM

165,000 SCFM total in three-unit system

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B&W MEGTEC is a subsidiary of The Babcock & Wilcox Company (B&W). Established in 1867, B&W is a global leader in advanced energy and environmental technologies and services for the power, industrial and renewable markets, with operations, subsidiaries and joint ventures worldwide.

For more information or to contact us, visit our website at www.babcock.com/megtec.

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