

• Fewest moving parts

- Smallest footprint available
- Highest reliability in the industry

Since 1951, EISENMANN has relied on repeat business and word-of-mouth to grow into a highly respected leader and turnkey supplier of industrial systems. Our goal is to provide our customers with the best technology and lowest cost of ownership. With this goal in mind, EISENMANN "raised the bar" for the entire RTO industry with the development of the Valveless RTO (VRTO).

For over twenty years the RTO has been recognized as an efficient way to thermally treat pollutants. However, conventional RTOs are designed with multiple valves that direct air flow in and out of each oxidation chamber in the system. The multiple valve design is prone to maintenance problems, decreased efficiency and poor reliability over time.

EISENMANN evaluated the weaknesses surrounding the conventional and 2 can designs and spent the early 1990's developing the VRTO in our technical center. This innovative patented design eliminates the need for multiple valves and chambers and replaces many moving parts with a single, simple rotary distributor. By 1992, our first VRTO system was installed and operating in an industrial application. VRTO technology has been the choice for many companies that lead their particular industry. EISENMANN has over 400 units installed worldwide.

In 2001, EISENMANN successfully developed the VRTO-C, a compact, skid mounted system providing the same, patented valveless technology as the VRTO, with reduced installation time and the smallest footprint available per CFM of gas treated.

The Advantages of VRTO-C Performance:

60,000 SCFM 50,000 SCFM

40,000 SCFM

30,000 SCFM 20,000 SCFN

10,000 SCFM

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18'x18

21'x 21 24'x 24'

• High Uptime Reliability

- Less Maintenance
- Compact Design

- Minimal Pressure Functions
- Continuous Emissions Compliance





The process exhaust stream is collected and directed through the VRTO vessel by a variable speed process fan.

2 The patented rotary distributor is the single moving devise that controls air flow through the inlet, purge, and outlet sections of the heat exchanger.

3 The exhaust stream is directed up through the inlet wedge of the rotary distributor and the corresponding heat exchanger sections. The airflow is preheated to near combustion chamber temperature as it travels upward.

is oxidized in the required, to maintain oxidation temperature.

4 The process exhaust combustion chamber. A modulating burner provides additional heat, if **5** The exhaust or outlet wedge of the rotary distributor allows clean oxidized air to flow downward through the exchanger, where the exchanger media is preheated for the next cycle of incoming process exhaust.

6 Clean air exits the VRTO vessel and is released to the atmosphere through the stack.

The purge wedge of the rotary distributor follows in rotation behind the inlet wedge, continually flushing the exchanger media with clean oxidized air.



Pioneers of valveless regenerative thermal oxidation technology and 100% uptime for VOC abatement.



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