



CASE STUDY

# Red Trail Energy

## Ethanol facility replaces VRTO-C with new Oxi.X RC

### SITUATION

Red Trail Energy, an investor group from North Dakota, operates a corn-based ethanol facility that produces up to 64 million gallons of ethanol per year. It was looking to increase ethanol production, which would require increased dryer and dried distillers' grain solubles (DDGS) output. The existing competitor VRTO-C was slightly undersized, had reliability issues and would require a very expensive rebuild to meet the new output goals. Therefore, the plant's executive team investigated and decided to pursue more reliable abatement solutions, outside of their existing supplier's capabilities, that would meet their new requirements.

### HIGHLIGHTS



- [Allows for increased production](#)
- [Offers more reliable abatement system](#)
- [Includes features specific to ethanol, such as robust process fan designs and plug-resistant media](#)
- [Reduces bakeouts and maintenance](#)

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### SOLUTION

Dürr proposed an Oxi.X RC 50 (CS-500) regenerative thermal oxidizer with mechanical installation. It supplied this new, larger capacity RTO to replace the former competitor VRTO-C unit. The new Oxi.X RC 50 made it possible to increase production, while also providing a more reliable abatement system with value added features specific to ethanol processing, including an enhanced process fan design, plug resistant media and controls.

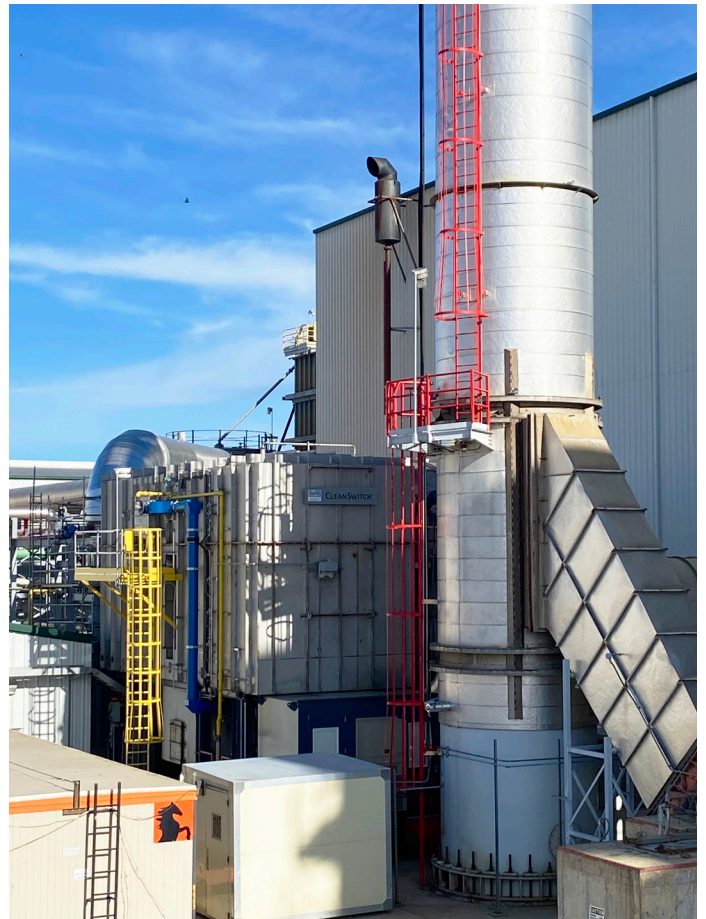
The Oxi.X RC is also capable of treating additional impurities associated with commercial grade ethanol. This allowed Red Trail to create a cleaner and more pure product for use as hand sanitizer during the pandemic.

### CHOOSING A PARTNER

Red Trail was introduced to Dürr by its service department, which completed VRTO-C preventative maintenance visits and opened the door as an alternative partner. When deciding on an RTO technology provider, the key factors were reliability, recommendations within the industry and past performance.

### RESULT

The equipment performs well and has met Red Trail's expectations in terms of EPA compliance, reliability and extra capacity for future growth.



The Oxi.X RC has multiple configurations and a unique footprint that allows for easy installation.



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