



Case Study

California Bioenergy Improves Reliability and Reduces Costs with Super-Dry D2

Overview

California Bioenergy, a leader in renewable energy solutions, operates oxygen generation systems supplied by Onsite and ozone generators manufactured by ON2 Solutions. These systems are critical to their continuous biogas upgrading processes, running 24/7 across multiple installations.

Despite utilizing an oxygen generator package equipped with three levels of filtration, the company encountered persistent moisture-related challenges that impacted system performance and operating costs



The Challenge

The existing filtration setup was not sufficient to eliminate moisture and condensation within the system. This led to premature deterioration of filter elements and consumables, increasing maintenance frequency and driving up operational costs. Each maintenance event was costing approximately \$600 per unit, while system reliability and oxygen purity were negatively affected. With systems running continuously, these issues quickly scaled into a significant operational burden.



The Solution

To eliminate the root cause—moisture in the air stream—California Bioenergy installed the Super-Dry Model D2 desiccant air dryer. The D2 units were placed upstream of both the oxygen and ozone systems, ensuring a consistent supply of dry, moisture-free air and protecting critical components, including the ON2 Solutions ozone generators.

Results & Benefits

Following the installation of the Super-Dry D2, California Bioenergy significantly reduced premature failure of filter elements and consumables, cutting down maintenance frequency and associated labor costs. The company has saved thousands of dollars by avoiding repeated \$600 service events.

System reliability improved substantially, with condensation eliminated from oxygen and ozone skids, enabling uninterrupted 24/7 operation. In addition, the consistent dry air supply enhanced overall system performance and improved the quality and stability of oxygen feeding the ozone generation process.

Today, California Bioenergy has installed over 45 Super-Dry D2 units, with plans to deploy 45 additional units, demonstrating strong confidence in the solution.

Conclusion

By integrating the Super-Dry D2, California Bioenergy successfully resolved moisture issues that their existing filtration system could not address. The result is a more reliable, cost-efficient, and higher-performing oxygen and ozone generation process.

This case demonstrates how proper air drying is essential for protecting sensitive equipment and maintaining performance in demanding, continuous-use applications.



Customer Testimonial

“Since we have installed our D2, we have saved thousands of dollars on our consumables and increased the quality of the purity of our O₂ skids.”

— Robert E.

