

# PRO Refrigeration Inc. Introduces PROGreen Hybrid Solutions, Simplifying Transition to Natural Refrigerants

MOCKSVILLE, NC OCT 10, 2023 - PRO Refrigeration Inc, a leading provider of innovative refrigeration solutions, is proud to announce the launch of their groundbreaking PROGreen Hybrid Packaged Chiller System. This new solution merges two independent refrigeration systems combined into a single packaged chiller system. What makes this pairing unique is one system utilizes all-natural CO<sub>2</sub>/R744 as a refrigerant while the other system utilizes R448, a synthetic refrigerant with a Global Warming Potential (GWP) under 1300.

Like industries and businesses worldwide, PRO strives to achieve environmental sustainability and reduce their carbon footprint, the need for eco-friendly refrigeration systems has become more crucial than ever. PRO recognizes the challenges faced by customers when transitioning to natural (or any new) refrigerants and the need for efficient, user-friendly solutions. With the PROGreen Hybrid Solution, the company aims to make the transition easier by offering a reliable solution that combines the best natural refrigerant option with one of the "best" synthetic based refrigerants currently in the market.

PRO chose to develop the "Hybrid Machine" 3 years after they launched their PROGreen Packaged CO<sub>2</sub>-Charged Chiller System. The team and their partners have gone through rigorous field testing at breweries and dairy farms from Bakersfield, CA, to the foothills of the Denali National Park in AK. The PRO team focused on proving the benefits of a CO<sub>2</sub> based system, while learning all that it takes to install, service, and maintain this equipment and also finding the limits of this design.



*"The team was given some big challenges, and we pushed the systems harder than we wanted at times, under some extreme conditions," shared Damon Reed, COO at PRO and leader of the PROGreen program. "We had to find the limits, and we did find most of them. It's a bigger challenge than anyone really understands to ask an outdoor system to operate reliably, often with a variable cooling load, in extreme temperatures from -30 (F) up to 115 (F)."*

Combining the two refrigerant strategies eliminates high ambient concerns, shifting the cooling load between the R744 (CO<sub>2</sub>) system and the R448 (Low GWP Synthetic) system automatically based on ambient conditions and the cooling or water heating demand.

## Key features and benefits of the PROGreen Hybrid Solution include:

1. **Natural Refrigerant Advantages:** R744/CO<sub>2</sub> is a natural refrigerant with very low GWP (Global Warming Potential) that significantly reduces environmental impact.

2. **Improved Serviceability:** The system incorporates the serviceability benefits of R448, a widely used synthetic refrigerant, ensuring ease of maintenance and repair. More than 80% of the systems produced in 2023 by PRO utilized R448 as the primary refrigerant.
3. **Enhanced Efficiency:** The hybrid nature of the solution enhances high ambient operating efficiency, ensuring optimal performance in a variety of conditions.
4. **Cost-Effective Solution:** PROGreen Hybrid Solution offers a cost-effective alternative to full-scale natural refrigerant conversions, providing businesses with immediate efficiency gains and a smooth transition process.

*“Most times, a CO2 based system is the best option- EXCEPT in high ambient situations, where a synthetic based system, using R448, can operate more efficiently and more reliably,”* added Damon. *“We designed the Hybrid Machine to provide the maximum benefit from the CO2 System, with the ability to shift the load over to a traditional based R448 system, when it needs to.”*

Speaking about the release, Jim VanderGiessen, CEO of PRO Refrigeration Inc, expressed his excitement stating *“We are delighted to introduce the PROGreen Hybrid Solution to our customers. Our goal is to provide them with innovative refrigeration solutions that promote sustainability and meet their operational needs. This hybrid solution offers the best of both worlds by combining the benefits of natural refrigerants with the serviceability and efficiency of synthetic refrigerants.”*

PRO Refrigeration Inc is committed to shifting from synthetic refrigerants by offering environmentally friendly refrigeration solutions that minimize environmental impact, enhance efficiency, and help businesses achieve their sustainability goals. By introducing the PROGreen Hybrid Solution, the company reaffirms its dedication to providing cutting-edge technology while prioritizing customer satisfaction.



## About Pro Refrigeration, Inc.

Headquartered in Auburn, Washington, with a production facility in Mocksville, North Carolina, PRO Refrigeration, Inc. stands at the forefront of cooling technology and equipment for the craft beverage and dairy industries in the United States. With a track record dating back to 1990, PRO has built a reputation for manufacturing top-quality equipment and innovative solutions, delivering chilled fluid within a temperature range of -45°F to +45°F at almost any scale. In 2020, PRO established the PROGreen Solutions Team, focused on finding ways to shift away from chemical-based refrigerants and they began offering Natural Refrigerant based options and help prove their value. Visit [www.prochiller.com](http://www.prochiller.com) to learn more and explore Pro Refrigeration's comprehensive offerings. Contact [media@prorefrigeration.com](mailto:media@prorefrigeration.com) to talk with someone on our team about this release.