

# Chemours & Coldmaster Pave the Way for A2Ls in Chile

Installation using Opteon™  
XL20 (R-454C) transforms  
commercial refrigeration



Opteon™

# Introduction

As is the case in many other parts of the world, the commercial and industrial refrigeration market in Chile has reached a critical point in terms of reducing its environmental impact. Although new-generation, lower global warming potential (GWP) A2L refrigerant solutions are emerging that will help businesses meet escalating demands for greater energy efficiency and sustainability, barriers exist between these technologies and industrywide adoption. Transitioning to A2Ls requires a willingness to become knowledgeable in equipment operation, familiarity with differences between A2Ls and legacy refrigerants, and confidence in their safety, performance, and cost-effectiveness. Embracing the opportunity to realize the many benefits of A2Ls for their business—and lead the way for others in their country—one of the most renown supermarket chains in Chile did what was necessary to be at the forefront of the A2L transition.

## The Collaborators

Driving success for a project of this size, scope, and transitional importance started with collaboration among companies who have been immersed in A2L technology for commercial refrigeration from day one—and who offered the alignment in resources and experience necessary to ensure all the pieces came together seamlessly. The supermarket chain in central-south Chile put their trust in all the right places.



**Coldmaster** was founded in 2008 by Rodrigo Torres and Jaime Carvajal, two refrigeration technicians who, after gaining operational experience in the refrigerated food sector, established Refrigeración Industrial Coldmaster Limitada, known today as Refrigeración Industrial Coldmaster, S.A. Respected in the industry for their reliable infrastructure, successful collaborations, notable projects, and exponential growth over 15 years, Coldmaster was a natural choice for the supermarket chain's foray into A2L technology.

**Chemours**, a leader in refrigerant innovation brought to the table nearly a century of experience in refrigerant development dating back to the invention of Freon™ and continuing into today's new-generation A2L solutions. Chemours' refrigerant chemistry and manufacturing capabilities, coupled with its extensive experience in providing solutions, training, and other support for evolving needs of the HVAC and commercial refrigeration industries, offered the ideal match for the supermarket chain project.

Rounding out the team were **Grupo DISCO**, a leading Spanish company in commercial refrigeration that specializes in manufacturing refrigeration units, and **F.H Engel S. A.**, a Chile-based company with more than 70 years of experience in the distribution of the Chemours products. Both companies provided key support in supplying the refrigerant and equipment required for the project.

## The Project

Realizing the potential environmental, performance, and cost benefits of A2L refrigerant technology, the supermarket chain identified a store location in central-south Chile for the remodeling project. Given the location's typical yearly temperature range of between 9 C to 26 C—paired with GWP reduction, energy efficiency, performance, and scalability goals—Chemours and Coldmaster proposed moving the store away from R-507A by installing new systems utilizing Chemours **Opteon™ XL20 (R-454C)**. Offering a 96% lower GWP compared to R-507A and R-404A, Opteon™ XL20 would contribute significantly to the customer's sustainability criteria, as well as deliver in terms of cooling capacity, energy efficiency, and more.

Designed and manufactured under the highest international standards, Grupo DISCO equipment units reflect a dedication to providing reliable, high-performance solutions. The system they developed for the central-south Chile supermarket included distributed units with two medium-temperature condensing units. These units provided a total cooling capacity of 48.5 kW for refrigerated products and 24.8 kW for frozen goods.

Because Opteon™ XL20 carries an A2L (mildly flammable) classification as defined in ASHRAE Standard 34, the teams ensured installations complied with the highest safety standards. In addition, the Grupo DISCO units complied with the European Standard EN378. Lastly, the Coldmaster technical staff involved in the project were trained on the safe installation and operation of this new refrigerant technology by DISCO and Chemours experts.

“We are very excited to have taken the lead on this new project using the **Opteon™ XL20** system. It is an achievement stemming from a sustained effort to emphasize the benefits of new-generation, low-GWP refrigerants and to endorse global commitments to sustainability. Today, we are harvesting the fruits of a collaboration with Chemours, Grupo DISCO, and Coldmaster, and we expect that this is only the beginning. New projects will surely be added to this quest toward a more ecological future, and we are here to satisfy all your needs!”

— Daniela Bustamante, Commercial Manager of the F.H. Engel Industrial Division

# The Results

The new Opteon™ XL20 units are up and running, helping the store lower its environmental footprint through a refrigerant solution offering a potential 96% reduction in GWP over the previous system, increased energy efficiency, and more.

Moreover, together, Chemours and Coldmaster—along with the supermarket chain eager to embrace new and better commercial refrigeration technology—has set a precedent for the adoption of sustainable A2L solutions across Chile and, perhaps, beyond.



“Grupo DISCO Chile is proud to have provided the first A2L equipment installed in Chile— and to be at the forefront of a milestone installation paving the way toward refrigeration solutions that are more sustainable and efficient. Commercial refrigeration is a key sector in this country’s development, and we will continue working relentlessly to lead with innovation. We thank everyone who participated in the decision-making process of this project and is making it possible to move towards a more sustainable future!”

— Cristian Gonzalez Zaballa, Development Manager at Grupo DISCO Chile.



“We are extremely grateful for the excellent teamwork performed by all parties involved in this landmark project. With no doubt, this is only the beginning! We invite everyone to join us on this road toward sustainability. By using innovating technologies such as Opteon XL20 (R-454C), we will be able to build a better future and a better planet.”

—Maria Meitin, Chemours’ Commercial Leader for the Region.

Learn more about how a project with Chemours Opteon™ refrigerant solutions can benefit your commercial refrigeration needs by contacting [infolatam@chemours.com](mailto:infolatam@chemours.com)