Case Study

Pioneering Sustainable Packaging: Pregis and Home Good Retailer Sets New Standard High-Performance Cushioning



Pregis AirSpeed® HC Renew PCR high-pressure cushioning



Overview

Pregis and a high-end home goods retailer embarked on a an innovative collaboration in sustainable packaging, marking a significant chapter in their decade-plus-long partnership. The culmination of this effort is on-demand solution: Pregis AirSpeed® HC Renew PCR high-pressure cushioning.

Challenge

The retailer aimed to transition all plastic packaging to materials containing at least 80% post-consumer recycled (PCR) content within a year. Protective packaging is critical in maintaining the brand's product integrity, especially for fragile items like glassware. Meeting the PCR requirements while manufacturing a thin-gauge high-pressure film capable of protecting these delicate items presented a unique challenge for Pregis.

Solution

Material Selection and Quality Assurance

The lack of existing solutions that met the sustainability and performance criteria presented a significant barrier. Pregis skillfully navigated this challenge by conducting a comprehensive market analysis to identify cost-effective, high-quality PCR resin sources. They selected a PCR blend from a reliable stream with low contaminant levels, ensuring steady access and quality assurance.

Validation and testing

At Pregis IQ Innovation Headquarters, packaging engineers conducted over 200 rigorous tests to ensure the new product effectively maintained damage protection. Engineers collaborated closely with the customer throughout the validation process to ensure alignment, transparency, and trust. The results were exceptional, with the HC Renew PCR achieving a mere 2.33% damage rate in shipping tests.

Achieving circularity

Lifecycle assessment¹ results found that, HC Renew PCR reduced carbon emissions by over 40%, fossil fuel usage by 65% and water usage by 70% compared to the previous cushioning solution made with virgin plastic. The store drop-off recyclable solution is also printed with clear How2Recycle® labeling, promoting consumer awareness and recycling.





By the numbers:



1 million pounds of PCR processed



200+ ISTA, ship and material tests



600+
retail products
tested



<2.5% damage rate



Impact

Adopting Pregis AirSpeed HC Renew PCR allowed the retailer to meet its sustainability goals without compromising their high product protection standards. This collaboration set a new benchmark in the packaging industry, proving that high PCR content and high-performance packaging are not mutually exclusive.

40%
reduced carbon emissions

<u>Contact us</u> for more information on how Pregis can help your business achieve its sustainability goals with innovative packaging solutions.



