

HOW NYLABONE CUT OVER 40 TONS OF PLASTIC WASTE

By Eliminating Blister Packaging

CASE STUDY

Overview

Nylabone set out to eliminate hard-to-recycle blister packaging across its product lines¹, driven by sustainability goals and retailer pressure for more responsible materials. They sought to transition from traditional plastic blisters to FSC-certified mono-material paperboard formats made without plastic, without compromising durability, visibility, or retail performance. This required redesigning structures, reworking supply chains, and aligning cross-functional teams.

The result: a scalable packaging solution that eliminated more than 40 tons of plastic², improved recyclability, maintained a strong brand presence, and ran efficiently on existing equipment.

The redesigned package by TOPPAN was recognized with a 2025 AmeriStar Award for Sustainable Packaging, highlighting its combination of material reduction, recyclability, and operational performance.

About Nylabone

For 70 years, Nylabone has been a trusted name in chew toys and an active member of the pet community. The dogs and pet parents who count on Nylabone deserve top-quality products they love, produced in a greener way, and that starts with smarter packaging.



"True sustainability means rethinking what's standard. By eliminating blister packaging, we proved you can reduce waste at scale while maintaining performance, efficiency, and strengthening Nylabone's brand impact."

Miguel Zorrilla, SVP Marketing, Nylabone

Takeaways



Material Reduction Without Compromise Is Possible

Reducing material usage by 25%³ while preserving product protection, shelf appeal, and retailer performance expectations prove the value of sustainability improvements.



Enhanced Brand Presence & Consumer Education

Refined on-pack branding and clearer messaging improved shelf visibility and educated consumers more effectively.



Early Collaboration Accelerates Success

Aligning with suppliers and retailers earlier in the process (along with prototyping and pilot testing) reduced revisions, prevented delays, and accelerated execution from concept to launch.

The Challenge

Blister packaging has long been the industry standard for durability, tamper resistance, and shelf visibility, but it comes with significant environmental drawbacks. The materials are difficult to recycle and contribute heavily to plastic waste. At the same time, retailers and consumers are increasingly demanding sustainable alternatives.

The challenge was redesigning packaging to meet strict functional and merchandising requirements while significantly reducing plastic use without disrupting operations.

The Solution

TOPPAN and Nylabone started by drawing a clear line: eliminate blister plastic wherever they could, **without trading away product integrity and retail performance.**

In practice, this looked like:

- **Collaborating across teams from the start to define success.** They united packaging engineering, sourcing, marketing, graphic design, and sales teams while working closely with suppliers and retail partners throughout development.
- **Adopting folding and die-cutting techniques** from the electronics industry to create internal paperboard structures that securely hold the chew toy without requiring a plastic blister and adding a water-based finish.
- **Redesigning packaging structure and developing new tooling** that runs on existing equipment, allowing Nylabone to implement changes without major capital investment.
- **Testing rigorously** to ensure the new formats were shelf ready and executing a phased rollout to let them scale across product lines without disruption.

Throughout the process, the team optimized tab strength and case pack-out to protect products during shipping and minimize damage. They also refined multiple design iterations to standardize die lines and tooling across chew toy shapes and textures, improving manufacturing efficiency while accommodating subtle product variations.

- **Running several iterations of the automation process,** including initially using fold-over cards before transitioning to automated denesting magazines to ensure the new packaging design maintained machine uptime and efficiency.
- **Optimizing the heat and dwell parameters** to generate the pressure required to achieve a reliable card-to-card seal, which differed significantly from the previous card-to-blister packaging process.



"The new Nylabone chew toy packaging represents the future of responsible product design, and we are proud to lead the way in creating solutions that benefit both the planet and the consumer."

Jay Patel, General Manager of ALLOYD – A TOPPAN Company

What's Next

The biggest lesson from this project was that sustainability and commercial viability can work together, but success requires alignment early in development. Bringing internal teams, suppliers, and retail partners together from the start helped accelerate decisions and avoid delays. If they started again, they'd move faster through testing and pilot programs instead of waiting for perfect prototypes.

Nylabone now applies the same operational changes to their edible chew treat brands by replacing heavier plastic blister packaging with lightweight film where possible. They are also exploring post-consumer recycled content and rightsizing packaging to further reduce unnecessary material and excess space.

For Nylabone, this project is a strong example of using sustainability as a design principle from the beginning rather than as an afterthought. They are openly sharing progress with retail partners and consumers to encourage broader industry change and help move sustainable packaging solutions forward across the pet category.

Call to Action

Start with one product line and rethink every packaging assumption. Engage suppliers and retailers early, test aggressively, and focus on scalable solutions over perfection.

Sustainable transformation doesn't require a complete reset, just smarter decisions applied consistently across high-volume products. Small changes can create significant impact at scale.

Learn more about Nylabone's sustainability initiatives: [Our Commitment Toward Sustainable Pet Products](#) | [Nylabone](#)

¹Product Lines: Across both chew toys and treats, with most of the initial updates being on the chew toy line

²40 tons of plastic: Calculated by multiplying the average weight of a blister by the volume of blisters ordered at the time based on 52 week sales

³Reducing material by 25%: Measured in terms of total weight of package

