



IMPROVEMENT CASE STUDY: RECYCLED NYLON BAFFLE USAGE

Move your CO2 reduction and circular economy sustainability efforts forward with recycled general purpose nylon.

Henkel's global access to post-industrial reclaimed nylon stocks can help your operation achieve sustainable product development. Our well-established know-how in creating solutions from both recycled and virgin nylon materials is the outgrowth of years of research and performance testing. In addition to helping mitigate the carbon footprint of traditionally produced nylons with less CO2-intensive recycled material, Henkel continues to innovate by exploring alternatives to traditional petroleum-based nylon.



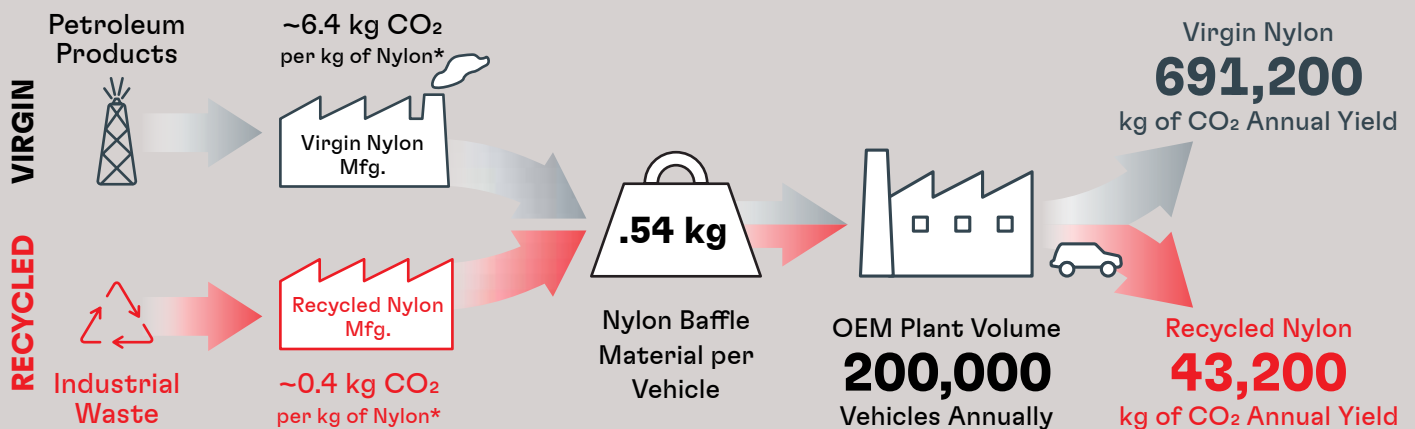
CUSTOMER SITUATION

A North American automotive OEM was evaluating all areas of their vehicle design for possible CO2 emission reductions and reached out to Henkel to explore potential ways to further that goal. Together, they identified the virgin nylon used in the customer's acoustic baffles as a potential source of CO2 emissions in the supplier production phase.

RECOMMENDED SOLUTION

As an outcome of its own research, and in collaboration with the OEM, Henkel offered an attractive opportunity to transition to high-performance recycled nylon. It reduces the CO2 generated by virgin nylon without sacrificing performance, heat resistance or ease of assembly.

PRODUCTION SCENARIO: RECYCLED NYLON VS. VIRGIN NYLON



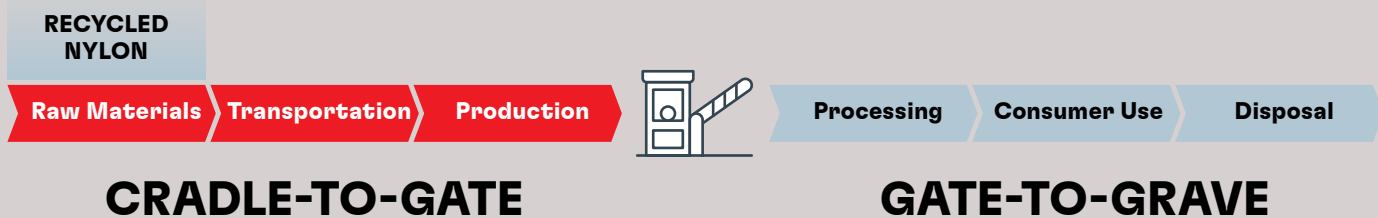
IN THIS CASE STUDY, CO2 EMISSIONS GENERATED BY NYLON PROCESSING WERE REDUCED BY ABOUT 94%*



*Approximate CO₂ equivalent per kg based on raw material supplier estimates.

OUR GOAL

At Henkel, our goal is to improve sustainability across our products' entire value chain. That includes a 30% reduction in carbon footprint for our raw materials by 2030. We are innovating to enhance the sustainability of our adhesive solutions. And we aim to further reduce our environmental impact by pursuing responsible solutions for transporting our raw materials and finished products.



SUSTAINABILITY OPPORTUNITY: RECYCLED NYLON

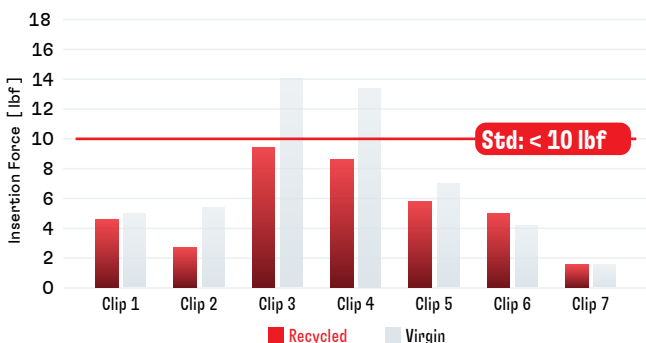
Transition from Virgin Nylon to the Henkel Recycled Nylon Portfolio.

Following extensive research and quality testing, Henkel and the OEM selected the ideal recycled nylon formulations for NVH applications. With options for infinitely renewable sourcing, Henkel recycled nylon acoustic sealing baffles can deliver on OEM CO2 sustainability goals while maintaining assembly ease and performance standards. By moving away from virgin polyamide yarns, Henkel reduces direct process energy demand and CO2 emissions – all at a competitive cost. Beyond sustainability considerations, Henkel offers recycled nylon formulations that meet performance requirements for insertion effort, extraction force, warpage, sagging and cracking.



IMPROVED INSERTION

RECYCLED VS. VIRGIN NYLON

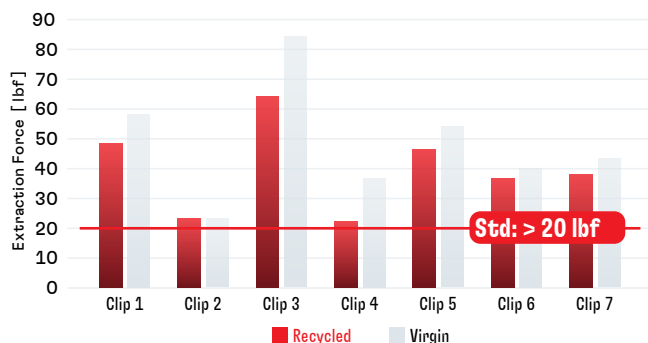


Henkel's recycled nylon clip formula requires less insertion force than virgin nylon for improved line efficiency and less rework due to breakage.



FIRM ANCHORING

RECYCLED VS. VIRGIN NYLON



Extraction force for Henkel recycled nylon clips is similar to virgin nylon clips and exceeds the industry standard of doubling the insertion force.

LEARN MORE

henkel.com/sustainability

