

From Subjective to Scientific: Inside Dow and GoodBed's Data-Driven Mattress Testing Program



One of the biggest challenges in understanding mattress quality is the lack of consumer-facing standardized testing to quantify comfort and performance. Today, both companies and consumers rely on subjective definitions – shaped by personal perception rather than objective measurement. As mattresses have evolved, the industry has lacked reliable, standardized tests to evaluate the true performance of modern designs.

This gap has implications across the value chain. Consumers often struggle to identify the mattress that best suits their needs, manufacturers lack clear frameworks to optimize mattress designs and suppliers have limited visibility into how their components translate into real-world experience, making it more difficult to develop innovative and effective materials. To help close this gap, Dow and GoodBed partnered to bring a more structured, science-based approach to measuring comfort and performance.

A Scientific Foundation for Comfort

At the center of the collaboration is Dow and GoodBed's shared commitment to evaluating and communicating mattress quality in a more holistic and objective way. The partnership combines Dow's advanced lab capabilities at its ComfortScience™ Studio with GoodBed's Mattress DNA™ evaluation framework. The goal is to translate the human experience into standardized, data-driven product metrics.

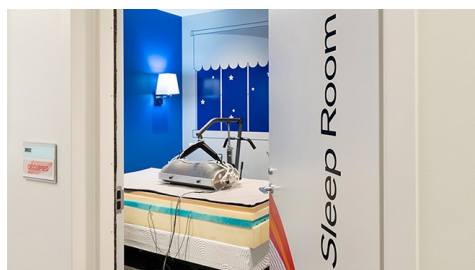
"From the start of this journey, we knew that Dow's materials science and testing capabilities would be a perfect match for the uniquely comprehensive database of mattress knowledge we are building," said Michael Magnuson, Founder and Chief Executive Officer at GoodBed. "Together, we've designed tests that accurately measure the attributes most important to consumers, which will help us improve both the buying experience and materials development for manufacturers and suppliers."

The implications of this research are significant. Manufacturers can develop more differentiated products while suppliers can pursue innovation tied to measurable performance attributes. Most importantly, consumers can make more informed decisions for a better night's sleep.

Putting the Framework into Practice

Rather than remaining theoretical, Dow and GoodBed are bringing manufacturers directly into early-stage testing. Through confidential pilot collaborations, brands can validate prototype performance in real-world conditions prior to commercialization. These engagements ensure practical

applicability and are already demonstrated through early test cases that show how the approach works in practice.



Translating Craftsmanship into Measurable Performance

A premium, legacy brand, Shifman Mattress Company is known for its commitment to high-quality materials and craftsmanship. To further strengthen its position, the company contracted Dow and GoodBed to validate its performance through objective data.

Shifman's Timeless Collection underwent extensive testing to evaluate key performance factors, including temperature regulation, edge support and long-term durability.

"For Shifman, this partnership was about putting data behind what we've always believed – and what our customers already experience," said Mark Quinn, SVP of Sales & Marketing at Shifman. "The independent insights from the Dow-GoodBed testing program validated that our approach delivers measurable performance while remaining true to the luxury, craftsmanship and materials that define the Shifman brand."

Navigating Scale, Speed and E-Commerce Through Data

SweetNight, by contrast, represents a newer, digital-first model.

As a modern sleep brand focused on delivering simple, intuitive solutions for everyday consumers, SweetNight faced a distinct set of challenges compared to legacy manufacturers. Operating in an e-commerce-driven environment, the brand must keep pace with rapid innovation cycles, build trust without in-store experiences and clearly communicate its product attributes to online shoppers.

Dow and GoodBed's testing approach helped address these

challenges by providing objective, testing-driven metrics to characterize the comfort and feel of their products – including softness, cushioning depth, memory feel and bounce – supporting more informed purchase decisions and reducing uncertainty for consumers who are buying sight unseen.

"Our work with Dow and GoodBed is helping consumers develop clearer expectations for comfort, which we anticipate will result in stronger conversion rates and fewer returns," said Yonah Lowenstein, Head of North American Sales for SweetNight. "By addressing key barriers in the buying process, we're enabling our customers to feel more confident in their purchase."

What These Tests Reveal Beyond Individual Brands

The work done with Shifman and SweetNight highlights the flexibility of the testing framework – demonstrating how it can be tailored to meet the distinct needs of both legacy manufacturers and digitally native brands.

"Our partnership with GoodBed in supporting these brands has reinforced that the consumer sleep experience is inherently multi-dimensional," said Chris Thiede, Technical Service and Development Scientist at Dow. "Performance attributes such as pressure relief, temperature regulation, moisture diffusion and support can vary significantly across products. By studying the factors that contribute to these mattress characteristics, we're gaining deeper insights into what truly drives comfort and sleep quality."

These insights are helping connect material performance directly to real sleeper experience. Standardized metrics now provide manufacturers, suppliers and retailers with a clear, actionable way to measure performance, replacing subjective claims with science-based data and enabling more informed product development and differentiation within the market.



Building Toward Industry-Wide Transparency

Looking ahead, this collaboration has the potential to expand, not only into other bedding-related products, but also through wider industry engagement, including possible inter-lab validation and the broader adoption of standardized testing approaches. Ultimately, this effort reflects a shared commitment to scientific rigor, transparency and improved outcomes for consumers. Dow's role is not to dictate industry standards, but to help enable the data and methodologies that support alignment across the value chain.

When consumers have confidence in how a mattress will feel, they can make the right decision the first time – reducing uncertainty and improving long-term satisfaction.

To learn more about Dow's ComfortScience™ Studio and its collaboration with GoodBed, download the full whitepaper and explore Dow's broader sleep portfolio, including polyols that help enable comfort, support and durability.