

“How Venus Group Engineered Bed Sheets to Bridge the Gap of Comfort and Durability” Case Study

Product Brand: Performance Twill® Bed Linen



Manufacturer

Venus Group

Industry

Textiles/Linen

Website

www.venusgroup.com

Location

Foothill Ranch, CA

Phone

800-421-6599

About Venus Group

Founded in 1972, Venus Group is a global textile manufacturer and distributor based in Foothill Ranch, CA. The company provides a wide assortment of textile products to a range of B2B markets - from industrial laundries, healthcare providers, hotels and everything in between.

The company’s core strength is its extensive manufacturing experience and in-house textile engineers. Venus is always looking for ways to innovate products and processes, to deliver true value and growth to both their customers and their respective end-consumers.

The Challenge

For businesses who need to change bed sheets daily – from hotels, healthcare facilities to cruise ships - keeping a clean, fresh and comfortable bed is an essential part of delivering a satisfying guest experience as well as maintaining a hygienic environment.

Most businesses regard 100% cotton sheets as providing the greatest level of comfort. However, the longevity of the sheets, or the number of times they can be used, is also a key consideration when purchasing, as the **replacement cost of bed sheets can bear a significant expense.**

When commercially laundered and ironed, sheets are subjected to high temperatures and harsh chemicals. **The average lifespan of a 100% cotton sheet is 50 to 60 industrial launderings.**

The Opportunity

There remains a need in the industry for a comfortable sheeting fabric that has a longer lifespan, helping businesses minimize their true cost of product ownership while still offering their guests exceptional comfort.

Our Approach

PROJECT DURATION (INCEPTION TO RECEIVING PATENT):	4 years (2 years R&D, 2 years patent filing)
TEAM:	USA: A full-time team comprised of three textile engineers. India: A full-time R&D team comprised of ten textile scientists.
NET INVESTMENT:	\$250,000
COUNTRY OF DEVELOPMENT:	India: textile infrastructure and expertise, raw material proximity China: raw material proximity
TOTAL VARIATIONS BEFORE FINAL PRODUCT:	12
CUSTOMER TEST:	5 months (Wash Test and Hand/Feel Test)

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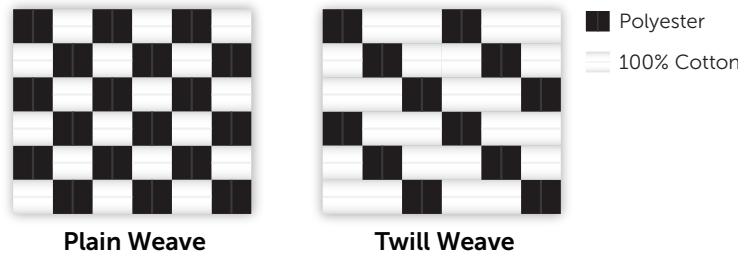
Our Solution

Introducing Venus’ patented Performance Twill® Sheets, an engineered blend of 100% premium cotton and textured polyester yarns.

Our team of textile engineers and R&D experts developed 12 variations of the sheets, testing various yarn weaves and tensile strengths (the resistance of a material to breaking under tension).

The final result, bed sheets that last **4x longer than the average 100% cotton sheet.**

To achieve the optimum comfort and feel of 100% cotton, a twill weave was selected, giving the fabric 2x the surface area constructed with cotton yarn. To deliver maximum durability, the construction along the length and width of the sheet was carefully evaluated. Sheets last longer if they have more tensile strength along the length and the width. Cotton yarns were chosen for the length, with polyester yarns along the width of the fabric.



The Final Results

Performance Twill® has been independently tested by SGS Labs for up to **200 industrial launderings** and has been successfully commercialized in our target markets. We are happy to provide customer references upon request.

