

C O N S T A N T I N E manufacturing process

For us, it's more than an initiative. The capacity of our efforts goes beyond earning points and endorsing buzz words. At Constantine, we have an environmental story uniquely our own. In fact, it is the foundation of our existence.

Constantine is a Product Innovation Company. Innovation and continuous improvement permeate every level of our business. Robert S. Weiner, Ph.D. founded Constantine with his breakthrough Multiple Yarn Infusion (MYI) technology, now patented. But his genuinely efficient and progressive concept was only the beginning. MYI set the stage for limitless product capabilities of exquisite composition and design. The rest of the story soon fell into place.

Every aspect of the Constantine manufacturing process is implemented carefully and efficiently. The superiority of our carpets is attributed to the careful planning and conservative use of materials and resources in and around its production. At Constantine, we value the beauty and aesthetic of our incomparable products; but more importantly, we both respect and evaluate all that occurs from when our hands begin twisting the fibers to when your feet are striding across them. We believe there are always ways to improve what one is currently doing, and this concept has guided our choices and ultimately led to a truly better, more efficient, state-of-the-art process.

THE CONSTANTINE PROCESS

Yarn

The performance of carpet begins with the quality of the materials that make up the carpet assembly. Constantine uses 100% recyclable yarn offered from its three fiber suppliers, Solutia, Honeywell, and Invista, which are then twisted and heat set in our Yarn Facility to ensure optimum wear and performance.

All of Constantine's fiber suppliers have a commitment to quality and environmental friendliness unsurpassed in the fiber production industry and well match our goals at Constantine. Through alliances with these fiber manufacturers, Constantine actively participates in programs like Solutia's "Partners for Renewal™," Honeywell's "6ix Again™," and "The Invista Reclamation Program™" to reduce the amount of carpet disposed in landfills. Furthermore, not contributing to the solid waste stream that fills landfills is such a priority to Constantine that we will guarantee to pick up and recycle any and all of our carpet at the end of its useful life.

Constantine has also developed the ability to incorporate recycled fiber into many of our existing carpet patterns with varying percentages of recycled content. Additionally, our vinyl backing for tile and 6' vinyl backed goods always has 33% post-industrial recycled content and can be specified with up to 50% post-industrial recycled content.

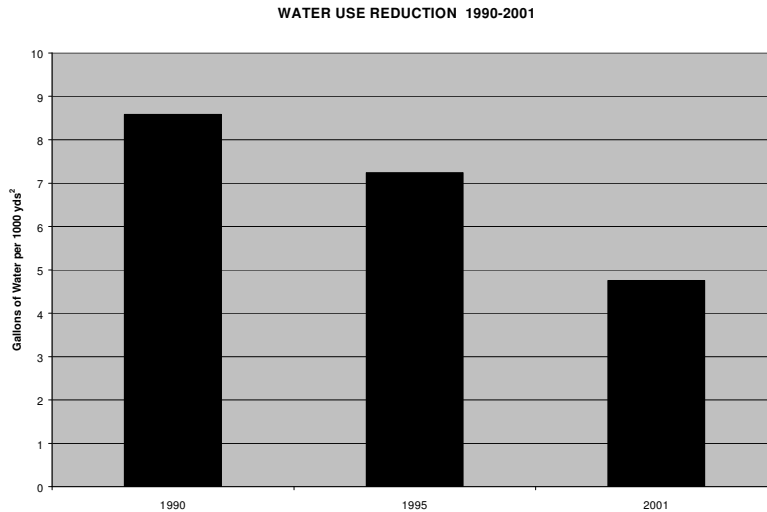
Dyeing

The greatest environmental advantage to Constantine carpets takes place in the dye house. Dyeing is among the most environmentally sensitive parts of carpet production. A wide array of dyes and chemicals are used and stored at the dye house. Proper storage and control of these substances has eliminated the chance of any accidental contamination of the land surrounding the dyeing facility.

Constantine uses a specialized, multiple over-dyeing process that maximizes water and energy efficiencies

The process incorporates water recycling and minimum water utilization. Additionally, the process recycles heat with minimum heat-utilization. Conventional dyeing processes (i.e. yarn, beck dyeing) use four to five times the amount of water and energy on a per square yard basis.

In addition, Constantine's proprietary dye system eliminates stress and agitation imposed by all forms of beck dyeing. Constantine's dye system incorporates a non-tumbling, flat bed dyeing configuration that maximizes bulk, enhances color uniformity, promotes dimensional stability, and does so in dye lots up to 12,000 sq. yards.



This chart illustrates the water savings at Constantine's dye house. The dramatic drop in 2001 reflects the elimination of beck dyeing.

Tufting

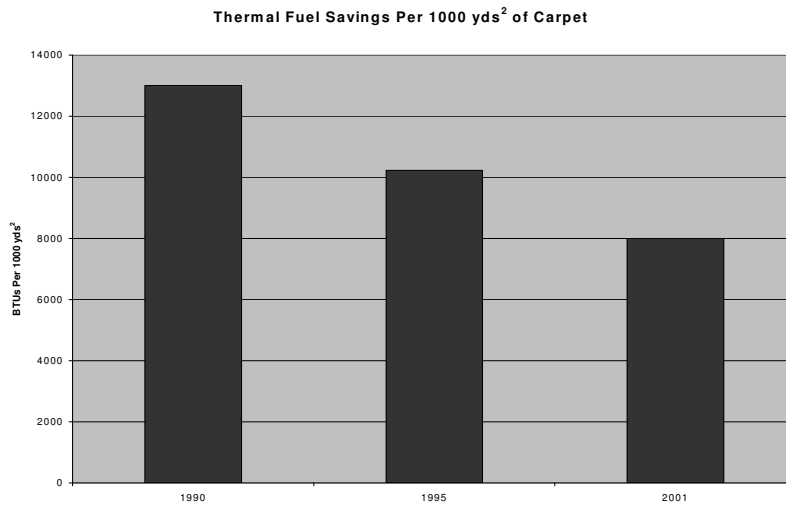
Tufting is traditionally a wasteful and energy intensive process. Constantine's patented Multiple Yarn Infusion process is a happy exception to this statement. It requires no extra energy and has significant advantages over traditional tufting methods.

The process totally eliminates creel outs. Creel outs are generated when a particular style of carpet finishes a production run. Excess yarn must be pulled off the creels with the hope of using it in the future. Very often the yarns prove unusable and must be discarded. Constantine's unique manufacturing process has totally eliminated this waste stream.

Unlike traditional carpet mills, the vast majority of yarn used in Constantine's manufacturing process is kept on plastic cones. When a cone is empty, it is sent back to the yarn supplier to be reused. Plastic cones resist wear and tear and have extremely long lives. When you consider that each creel uses hundreds of cones the savings become quite significant.

In addition to yarn savings, Constantine also recycles all scrap materials. Everything from primary backing, sheer lint, and greige goods are bailed and sent to a recycling facility. They are transformed into traffic cones, picnic tables, and carpet padding among other things.

Constantine is dedicated to conserving our energy use. A series of skylights reduce the number of artificial light sources needed. This saves electricity and provides good natural light for employees. In 2002, Constantine began harnessing the heat energy released by our air compressor to heat the plant during winter months.



This chart illustrates Constantine's steadily increasing energy savings.

Recycling

Constantine has an ongoing commitment to use recycled products, or components thereof, whenever possible. We use recycled materials for architect folders, stationary, envelopes, cards, shipping materials, etc. We recycle all aluminum cans, scrap carpet, boxes, paper, magazines, printer cartridges, batteries, and other office waste.

Our Philosophy

Constantine was founded on the notion that “the best product wins,” and striving toward the “best product” standard has required innovation on every level of the business. Constantine is committed to environmental stewardship, and we believe that efficient, conscientious processes are among the greatest, most responsible environmental investments we can make.