

Quality Textiles

Maintaining and Environment of Excellence

The current cotton shortage is a situation we all face; there's no debating that point. But how does one assure that the product received is the quality that was expected? "The industry learned some valuable lessons when the A Index peaked at \$0.90/lb in March of 2008," said Joe Scully, Medline Vice President of Global Sourcing. "At that time, the industry was faced with a severe cotton shortage for the coarse count yarns which resulted in extremely poor quality towels and blankets due to the presence of a much larger percent of waste in the yarns." Scully noted that "This gave a dingy/streaking appearance and shrinkage issues to the affected textiles causing quality issues for the end users, while textile supplier's spent huge amounts of time and resources to fix these problems."

Today purchasing agents scramble to obtain textile products within budget; concerns erupt over the availability of products; and processors take measures to maintain expected product life. But how can we avoid a repeat of the quality concerns from 2008? We are ultimately responsible for assuring that the textiles received are the quality products we ordered. To maintain quality, attention must be given to the elements within our control. A diligent manager will

- Clearly communicate the product quality desired,
- Identify acceptable vs. unacceptable products,
- Measure, test, and document, and
- When quality issues occur, respond with the facts.

COMMUNICATE QUALITY DESIRED

Textiles of a lesser quality are not just a nuisance; inferior products can compromise patient outcomes, employee safety and the bottom line. We can't afford any of these! Bil Johnson, Managing Director for Quality with Encompass Group voices concern over use of weaker yarns due to poor quality cotton which can cause a reduction in tensile and tear strength, and the increase in linting from shorter staple lengths fibers.

Textiles that are lower quality wear out faster, adds Peter Menaker, Regional Account Manager with American Dawn, Inc. His concerns include knit sheets that pinhole and woven sheets that will tear. "Terry products get grey and dingy with fewer processing's if they are made of lower quality fibers, lower thread count, or lighter overall weight" says Menaker. Even if the price per piece is kept the same, 20% more total dollars are spent for replacement linen because the quality was down and the products wore out faster!

IDENTIFY ACCEPTABLE VS. UNACCEPTABLE PRODUCTS

This is an excellent opportunity to develop a partnership with end users. Menaker suggests that working together they can agree on what constitutes an acceptable vs. unacceptable piece of linen. "Establish a level of quality that meets their collective needs." Quality is in part, a "look and feel" (i.e. white and soft), but these characteristics are produced by adhering to a set of product specifications that can, and should, be measured to make sure they are consistent over time.

Is a washcloth that is supposed to be 12 x 12" and fluffy that becomes 10 x 11" and rough after one washing, acceptable? If inspection doesn't occur as the product comes out of the box/bale, how do you know if the change occurred because the textile mill made an error or if the dryer was too hot and scorched the goods?

MEASURE, TEST AND DOCUMENT

Good practice includes consistent monitoring. Menaker states that at designated points four main textile product specifications should be assessed:

- Initial Weight – Don't guess; use a digital scale to measure from fractions of an ounce up to 25 pounds. Weigh multiple samples from a few different boxes.
- Size – Know the difference between "cut" size and "finished" size. "Cut" size is the dimension of the fabric before hemming. Hems can take off up to 4" or more in length from a sheet. Therefore your 115" sheet was never actually 115" long; it measured 111" when it came in the door.
- Color – White comes in a million shades. What happens when sheets don't even start out at the same color white? Retain an unwashed control sample. Compare subsequent shipments to the control. Compare in natural/outdoor light as artificial light changes the color of everything.
- Integrity – Weigh and measure not just before washing, but after one wash, and after at least seven washes. Lower quality fibers result in increased linting. Increased linting is an indication that your sheets and towels are getting lighter. Some sheeting products are made heavier by the addition of excessive starch during weaving and finishing. This extra starch brings the weight up to specifications, but only until it is washed away.

Dan Sanchez, Vice President, Medcrest Textiles, recommends avoiding the “subjective” assessment by having a detailed specification for items from the start, and a sample provided by the supplier which will serve as a standard. “The best practice by an end user would be to test-wash their textile sample prior to contract delivery” adds Sanchez. Documentation will provide the end user with facts for making a decision based on previous use, experience and costs.

Linen utilization data becomes a valuable tool for identifying patterns of change. This can be an early indicator that textile performance is slipping. If product specifications have not changed and par levels remain the same, yet bath towels previously reaching 18 uses now only last for 12, this may indicate that product quality has been compromised. It is necessary that proper inventories are maintained and details provided through the use of linen management software can be of great benefit.

PRODUCT INTEGRITY AND SAFETY

Assuring product integrity, especially in regards to barrier products is essential. Sanchez reminds managers to choose a supplier with extensive FDA (Food & Drug Administration) compliance experience and provides barrier products that adhere to the AAMI Guidelines for the US and Canadian Standards.



AAMI Standard PB70:2003 on Liquid barrier performance and classification of protective apparel and drapes intended for use in health care facilities, identifies four classification levels of barrier performance. AAMI PB70:2003§4.1.1 states that “each surgical gown, other item of protective apparel, surgical drape, and drape accessory shall be prominently labeled with its class of barrier performance....” AAMI ST65:2008§5.2.1 recommends that “the identity of all incoming reusable surgical textiles (e.g., gowns, drapes, wrappers) should be verified for compliance with product purchase specifications.” This AAMI standard also recommends laundering all new items before use, following their removal from shipping cartons and packaging.

WHEN QUALITY IS A QUESTION

“There are standard test methods that can be employed to guarantee that certain criteria are being met” notes Sanchez. He recommends American National Standard AATCC 61-4A for Colorfastness and AATCC 96 for Dimensional Changes in Commercial Laundering. These can be conducted by any accredited textile laboratory. Test piece services utilized on a systematic basis are an excellent means to track quality of products throughout their performance life.



If product quality and performance continue to be an issue, Johnson recommends changes in product blend. A change from 55/45 Cotton/Poly to 55/45 Poly/Cotton or higher polyester may produce the desired product life. When quality issues occur, and they will, Sanchez reminds us to notify the supplier immediately, provide samples, and invite them to your facility to see the problem first hand.

Addressing the cotton shortage, rising prices, and challenges regarding textile quality will be an endurance race and not a sprint. And most agree that it is extremely unlikely we will see a return to previous prices. How we manage this situation is up to us. Perhaps we can borrow from the philosophy of Steve Jobs, who said “Be a yardstick of quality. Some people aren’t used to an environment where excellence is expected.”

We thank our contributing textile partners for this material:

- Encompass Group
Bil Johnson, Managing Director, Quality
bil.johnson@encompassgroup.net
- American Dawn, Inc.
Peter Menaker, Regional Account Manager
pmenaker@americandawn.com
- Medcrest Textiles
Dan Sanchez, Vice President
DSanchez@medline.com