Linen Life, Replacements and Rejects

The Revolving Door

linen life, replacements, and reject percentage. These three terms are prime issues to the laundry owner/operators these days. As laundries fight to win, maintain and keep business, these key factors can and will continue to play an important role in the success and failure of any given laundry. As laundry operators continually launder products such as scrubs, gowns, blankets, uniforms, sheets, pillow cases and terry towels, the life of the product, how many times any specific item is used, and at what point a product is replaced or rejected is what makes or breaks a laundry day in and day out.

Fabrics in the products being processed in laundries have advanced from years past. A higher percentage of synthetic yarns as well as more ring spun cotton is being integrated into the manufacturing of the fabrics used to produce scrubs, gowns, bed linen, uniforms and toweling. This new wave of fabric technology plays an important role in adding to linen life and reducing replacements and keeping the reject level down.

At one time, for example, 100% cotton scrubs were the norm. However, as laundries wanted a product that would last longer and enable them to get more use on that specific product, polyester was introduced into the fabrics thus adding life to the product. Over the years this transition continued as poplins that were poly rich in content were developed, adding life to the garment compared to its 100% cotton predecessor. Today there is a new wave of 100% poly products rolling into the marketplace, thus yielding products that can seem to last forever, so to speak. With this added linen life comes a higher purchase price to the laundry. However, considering that the replacement factor decreases with these new fabrics, so does the overall costs.

Scott Delin
Sr. National Healthcare Market Executive for Fashion Seal Healthcare, a division of Superior Uniform Group
Another factor in maintaining the investment in these new textiles that laundries need to consider is how to process them. As fabrics have evolved, so have the machinery and the chemicals being used in wash formulas. These two factors can and will have a direct impact on the linen life of product.

Times have changed and the way we do business is changing on a daily basis. To add linen life to products, reduce replacements and keep the ragout factor low, laundries need to take stock in what is being used and how it is being processed. Are we keeping up with the change in today’s technology? It can be a fast-paced race, but one worth running.

More on Linen Life

Product life expectancy is a very tricky topic. Life can be defined in a laboratory setting based on number of washings before reaching a certain standard of quality. However, this is not true product life in a healthcare setting where items are used, abused, and mysteriously disappear. Some of the factors that cause linen to prematurely leave the system are:

- Bloody or isolation linen placed in biohazard containers
- Inappropriate disposal in trash (no discard program)
- EMS and nursing home transfers
- Linen sent home with patients, particularly baby linen and blankets
- Pilferage (patient or staff)
- Early discard due to abuse – cutting sleeves on patient gowns, writing on scrubs, electrodes and tape left on linen sent to laundry

One formula that has been used in the industry is as follows:

\[
\text{Annual product usage ÷ Annual product replacement} = \text{Life Expectancy in uses}
\]

A hospital must conduct inventories and usage studies in order to accurately obtain the above data. Some facilities that do not conduct inventories or do usage studies use the following formula:

\[
\text{Annual pieces delivered (from laundry) ÷ Annual product purchases}
\]

This formula assumes that pieces delivered are equal to pieces used and that the facility actually purchases the same amount as is leaving the system but gives the facility something to work with.

Barb Williams
Operations Manager/Consultative Services
Standard Textile

Make the process easy for the Customer.

Ensure that the proper return process is easily accessible! If the reject process calls for returns in a brown reject bag, then make sure there are brown reject bags at each distribution point. The customer cannot be expected to follow the process if the process isn’t available.

Educate the customers on the process: SIGNAGE EVERYWHERE AND COMMUNICATION. Make sure the customers know the process. Easy to read and well placed signs explaining the process will help educate.

Educate on how to avoid rejects: Let the customers know that their actions absolutely can have a direct effect on rejects. Avoid place adhesive products on linen. Only use linen products for their intended purpose.

I know this sounds too simple, but all of this needs to be discussed at all opportunities. Linen Utilization Committee meetings, linen awareness events, during customer visits. And the linen committee members as well as the linen distribution team at customer facilities have to help with getting the message to the users by communicating. They are ones that have direct access to users so they can have the most impact on education.

Duane Houvener
ADI National Manager
AMERICANDAWN

ABOUT THE AUTHOR
Scott Delin is the Sr. National Healthcare Market Executive for Fasion Seal Healthcare, a division of Superior Uniform Group and is a graduate of Philadelphia College of Textiles and Sciences, now known as Philadelphia University, and holds a Bachelor’s degree in Apparel and Textile Production and Management.

He currently serves as a standing board member for TRSA, a member of the TRSA Healthcare committee, sits on the board of directors for ARTA, ALM Member and active member for the HLAC advisory committee.
Impact on Textile Life Expectancy:

1. Overloading or underloading a washer
Overloading does not allow the textile products to benefit from the agitation to properly clean, since chemicals and water cannot adequately reach all the products to be effective. Chemicals dispensed onto dry textiles (water can’t reach them all in a tightly packed situation) will likely damage the products when soil has not been properly removed. When inadequately cleaned products face the heat of a dryer or ironer it sets stains creating a reject or reclaim issue that will shorten the product life IF the stain can be effectively removed.

2. Proper soil classification
Submitting a light soiled textile to a heavy soil wash formula can increase the degradation of the textile. Processing a heavily soiled product on a light soil wash formula will not adequately clean the product, subjecting it to repeat washing(s) with a rewash formula which will speed up the normal wear of the product.

3. Equipment maintenance
When proper heat settings in dryers are exceeded, life expectancy is shortened by scorching. Damaged ribs on washer/extractors will shorten the life of the textiles by tearing or snagging. Improperly operating drains and incorrect spin speeds can abuse the textiles through poor processing techniques.

4. Over drying products
Excessive heat by lengthening the dry cycle, increased temperature of the dryer, putting dry sheets or low moisture products through an ironer or the ironer on a slower speed will scorch the products and/or crush the fibers beyond recovery.

5. Inadequate par levels
Pushing textile products (especially natural cellulosic fibers) back into use too quickly and eliminating the period for the product to rest. If the pH Balance of the chemical in the textile is “off,” ironing will impact the life.

A lot of the textiles we use are a cotton poly blend. We use this type of linen for the prolonged life and durability of the product. A cotton/poly blend holds up better under stress of being washed very frequently better than cotton and it is more forgiving when it comes to wrinkling coming out of the wash process. Be sure the extract time is not too long; if you have a tunnel with a press that the pressure is not so great as to set any creases into the fabric; or that the linens have opportunity to cool down somewhat coming out of the washer so the fabrics don’t go into fabric shock.

Richard Griffin CLLM, VP of ALM
Laundry Manager
Keystone Lodge & Spa

Keeping it Clean
Earn one Laundry & Linen Management credit hour by completing the quiz over the material from this educational offering. To maintain ALM credentials individuals must submit proof of continuing education in laundry & linen specific programs every three years.
Access to contact hour quizzes are a benefit of membership in ALM
Check your current continuing education status here