WE CAN STOP CONTAMINATION
~~THIS IS THE WAY TO DO IT~~

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Abstract

Textile mills had more problems with contamination in the 1995 cotton crop than any crop in history. The cost to mills runs into many millions of dollars. There has been a lot written about this subject. Many meetings have been held, and it has been a favorite topic at many seminars. However the fact remains that the problem is getting worse, not better. It is time that we solve the problem once and for all. It can only be solved if ginners, producers, merchants, and mills work together and resolve to eliminate it.

Most contamination is caused by:

1 Module covers
2 Tie straps used to secure the covers on the modules.
3 Tie strings and ropes used to tie up rolls of module covers at the gin.
4 Other items such as gloves, shirts, coats, caps, socks, plastic bags, etc.
5 Bale bagging

When cotton becomes contaminated, it remains within the stock throughout processing, and the defects cannot be found until fabrics have been bleached or dyed. If you are familiar with textile processing, you can understand that only a few ounces of foreign fiber can contaminate many thousands of pounds of yarn and many thousand units of finished products such as sheets, pillow cases, shirts, and other garments. Often contamination is not found until the finished product has been made ready for shipment to the retailer. And, of course, there have been times when it has not been found until it has reached the retailer or the consumer.

The answer to the contamination problem coming from bale bagging is a four letter word...FILM. We have solved this problem with our direct buying of cotton by specifying polyethylene film bale bagging. Bagging made from woven fabric containing yarns spun from fibers can cause serious problems. If samples are cut from bales enclosed in this type bagging, fibers will be buried into the bale and will remain there throughout processing.

I believe it is also important to mention that our experience at Parkdale tells us there is little possibility of having contamination from Burlap Bagging.

Most of the contamination that we have had problems with on last year's crop has come from module covers and related items. Last summer, one of our customers had 70,000 dozen shirts returned to him because of a black speck that was found by the retailer. The black speck came from the black mesh skirt often used on module covers. We guarantee our yarns to be dyeable and free of contamination, consequently, our customer came to us with a claim. As you can imagine, one instance such as this can cost upwards of a million dollars. You will be interested to know that the retailer told our customer to straighten out the problem or he would source his future requirements overseas. When this occurs, it not only hurts Parkdale and our customers, but it also hurts everyone in the American cotton industry.

There have also been instances where other customers have found contamination and it has all been very costly. Module covers have not been the only cause of contamination. We have found some contamination caused by black and blue straps that are used to secure the covers to modules. And, we have found contamination caused by strings and ropes used to tie up rolls of module covers at the gin.

Because of the seriousness of the complaints from our customers, we have taken steps to solve this problem by working closely with the Ginners and Producers from whom we buy cotton direct. We met with one of the major suppliers of module covers and developed some specifications which we believed would be a good remedy. These covers were used by all of the Producers we did business with in our direct buying program on the 1996 crop. Some of our mills are exclusively running the cotton produced by these farmers and as of this date, we have not had any contamination problems.

With all of the above in mind we have developed specifications to be used by our Producers and Ginners for module covers and related items for the 1997 crop. They are as follows:

Specifications for Module Covers for Cotton

Listed below are the specifications for cotton module covers to reduce contamination. These specifications are to be used by all producers and gins shipping cotton directly to Parkdale Mills, Inc.

Tops and Ends:
The base fabrics for the tops and ends are to be made from woven slit film. Polyethylene is preferred; however polyester will be satisfactory. Fabrics made from woven yarns spun from fibers will not be accepted.

The tops and ends will be coated with either a polyethylene or polyvinyl film with UV inhibitors. Polyethylene is preferred.

All snow white colors are preferred; however, if required, only the upper portion of the top will be permitted to be colored. Light pastel shades of yellow, orange, or green

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will be permitted. Blue will only be permitted if it is a very light pastel shade. Only snow white will be permitted on the bottom of the cover next to the cotton.

Skirts:
We prefer skirts made from slit film and with the same specifications listed above for tops and ends. Only snow white colors will be permitted.

If a net mesh skirt is desired, it must be raschel knitted from a snow white polyethylene or polyester monofilament of not less than 600 denier. Polyethylene is preferred.

All Threads Used to Sew Module Covers Are to Be Snow White Polyester

Tie Straps and Buckles:
All tie straps are to be woven from polyester yarn with a binding fill to prevent unraveling and the ends are to be heat cut. The width is to be 1 1/4 inches. Sufficient strength is required so that stretching or breaking will not be a problem. Ropes and strings used to tie up rolls of module covers will be 100% cotton. All strap, rope and string colors are to be snow white.

The buckle will be a heavy duty quick release toggle type that lends itself to securely fastening the strap and with an easy release.

Summary: all module cover tops, ends, skirts and straps are to be a snow white shade of white on both sides. If it is required that the top of the cover be colored for identification purposes, only very light pastel shades in the colors listed above will be approved. The bottom side of all tops are to be snow white.

Any variance from the above specifications must be approved.

So, How Do We Stop Contamination?
The most effective way is to ask all module cover manufacturers to adopt the broad specifications listed above. Those with whom I have discussed this matter say they are willing to make the necessary changes.

In addition, it would be helpful if the National Cotton Council would pass these specifications on to all Ginners and Producers so that they may be used when ordering module covers in the future.

Merchants and Co-ops could include these specifications in their contracts with producers and it would go a long way toward making everyone aware that this is a practical way to stop contamination.

For Ginners and Producers:
Contamination originating from bale bagging can be practically eliminated if all ginners would use either Polyethylene Film or Burlap Bagging for Bales. This would go a long way toward eliminating the problem we have with contamination coming from bale bagging.

Ginners should make sure that their gins are free from contaminating items that may be lying around inside the gin, in the gin yard, and in the module yard.

One of the key places to check is the module yard where modules are stored prior to ginning. Often pieces of module covers and tie bands can be found lying around and these can easily get into the cotton before ginning. It would be best if knives were taken away from those individuals that remove module covers at the gin. Often the tie bands are cut with a knife and pieces are left lying around.

At least twice each day, Ginners should check their processes to make sure that contaminating products are not entwined around the cylinders and shafts of their equipment. The beginning processes at the gin are most susceptible to collecting contaminating items.

Producers should scout their fields before planting and make sure that no contaminating products are lying around.

Immediately prior to harvesting, Producers should scout their fields and remove any materials that can cause contamination. During harvesting, the picker operator should watch for contaminating products and remove those he finds that can get into the basket with the cotton.

One of the most important things to do is to instruct your employees properly and follow up to see that they are doing their job as they have been instructed. I believe it is good to discuss contamination with them frequently so they will know you are vitally interested in solving this very important problem.

We cannot afford to underestimate the importance of controlling contamination. All of us are aware of American business that has been lost to countries such as Japan, Germany, and others in Europe and Asia. Not only has a substantial portion of automobile manufacturing been lost to them, but capital machinery, machine tools, and much of the electronics industry has been lost to them also. The reason we lost this business was because of QUALITY, not price. Let us work together and not let this happen to our American Cotton and Textile industries.

We Can Solve the Contamination Problem!