

**FIBER NEEDS FOR TEXTILE CONSUMER**  
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It is indeed a pleasure and an honor to be with you this afternoon, and I am grateful for the invitation extended by the National Cotton Council, to speak to you. I have been astounded by the quality of the presentations today, which have placed me in a disadvantage, already adding to my preoccupation, such as being the last speaker today, a foreigner from Brazil, speaking with a British English accent, and representing the world's worst complainers, the textile industry. I certainly can not escape the last one, since in fact I have the privilege of chairing the International Textile Manufacturers Federation's, Spinners' Committee. This well renowned Committee, consisting of twelve members, each being an experienced cotton spinner from a different country, and these twelve countries together represent, 65% of cotton traded and consumed in the free world. The Committee's principle objectives are to bring the grower closer to the textile industry, to better understand each others needs, and future needs.

As the title of my presentation suggests I am to talk about the fiber needs of the textile industry, but I am proposing to stray slightly from this path since I think we all know what we want, QUALITY, with a capital Q, strong, nothing below 30 gm/tex, uniformity 90%, in fact an absence of short fibers, mature and well bodied, micronaire 3.7 to 4.2, as well as good colored cottons, the sort of characteristics which one tends to leave in the hands of the seed breeders, the soil and the climate. I would like to suggest that additional actions can be taken to contribute to achieving some of these important quality goals in the short term.

It is no secret that outside of the USA, cotton is losing market share to synthetics, in fact at an accelerated pace over the last two years, and one of the principle reasons for this, in my opinion, is that cotton is not keeping up with the technical advances in the textile sector. The textile industry battles against rising costs, but with stable textile prices, the industry must look for productivity to defend the bottom line, which means faster and faster, low-labor machines. This in return increases the percentage participation of cotton in the final cost. Now if cotton cannot handle the high speeds required, which by the way, the modern synthetics can, then the migration will eventually be away from cotton, despite the popular belief as regards comfort and ecology.

The spinners predict that if cotton does not show performance improvements over the next few years, cotton's market share world wide will begin to drop even more rapidly. This effects us all, since the export market is vital to the US grower.

On the other hand I must admit that we spinners in general can also be short sighted, and send the wrong message. We invest millions of dollars in sophisticated machinery, and then fight over 25pts when we buy the raw material, giving the impression of that only price consideration is important. This **must** and **will** change over the next few years. Improved Quality and Performance **must** be the name of the game.

In the long term we must look towards the seed breeders, and farming technology to halt this decline of market share, but there are **actions** which could be taken in the near term, to permit cotton to initiate the reversal and regain an overall growth rate through quality and performance, thereby meeting the future **fiber needs for the textile consumer**.

Unfortunately any suggestion can be interpreted as a criticism, and I apologize before hand, but I have no intention of offending anyone, I am just a passionate defender of cotton.

Ladies and Gentlemen, growers of cotton, you plant your seeds, and tender your fields with love and care, the seeds have been bred to provided high yields, resistant to diseases and with excellent fiber characteristics, the cotton has been picked and then, Oh no! you deliver your cotton to an archaic process called "saw ginning", so that these machines can tear your hard work to threads, excuse the expression, and destroy a greater part of the beauty of the cotton which came from the field. The fact is that ginning technology has not changed over the last fifty years or more, only the machines run faster and produce more bales per hour but the approach has not changed, though certainly some do it better than others. Why is it that we are fascinated by grade and grade only? It seems that we must obtain 21's or 31's like we must drive a Cadillac, but today. Ladies and Gentlemen, we don't all need a Cadillac there are plenty of other makes which do the job just as well.

We, the textile industry do not really require grade as such, we require, uniformity, strength, elongation as a first step, then staple length, micronaire and color, the grade should be a consequence, not an objective. Generally speaking to achieve a high grade with saw ginning we damage the principle spinning characteristics that the industry is looking for, and introduce others, like neps for example which do not exist on the cotton plants.

How has this happened? Well, in the past history, visual appreciation of the grade was the only way of determining

the quality of cotton, and so grade was all important, but today with the introduction of HVI and other testing instruments, we are able to see further into the cotton, and we can see that this rush to obtain a high grade is in fact detrimental to the cotton. The textile industry has the most modern machinery for cleaning and taking the trash out of cotton, which in this case is a gentle process, so as not to damage the fibers. Such an approach should also be the objective of the ginners, even if that means a lower grade because of trash content, and though this means a lower price per pound, the fact is, more bales are produced, since the trash that is not removed goes as cotton, whose weight in the final analysis usually more than offsets the price difference for grade.

I am not suggesting that we should scrap all existing cotton gins today, I am only suggesting that quality standards and certification should be incorporated in order to initiate the preservation of the original characteristics of the cotton, and in this connection I would advocate that, apart from the exclusion of **all** but **one** lint cleaner in the process, particular attention should be paid to the heating and humidifying of the cotton during ginning, as well as not overloading the system.

Mr. W. Stanley Anthony, USDA Stoneville, has published in Textile World a fascinating article entitled "Ginning Control can Optimize Fiber Quality" which shows that careful selection of ginning sequences can maximize fiber quality, and thereby maximize the return to the growers.

Our own research in Brazil and Argentina though less extensive indicates results similar to those as shown by Mr. Anthony.

It can be shown that controlling fiber **moisture** at each stage of the ginning process compared with conventional ginning can:

- **Increase** fiber length 4%
- **Reduce** short fibers 47%
- **Increase** the size of seed coat fragments 18% (and thus facilitating their removal during textile processing)
- **Boost** measured strength 5%
- **Raise** fiber yield 3%

Whilst eliminating just one stage of lint cleaning will:

- **increase** fiber length 2%
- **reduce** short fibers 22%

--- **increase** the size of seed-coat fragments 21%

--- **decrease** neps 15%

--- **increase** fiber yield 6%

Ladies and Gentlemen this is a wonderful **all win** scenario:

The **grower** can increase return by +/- 3%, (considering may lose 2 - 3 % price difference for the lower grade in the example of non-lint cleaning)

The **ginner** can produce 6% more bales.

The **warehouse** has 6% more bales to store.

The **textile industry** has cotton of superior intrinsic qualities, to improve quality and reduce costs.

At the same time we, and in this case I mean, the growers and the textile industry together, should be pressing for new high speed ginning technology to be introduced, or may be even, invented. Would this not be a great challenge for one of your national organizations to take this lead? How about working together with the textile industry, and their machinery suppliers, who surely are interested also in improving cotton performance, if only so that their new machines can stretch production and costs even further. The Spinners' Committee of the ITMF, and I can speak for my company as well, are prepared to collaborate fully in such a project. This great country has placed men on the moon, surely separating the cotton fiber gently from the seed cannot be so difficult.

While I still have your attention, I cannot miss this opportunity of raising with you all one other preoccupation of the textile industry, namely contamination. Contamination is like a virus, once it has attacked it is almost impossible to eradicate. We must work together to ensure that foreign matter especially other fibers and plastic or polypropylene does not enter the cotton before the ginning process. The losses this plague costs the highly automated textile industry is enormous, and is another of the negative aspects which is holding cotton back against the synthetics. Man-mades do not suffer from this disease. May I ask you all, from growers to truckers, to redouble your efforts to eliminate the contamination of cotton.

In this connection I find it hard to understand that the growers and ginners, still support the opposition, the synthetic fiber producers, by wrapping their bales in polypropylene or plastic materials. How is this possible? For a few dollars we throw away the possibility of manufacturing over 70 million yards of cotton cloth, which depending on the weight could mean 50,000 bales

of cotton. Apart from the increased consumption of cotton this proposal would eliminate contamination from, and disposal of, the bale coverings, a very serious problem. If I may dare say so I believe that the industry would pay a premium to receive cotton bagging instead of synthetic bagging, since, apart from the risk of contamination, it is strong, allows the cotton to breathe and avoids condensation, and the fibers of the wrapping can be recuperated by the industry, and re-spun in open-end spinning.

Ladies and Gentlemen, Cotton has a great future, **but remember the future only results from the present**, let us not fail to break out of the old traditions as regards the ginning and bale wrapping, and go forward in to the 21st century with the sure knowledge that we have done **our** part to ensure the growth and usage of this God given natural fiber.