



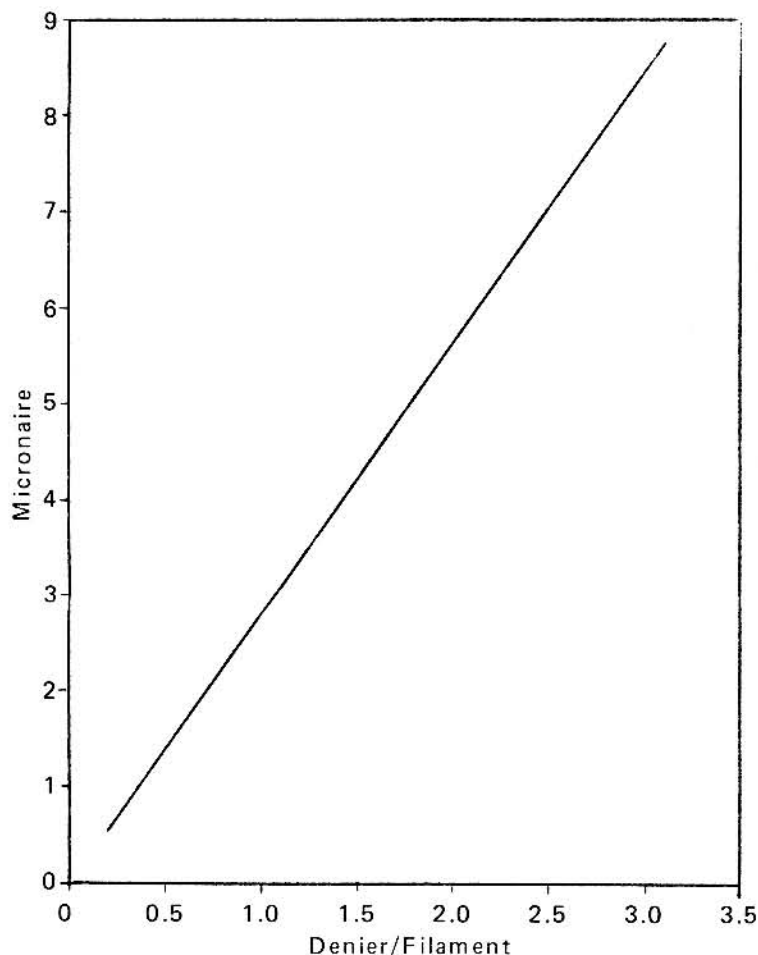
TEXTILE TOPICS

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COTTON FIBER FINENESS: FOR THE SPINNER OR THE FARMER? We are carrying the accompanying graph to show the relationship between cotton micronaire and man-made fiber denier. We realize some of our readers are already familiar with this, but we are showing this relationship to help make a point that needs to be made.

MICRONAIRE VS. DENIER



Denier/ Filament	Micro- naire
1.00	2.80
1.25	3.55
1.50	4.25
1.75	4.95
2.00	5.65
2.25	6.35
2.50	7.05
2.75	7.75
3.00	8.45

We have been aware for some time of the interest in using finer fibers for high-production spinning, particularly in the finer rotor-spun yarns. A recent conversation with a representative of a large man-made

fiber producer revealed that his company markets a 1.2 denier fiber that is commonly blended with cotton. he stated that this is the finest denier his company produces but they have some interest in going finer to what is sometimes referred to as "sub-deniers." We have had reports that sub-deniers (below 1.0) are being produced by a company in Japan. The reported size of the fiber is 0.8 denier. This would be equivalent to a cotton micronaire of 2.2, which is lower than most spinners would consider. However, we do know of several yarn companies that are buying 2.8 and 3.0 mic cotton. The denier equivalent of these qualities would be 1.0 to 1.1.

We have been told that producing a fine man-made fiber involves engineering problems. Engineering is not a problem in producing low micronaire cotton, but there are others involved. The most obvious is that low micronaire simply means less income for the farmer, and sometimes so much less that it can be devastating. It is apparent that something isn't right between the farmer and the spinner when the cotton that is sought after by the textile industry is discounted to the farmer through a grading and marketing system that classifies this same cotton as inferior quality. We understand the importance of keeping raw material and production costs as low as possible in order to make a profit, but we do not understand why the farmer has to take a discount on the fiber that is often the very quality the spinner desires. If the farmer ever intentionally produces fine cotton to satisfy industry's needs, then some incentive must be provided for doing so. As it is now, he is penalized.

We read recently that a committee of the American Textile Manufacturers Institute is urging the U.S. Department of Agriculture to re-evaluate its present cotton classing and loan structure to make sure the system properly reflects the end use of cotton produced in the United States. If this means what we think it does, then we hope USDA will take a close look at the marketing structure and the qualities that are in considerable demand.

Additionally, we have had an opportunity to read a report coming from the Spinners Committee of the International Textile Manufacturers Federation. Two statements in the report caught our attention very quickly. These are:

"... the Committee recognized the need for a change in emphasis in cotton development from coarser to finer fibres whilst maintaining fibre maturity and not being detrimental to fibre strength."

And

"There is an urgent need for a new and better grading system which allows farmers to receive proper compensation for growing the varieties required by spinners."

Let's take a look at the "proper compensation" mentioned in the second statement. Under present conditions, a farmer has to take a discount for any cotton finer than 3.5 micronaire. As an example, we can use a cotton that was classed strict low middling light spotted, 1-1/32", 3.2 micronaire. The reason for selecting this quality is because it is commonly produced in many areas and is in considerable demand by spinners, especially open-end spinners. Because a high percentage of cotton is sold based on points above loan values, we are using loan differences in the 1987 USDA loan schedule for this example. We do not know what the market price of this quality will be this year, but the way this season has been moving, it would not be too surprising for it to be between 70 and 80 cents per pound during the latter part of 1987.

To begin with, the light spotted designation lowers the price of this cotton 2.45 cents before anything else is considered. Then, the 3.2 micronaire takes off another 4.55 cents. This means that the discount for this quality would be \$0.07 per pound. A 480-pound bale would be discounted to the buyer a total of \$33.60 (loan value). But what is a bargain for the buyer is a loss for the farmer, and one who produces 1,000 bales of this quality would have an income loss of \$33,600.

It seems to us that the classing system and marketing structure for American upland cotton should be re-evaluated, as the American Textile Manufacturers Institute has suggested, so that the farmer will

have an incentive to produce the qualities that are in demand rather than having to take a drastic loss for his effort.

In some areas of the cotton belt, and due to certain weather conditions, the U.S. cotton grower produces light spotted and low mic cotton, even though he does not intend to do so. If he had complete control over the planting, growing, production and weather conditions, he likely would produce a white, long, high mic cotton that would give him the greatest possible income. Instead of the SLMLSp, 1-1/32", 3.2 mic cotton used in this example, he would prefer to harvest a middling white, 1-5/32", 4.5 mic that would have a loan value of 11.55 cents/pound higher. And instead of having to take \$206.40 for each bale of this quality, he would receive \$261.84, or \$55.40 more per bale. If all 1,000 of his bales were of this quality, his income would be increased by \$55,400.

Some changes in the grading discounts have to be made or some sort of incentive has to be offered the cotton grower if he is to intentionally produce the fine low micronaire cotton that is in demand for high-speed rotor spinning. No farmer in his right mind would purposely grow cotton that would result in a loss of \$33 per bale. We would give 100% support to any change that would provide an incentive to farmers for producing fine cotton. We hope the recommendations of the American Textile Manufacturers Institute and the International Textile Manufacturers Federation will receive attention in the proper USDA offices.

NOT-SO-SUDDEN SERVICE In the November 1986 issue of *Textile Topics* (Vol. XV, No. 3), we carried an article about rapid service we had given to a research sponsor in North Carolina. We referred to industry's Quick Response program, but we called our effort Sudden Service.

Near the end of May this year, we were removing furniture from a secretary's office at the old Center for relocation to our new facilities, and behind a desk against the wall we found an envelope that had fallen to the floor and remained there for quite a long time. This was addressed to Mr. George Blomquist of Parkdale Mills in Lexington, North Carolina. We opened the envelope and found it contained a letter dated March 7, 1979. It had been written by Jack Towery, then head of our open-end spinning research, and accompanied a report on a spinning program that had been conducted at the Textile Research Center. We re-sealed the envelope and mailed it to Mr. Blomquist, although it was more than eight years late in being sent.

This is hardly a good example of Quick Response or Sudden Service. Fortunately, this sort of thing does not happen very often, only once in eight years for Parkdale Mills.

Sorry about that, George

SONOCO PRODUCTS MAKES DONATION Sonoco Products Company of Hartsville, South Carolina has recently donated one case of high quality cones to the academic and research activities at Texas Tech University. These cones will be used by the students in the Department of Textile Engineering during their laboratory sessions in yarn manufacturing and warp preparation. Also, some of these cones will be used for research that is conducted by the Textile Research Center.

This sort of donation is very helpful at a time when funds for academic and research activities are difficult to obtain. We are very grateful to Sonoco Products for their assistance.

TEXTILE RESEARCH CENTER OPEN HOUSE In order to introduce our friends and supporters to the new facilities at 1001 East Loop 289, the Textile Research Center will hold Open House on September 12, 1987 from 9:30 a.m. through 3:30 p.m. This is a Saturday, and we have chosen this day because Texas Tech will play Colorado State University in a "home" football game that evening. We hope those who are in Lubbock for the game will take the opportunity to come by the Center for a visit with us. The Open House will feature a tour of our research laboratories including materials evaluation, opening, carding and combing, ring spinning, open-end spinning, worsted processing, warp preparation, weaving, knitting, and chemical processing.

We do not want our readers to confuse the Open House with the technical symposium and dedication

of the new Center to be held on November 17–19, 1987. Details of that will be given in the next issue of *Topics*. The Open House will be simply an introduction of our new facilities. We hope to see many of you on September 12.

VISITORS Visitors to the Textile Research Center during May included Helmut Deussen and Siegfried Prueckel, American Schlafhorst Co., Charlotte, NC; Carl Cox and Jean Vandelune, Natural Fibers and Food Protein Commission of Texas, Dallas, TX; Tom Wallace, Anacacho Petroleum, Inc., San Antonio, TX; Bob Hensz, Tropical Seed Co., Harlingen, TX; Max Lennon, Clemson University, Clemson, SC; and Kristie Jones, Business Journal of the Permian Basin, Abilene, TX.

Also visiting were Li Wenbing, Xue Zhenxiang, Que Lianchun, Xu Peiwen and Yuan Wenjian, all from the Shandong Academy of Agricultural Sciences, Jinan, Shandong Province, People's Republic of China.