

**AFIS: A LAB AND MILL COMPARISON**  
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**Abstract**

Mills and research labs use Uster Technologies, Advanced Fiber Information System (AFIS) to test cotton for a variety of properties. The application of AFIS data, however, differs between the lab and the mill. Results from AFIS tests help mills to ensure that their cotton fiber cleaning and carding processes are running properly, while research labs use AFIS results for a wide variety of applications: from fiber and yarn studies, to evaluations of cottons from breeding research. A domestic mill approached Cotton Incorporated to help troubleshoot a quality problem with their yarn. Given the difference in application of the AFIS, and in the strict quality control maintained in a research laboratory, disagreements in AFIS values were expected between the two test sites. Weekly tests were run on mat and card sliver samples at both locations for four consecutive weeks. The results did not show significant differences between the readings, a positive conclusion for the mill's concerns. Examining the results and discussing the varied uses of the AFIS reiterates the focus on the connection between research in a lab and its application in a mill.