

Textile test essay



4/30/13 Textile tests are important for the store buyer, the salesman, and the consumer. A number of different tests may be fiber to textiles in order to evaluate them for specific uses, and in addition several tests may be required to determine whether a fabric can perform well in a particular use. To ensure accuracy and reliability, textile testing must be carried out under carefully controlled condition. Atmospheric conditions affect the performance of textiles. For this reason, testing is done with temperature and humidity being maintained at standard levels of 70 degree and 65% relative humidity. Testing equipment must conform to specifications established in the test methods and fabric specimens must be of uniform size. Test measurements are repeated a number of times because of variability in results from one specimens to another. Laboratory testing has limitations in that these tests do not simulate exactly the conditions under which textiles will be used. Consumers will differ from each other in the stresses to which they subject textiles.

A farmer will place different demands on a pair of jeans than will an urban high school student. The research literature that deals with the evaluation of textile product contains numerous studies of actual wear test or of correlations between consumer evaluations of products and standard testing procedures. Studies such as these add another dimension to the testing of textiles. Technical and research publications in the field regularly report new developments in performance. In addition standard test methods undergo periodic reexamination by professionals to ensure their continued validity and to include new instrumentation that is developed.

Fabric strength evaluations are made in terms of breaking strength, tearing strength, or bursting strength. A variety of machines are used to measure strength, and fabric samples are prepared for testing according to ASTM test method procedures. Instron Tensile Tester with...