

**EXPANSION OF THE UNIVERSAL COTTON  
STANDARDS AGREEMENT TO INCLUDE USDA'S  
HVI CALIBRATION COTTONS  
AND PROCEDURES**

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**Abstract**

The Cotton Standards Act, passed in 1923, authorizes the Secretary of Agriculture to enter into agreements with foreign cotton associations to provide for adoption, use and observance of Universal Standards for U.S. Upland cotton, and other purposes. Triennial Universal Cotton Standards Conferences, dating from 1925, have brought overseas customers together with U.S. cotton industry representatives to review the standards and make recommendations for changes. At the 24th Universal Cotton Standards Conference in June 1995, the industry overwhelmingly recommended that, in addition to color grade and leaf grade, the High Volume Instrument (HVI) Calibration Cottons, laboratory atmospheric conditions and sample conditioning practices and procedures be made Universal Standards.

**Introduction**

The United States Cotton Standards Act was passed in 1923 for the primary purpose of establishing and promoting the use of the official cotton standards of the United States in interstate and foreign commerce. There was one key element of the Act that played a major role in accomplishing that mission. The Cotton Standards Act authorizes the Secretary of Agriculture to enter into agreements with cotton associations in foreign countries. Under provisions of the Cotton Standards Act, the Department of Agriculture (USDA) entered into the original Universal Cotton Standards Agreement with nine leading cotton associations in seven major European cotton-consuming countries in 1923. Those countries were the Netherlands, Belgium, England, Germany, France, Spain, and Italy. Associations in all of these countries except one have remained signatories and actively participated in the establishment and revision of cotton grade standards for the past 73 years. Due to the declining cotton marketing industry in the Netherlands, the association there withdrew as a signatory in 1992.

The Universal Standards Agreement provides for: (1) the adoption, use, and observance of the Universal Standards in the classification of U.S. Upland cotton; (2) the arbitration or settlement of disputes with respect to such

classification; and (3) the preparation, distribution, and protection of key copies of the Universal Standards. The agreement also involves all customers of U.S. cotton in the standardization process.

**Revisions to Agreement**

A supplementary agreement made in 1924 between USDA and the European cotton associations contained provisions for holding periodic conferences for the purpose of examining and approving sets of copies of Universal Cotton Standards for the use of the United States and the member cotton associations. The first conference was held in Washington, D.C. in March 1925. There were no conferences held during World War II. Since World War II, the conferences have been held on a triennial basis. In 1965, the conference site was changed from Washington to Memphis, TN. The conference held in Memphis, in June 1995, was the 24th Universal Cotton Standards Conference.

The success of this program speaks for itself. The number of countries represented by participating organizations has grown to 18 over the years, and the use of USDA cotton grade standards has continually expanded in the world cotton market. There are now 21 signatory cotton associations to the Universal Cotton Standards Agreement from 18 countries around the world (Table 1). This Agreement between USDA and private associations of cotton merchants and textile manufacturers in countries that import U.S. grown cotton has been very effective in promoting the use of USDA's official cotton grade standards and involving the overseas users of U.S. cotton in USDA's standardization process. It greatly facilitates the overseas marketing of the U.S. cotton crop by giving our foreign customers a voice in the establishment of standards on which their trade with us is based.

In 1989, the Universal Cotton Standards Agreement was revised to create a Universal Cotton Standards Advisory Committee to be appointed by the Secretary of Agriculture for each triennial Universal Cotton Standards Conference. The advisory committee provides for participation by domestic cotton interests as well as the foreign cotton trade in making recommendations to USDA concerning proposed changes to the standards. The purpose of the committee is to review the Universal Standards for American Upland Cotton which are prepared by USDA and to make recommendations to USDA concerning any changes. Recommendations must be made by a three-fourths majority vote and are only advisory in nature, with the Secretary of Agriculture making the final decision on any recommended change.

**Universal Standards**

Under the terms of the current Universal Cotton Standards Agreement, the Official Cotton Standards of the United

States, also known as Universal Standards, only include Color Grade and Leaf Grade. The current agreement does not pertain to standards for other quality factors such as micronaire, strength, length, or length uniformity.

### **Changing Technology**

Cotton classification technology has changed dramatically during the past two decades. HVI measures of cotton quality are rapidly replacing the old manual cotton classification system in the world market. The need for greater efficiency and higher quality has produced new technologies in the yarn spinning and textile manufacturing industries. These new technologies require more information about the fiber properties of the cotton being utilized. HVI's were developed to reliably and economically provide this information. USDA has provided HVI classing on an optional basis since 1980. Since 1991, HVI classification has been provided on all cotton classed by USDA along with the classer's grade for color and leaf which conforms to the Universal Cotton Standards.

Usage of HVI systems in foreign countries has also increased in recent years. A recent survey of HVI systems showed that there are currently more than 900 HVI systems in use in 62 different countries around the world. One of the major problems with the worldwide proliferation of HVI classification of cotton is the lack of a universal standard for calibration of HVI's to achieve a uniform level of testing. During the past three or four years, discussions of HVI testing problems by a small international group of cotton industry representatives have led to suggestions that the best way to achieve universal HVI standardization would be to bring it under the responsibility of the Universal Cotton Standards Agreement.

### **Advisory Committee Action**

At the Universal Standards Conference held last June in Memphis, TN, the Universal Cotton Standards Advisory Committee voted to recommend to the Secretary of Agriculture that the Universal Cotton Standards be expanded to include the current USDA HVI calibration cottons, laboratory atmospheric conditions, and sample conditioning practices and procedures. This means that when testing U.S. grown American Upland cotton, the signatory associations agree to use USDA HVI calibration cottons (Long/Strong and Short/Weak) for calibrating the HVI lines and they agree to comply with USDA laboratory atmospheric conditions of 70 degrees Fahrenheit plus or minus one degree and 65 percent relative humidity plus or minus two percent. Samples of cotton to be tested must be directly exposed to approved laboratory conditions until their moisture content reaches equilibrium with that of the atmosphere. This equilibrium moisture content usually ranges from 6.75 percent to 8.25 percent. Conditioning of

samples in sacks, wrappers, or other coverings is not permissible.

### **Advantages of Recommendation**

It is quite obvious that color and leaf particle content no longer adequately describe cotton quality. Therefore, an agreement and standards that deal only with these factors does not address the changes seen in the cotton industry during recent years. HVI fiber property measurements are part of the cotton industry and the world cotton trade. For the same reasons that we have universal standards and an agreement for the factors of grade, we need an agreement and universal standards regarding HVI measurements. Such an agreement will provide for a common understanding between all parties when discussing the measurement of fiber properties. It will provide everyone the opportunity to meet and discuss methods to improve the reliability of these properties by establishing specific procedures under which the properties are measured. Just as the agreement on grade has served all parties well, so too would the expansion of this agreement to include HVI measurements.

An average of about 40 percent of the U.S. cotton crop, estimated at a total value of \$5.0 billion annually, is sold for export each year, and the importance of HVI quality measurements in those transactions make it urgent that international standardization of HVI measurements advance as rapidly as possible. By standardizing HVI testing around the world, data from fiber testing labs using the universal standards and procedures could be compared directly. This would help eliminate retesting and misunderstandings and facilitate the worldwide marketing of U.S. cotton.

The recommendation of the Advisory Committee has been presented to the Secretary of Agriculture for consideration. If the Secretary adopts the recommendation, the Universal Cotton Standards Agreement will be revised to incorporate these changes and forwarded to the overseas signatory associations for their signatures.

### **Summary**

The strong relationship between the U.S. cotton industry and its overseas cotton customers goes all the way back to 1923, the year that the Universal Cotton Standards Agreement was made. The triennial universal cotton standards conferences which have been ongoing for the past 73 years bring our overseas customers together with the U.S. cotton industry representatives to review the Universal Cotton Standards for conformity and to make recommendations to USDA for changes. Above all, the primary objective of universal standardization of cotton classification is to speak one common language in describing the quality of cotton. The Universal Cotton Standards Program provides everyone in the international

cotton industry with an opportunity to have a voice in developing the vocabulary of that language.

**Table 1.**

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Associations Signatory to the Universal Cotton Standards Agreement

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Merchant Associations:

Alexandria Cotton Exporters Association (Egypt)  
Association Cotonniere de Belgique (Belgium)  
Association Francaise Cotonniere (France)  
Associazione Cotoniera Liniera e Delle Fibre Affini (Italy)  
Bolsa de Mercadorias e Futuros (Brazil)  
Bremer Baumwollborse (Germany)  
Centro Algodonero Nacional (Spain)  
East India Cotton Association Ltd.  
Gdynia Cotton Association (Poland)  
Japan Cotton Arbitration Institute  
Japan Cotton Traders' Association  
The Liverpool Cotton Association, Ltd. (United Kingdom)

Textile Manufacturer Associations:

Bangladesh Textile Mills Association  
Council of British Cotton Textiles (United Kingdom)  
Indonesia Spinners' Association "SEKBERTAL"  
Industrieverband Textil (Switzerland)  
Japan Spinners' Association  
Malaysia Textile Manufacturers Association  
Spinners' & Weavers' Association of Korea  
Textile Mills Association Inc. of the Philippines  
The Thai Textile Manufacturing Association

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