

## Uster Technologies AG testing solutions at Textile Asia 2008

Uster Technologies is the world's market leader in textile electronics for quality control for the textile industry, with a tradition of standards, leadership and innovation. USTER® can look back over 60 years of expertise and success leading to its current position as worldwide leader in textile electronics producing systems and the creation of a brand which has a truly unique position in the textile industry. Uster Technologies is represented in Pakistan by Simag (Private) Limited.

### USTER® HVI 1000 - the fiber classification system

Uster Technologies' HVI 1000 System is accepted as the cotton quality measurement standard by organizations such as the United States Department of Agriculture (USDA) and the China Fiber Inspection Bureau (CFIB). Now cotton classing organizations, spinning mills, and other facilities requiring highly accurate sampling have the options for taking advantage of USTER®'s optimum measurement technology.

USTER® offers its HVI 1000 technology in two instruments with different volume levels. The model M1000 can process up to an outstanding 1000 samples per eight-hour shift, while the model M700 is designed for lower throughput facilities (approx. 700 samples per eight-hour shift). The M1000 model is ideal for any operation requiring high volume in combination with precision sampling, while the M700 model provides the proven accuracy and precision of HVI at an optimum price point.

The lower volume M700 model is ideal for many spinning mill operations. The



HVI 1000 can provide raw material savings that make up 50% to 70% of yarn manufacturing costs. There are over 400 HVI 1000 classing machines in operation worldwide that attest to this.

The HVI 1000 measures all important quality parameters used in the cotton trade – micronaire, fiber length, length uniformity, strength, color, and trash – at up to 1000 samples per eight-hour shift.

The system also provides information on short fibers, spinning consistency, cotton maturity, and sample moisture content. Parameters are provided with the highest degree of accuracy and precision. The undisputable proof is the fact that over 22 million bales of cotton are tested

each season in the U.S., which equates to 0.5 million samples tested each day with the same degree of precision and accuracy day to day, week to week, and year to year. Rather than relying on human evaluation, which can vary significantly even in the hands of experts, the HVI 1000 allows an organization to get consistent readings on samples, even when managing a large throughput of material.

The USTER® HVI 1000 M1000 and M700 Instruments both also offer a new enhanced moisture measurement method, which provides a remarkably accurate moisture reading. Knowing the cotton moisture content at the time of testing is perhaps the most important measurement for getting test results comparable to international standards.

### USTER® AFIS PRO 2 – extensive measurements, multiple benefits

Standard features of the USTER® AFIS PRO 2 include the nep classification test module and the built-in USTER® QUALIPROFILE software for graphical comparison of fiber quality to USTER® STATISTICS. With optional measurement modules including Length and Maturity, and Trash, the USTER® AFIS PRO 2 can be configured to meet the most demanding testing requirements. The USTER® AUTO-JET module is another optional module increasing testing efficiency by operating automation.

USTER® now offers its AFIS PRO 2 technology with a Windows XP operating system and a modern user interface. New and essential features such as critical nep size for managing nep defects in yarn, roller spacing diagram for more efficient use of length data for drafting processes, control charts for instantaneous feedback on processing quality, dust size categorization critical for compact spinning, and long term data storage for historical record keeping and trend analysis make this process control system unique.

Any cotton material in the form of bale, mat, sliver or roving can be tested on the USTER® AFIS PRO 2, repeatedly and reliably. Blends can be tested up to a ratio of 50% cotton:50% synthetic. The USTER® AFIS PRO 2 allows the cotton spinner to detect processing problems

### Uster Technologies range of testing solutions

Wherever textiles are produced, USTER® products are there – measuring, checking, reporting, analyzing. Laboratory systems such as the legendary USTER® TESTER series – the latest of which can pinpoint and assess an amazing range of fiber and yarn characteristics – are what made USTER® famous, and their full range of off-line testing solutions is growing.

- ❖ USTER® HVI 1000 M1000 and USTER® HVI 1000 M700 – designed to meet volume needs of different operations
- ❖ USTER® AFIS PRO 2 – detecting fiber imperfections before they become yarn imperfections
- ❖ USTER® TESTER 5-S800 – unique sensor technology now with Fancy Yarn Profile
- ❖ USTER® TESTER 5-C800 – tradition of innovation
- ❖ USTER® TESTER 5-S400 – brilliant testing and superior analysis
- ❖ USTER® AUTOSORTER 5 – count determination
- ❖ USTER® TENSOJET 4 – predictable Weavability®
- ❖ USTER® TENSORAPID 4 – secure qualification
- ❖ USTER® QUANTUM 2 – the radical innovation now allowing polypropylene foreign fiber detection
- ❖ USTER® EXPERT SYSTEMS – the online monitoring systems
- ❖ USTERIZED® – the system for quality management in the textile supply chain.



Uster® Afis Pro 2.

before it is too late – before they end up as yarn faults. The only process control system in the world that meets the requirements of every spinning system is the USTER® AFIS PRO 2.

### USTER® AUTOSORTER 5 – count determination

The count determination of staple fibers, roving and yarns is the core of the entire textile spinning process. The USTER® AUTOSORTER 5 determines the average count, variation of the count of pre-products and yarns. With flexible testing programs and the variability in the counting system the USTER® AUTOSORTER 5 is a big support in spinning mills.

### USTER® TENSOJET 4 – predictable Weavability®

USTER® TENSOJET 4 – a real innovation in tensile strength testing. New standards are set by this predictor of Weavability®. With a testing speed of 400 m/min, the system can carry out fully automatic measurements with up to 30000 tests per hour. This massive testing capacity allows entire bobbins to be analyzed for the first time and the degree of further processing efficiency to be predicted. Of course, the USTER® TENSOJET 4 also shows the traditional strength and elongation values which conform to the standards of international world trade.

### USTER® TENSORAPID 4 – secure qualification

Traditional tensile strength tests require a whole series of testing possibilities, variable test speeds and measuring lengths. The USTER® TENSORAPID 4 fulfills these requirements and is ideal for testing staple fiber yarns as well as filaments and technical yarns. An integrated software program for standardized special tests increase the flexibility.

### USTER® QUANTUM 2 – the best selling yarn clearer ever

Since the market launch at ITMA 99 USTER® QUANTUM 2 has become the best selling yarn clearer ever with over 1.5 million positions sold worldwide until mid 2007.

Integrated with intelligent, advanced sensing technology and incremental radical innovations, such as the Computer Aided Yarn clearing (CAY), most customers choose the USTER®QUANTUM 2 for assuring quality for their complete production.

The USTER®QUANTUM 2 LAB Online options package comprising USTER®QUANTUM EXPERT, USTER® CAY, true hairiness measurement, vegetable filter, splice classification and CLASSIMAT Online monitors quality for the entire production in accordance with USTER® laboratory standards. The system separates critical quality outlier bobbins and quantifies them for the entire production on a continuous basis.

Since the last quarter of 2006, Uster Technologies also delivers a new control unit for its clearers – the CCU 2006. The CCU 2006 incorporates state of the art technology in hardware and software including a high resolution 12.1" color touch screen. A user friendly menu structure, shorter menu navigation, improved graphics and several new information are the other attractive benefits.

With contemporary technology and several other improvements, CCU 2006 offers an even higher value for the best selling clearer ever – the USTER® QUANTUM 2.

### USTER® QUANTUM 2 – polypropylene detection – color does not matter

Foreign fiber contamination in cotton and yarn is a challenge for every spinning industry world-wide. While clearing of colored foreign fiber in yarn has become a standard for years, the elimination of transparent and white polypropylene fibers was impossible. With the USTER® QUANTUM 2 white or colored polypropylene defects, which are one of the major reasons for claims, can now be detected and removed.

The unique measuring technique, patented by USTER®, even ensures detection of white and transparent polypropylene embedded in the yarn body as well as on the surface, beside any other foreign fibers.

### USTER® EXPERT SYSTEMS – the online monitoring systems

Spinning mills oriented towards quality and performance rely on USTER® EXPERT SYSTEMS for the economic operation of high performance production plants. Several millions of ring spindles and many thousand winding positions have profited from the efficiency boost of USTER® EXPERT SYSTEMS. Over 25 years of experience are consolidated into these monitoring products, providing reliable and effective management techniques for full control of the machinery. USTER® EXPERT SYSTEMS monitor machine settings, production data and quality data at the same time. Special features provided by the various systems include operational transparency, quality assurance, organizational aids and central machine monitoring, all allowing long term trend analysis.

Together with the USTER® QUANTUM clearers and the USTER® lab equipment, the USTER® EXPERT SYSTEMS form a unique set of tools for the highest levels of professionalism in spinning.



Usterized Cones

### USTERIZED® – the quality label for the textile industry

USTERIZED® is well known as a seal of quality for yarns tested and cleared with USTER® products, a seal that indicates a high level of quality control. The comprehensive quality control possible with USTER® laboratory and online systems makes it possible to manufacture textiles of significantly better and more consistent quality. USTERIZED® spinning mills produce yarns of consistent quality. They have an established quality management system which is regularly audited by Uster Technologies AG. Thus, quality problems can be eliminated. On the other hand, Uster Technologies AG supports yarn and fabric producers as well as retailers in the textile chain to establish customer specific quality profiles to be utilized.

Courtesy: Uster Technologies Ag.  
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