

USTER® TESTER 6-C800 USTER® TENSORAPID 5-C The filament yarn quality measurement systems





Ultimate systems for filament yarn testing

Filament yarn producers have been depending on USTER® quality control for more than half a century. They appreciate the unrivalled technical knowledge underpinning the latest USTER developments for the sector.

The three most important parameters for filament yarn quality are mass variation, yarn strength and elongation. Accurate, precise testing of these three yarn characteristics is provided by USTER's tailored package for filament: the USTER® *TESTER 6-C800* evenness tester and the USTER® *TENSORAPID 5-C* tensile tester. The high-speed USTER® *TESTER 6-C800* is part of the famous USTER® *TESTER* range – a watchword for evenness testing throughout textiles – in a version that is tailor-made for filament yarns. The USTER® *TENSORAPID 5-C* is driven by unique, specially written software to cater to the requirements of filament yarns.

Results from both these instruments can be combined and integrated to offer significant advantages in the monitoring of filament yarn quality at the production stage, as well as assessing how the yarns will perform in subsequent manufacturing processes.

Filament yarn technology is progressing rapidly, in technical textiles as well as apparel and home textiles applications, so it's vital that testing capabilities keep up with the pace of innovation. This applies not only to the most widely used fiber, polyester, but also to many others, including polyamide, polypropylene, viscose, aramid, in monofilament and multifilament types, across a range of yarn counts.

With the USTER® filament testing systems, it's all covered.

The pulse of a new generation – the USTER® *TESTER 6* sets the standard with special solutions for filament yarn producers

The USTER® *TESTER 6-C800* sets the global standard for evenness testing, destined for a central role in the laboratory of every quality-driven producer. Innovative features provide the most comprehensive quality measurements ever available in filament yarn testing.

- Brand-new: the latest USTER® Capacitive Sensor (Sensor CC)
- The global standard in filament yarn testing since 1955
- USTER accuracy: your guarantee of reliable measurements at top testing speeds



Brand-new: the latest USTER® Capacitive Sensor

This is USTER®'s new digital Capacitive Sensor, bringing even greater accuracy and reliability. Completely new features include the unique twisting unit, giving reliable information at every test.

- Automatic twist scan facility, for easy twister settings
- Measurement of the famous USTER[®] value CV_m, inert and half-inert values and cut-length results
- Easy-reference graphical presentations with diagrams, spectrograms and histograms

The global standard in filament testing

The USTER® *TESTER* 6 is acknowledged throughout textiles as the global standard in evenness testing. In over 60 years the Capacitive Sensor improved to the highest accuracy and gives filament yarn producers the power to guarantee the quality is right first time.

- Automatic and semi-automatic models available
- Upgradeable for Sensor OM, automatic function and Knowledge Based System (KBS)

USTER accuracy, reliability measurements at top speed

All models operate at the testing speed of 800 m/min. Set to automatic, the high sample throughput rates give even better detection of quality exceptions. That cuts down the risk of claims, reduces labor costs and ensures customers get the quality they expect.

Innovation at the core: latest sensor technology has all the answers for filament yarn quality

The latest sensor technology is at the core of the USTER® *TESTER 6*. A breakthrough with USTER® *TESTER 6-C800* is the measurement of interminglings, leaving no questions unanswered in the production of filament yarns.

- Measurement of interminglings at test speeds of up to 800 m/min (Sensor OM)
- Knowledge Based System (KBS) needs no extra machine settings
- Touchscreen operation intuitive, even for untrained users









/min (Sensor OM) ings

Measurement of interminglings with Sensor OM

The measurement of interminglings is a significant innovation. An optical sensor counts interminglings per meter at a testing speed of 800 m/min. Simple and precise quality control: saving time and preventing variation in fabric appearance.

- New results show interminglings per meter and distance between interminglings
- Unique graphics show the distribution of interminglings, distance between interminglings and missing interminglings

Knowledge Based System (KBS) needs no extra machine settings

The new Knowledge Based System (KBS) quickly traces the basic cause of a quality problem on the spinning machine, with no need for extra settings or input from the machine supplier. A single click on the spectrogram display brings up the defective component on the screen. Time saved, quality improved and expensive claims avoided.

Touchscreen operation

The USTER® *TESTER* 6 is designed for ergonomical operation. A superb graphical user interface features an intuitive touchscreen monitor that is easy to use, even for untrained operators. So users can stay focused on test results, guaranteeing higher efficiency and optimum user satisfaction.



USTER® TENSORAPID 5-C: applying USTER® accuracy to high-precision filament yarns

In the fast-moving filament sector, new yarn variants and novel applications are constantly being developed. So a special approach is needed for the strength testing, to ensure the right quality. The USTER® TENSORAPID 5-C features specially-designed measurement values, adapted for the particular requirements of filament yarn producers.

- Accurate and reliable measurements to guarantee the required yarn quality
- Meets all tensile testing requirement for all kind of yarns
- Time savings, thanks to an enormous test capacity







The system for all requirements

Offering automatic and precise information on yarn strength, elongation and tenacity, the USTER® TENSORAPID 5-C is acknowledged worldwide as the standard instrument. All measurements are in line with international standards, including ISO, BISFA and Chinese authorities.

Meets all tensile testing requirement

The USTER® TENSORAPID 5 is equipped for continuallydeveloping new yarn variants, with specific results focused on filament yarns. The trend to finer yarns makes it essential to measure force and elongation at the first filament breaks. Measurements for various modulus values, yield points and natural draw ratios complete the options available, to minimize potential complaints.

Two measuring heads are available: 500 N for typical filament yarns and 1500 N for high-tenacity filament products such as tire cord or bulletproof yarns.

Enormous test capacity – easy to use

The ability to load test 40 samples brings enormous time savings – is essential for POY yarns. Test parameters can be adapted for test length, test speed and pre-tension, to match the needs of filament producers.

The USTER® TENSORAPID 5 comes with an easy-touse touchscreen monitor, enabling operators to stay focused on test results and guaranteed higher efficiency.

240842-24020/11.17/© Copyright 2017 by Uster Technologies AG

The standard from fiber to fabric

USTER is the world's leading supplier of total quality solutions from fiber to fabric. USTER® standards and precise measurement provide unparalleled advantages for producing best quality at minimum cost.

Think quality

Our commitment to state-of-the-art technology ensures the comfort and feel of the finished product – satisfying the demands of a sophisticated market. We help our customers to benefit from our applied knowledge and experience – to think quality, think USTER.

Broad range of products

USTER occupies a unique position in the textile industry. With our broad range of products, we have a wide reach across the textile chain that is unmatched by any other supplier in the market.

Optimal service

Know-how transfer and instant help – we are where our customers are. A total of 200 certified service engineers worldwide grants fast and reliable technical support. Benefit from local know-how transfer in your specific markets and enjoy our service à la carte.

USTER® STATISTICS – the textile industry standards

We set the standards for quality control in the global textile industry. With USTER® *STATISTICS*, we provide the benchmarks that are the basis for the trading of textile products at assured levels of quality across global markets.

USTERIZED[®] – brand your products with quality

USTERIZED[®] stands for 'defined quality assured' within the textile chain. We invite selected customers to join the USTERIZED[®] Member Program. More information at www.usterized.com.

USTER worldwide

With three technology centers, five regional service centers and 50 representative offices around the world, USTER is always sure of delivering only the best to its customers. USTER – committed to excellence, committed to quality. And that will never change.



Switzerland T. +41 43 366 36 36 F. +41 43 366 36 37 sales@uster.com www.uster.com