Press release

## Ring spinning… as good as it can be

*USTER® SENTINEL enables practical optimization for managers and shop floor personnel*

**Uster, Switzerland, 10th December 2019: Even in the best ring spinning mills, there is always room for improvements, among a complex range of options management and operatives need to consider for optimized productivity and profit. USTER® SENTINEL provides a fact-based overview of spinning machine performance, pinpointing real opportunities for excellence in the use of technology, components and manpower.**

"The biggest challenge in my job is to source skilled shop floor operatives and retain them in the long run," says M. Kannan, General Manager responsible for technical and factory administration at Kikani Exports. The mill – obviously a well-run unit – is located at Dholka in the Indian state of Gujarat. Its installed capacity includes 29,376 ring spinning spindles and 4,320 twisting machine spindles. To improve the manpower situation, the mill prioritizes progressive HR policies and a decent working environment, as well as investing in sophisticated production machinery.



USTER® SENTINEL handles the complete personnel management, including shift planning and staff assignment

### Wide-ranging benefits in ring spinning

"We invested in USTER® SENTINEL ring spinning optimization system with the goal to improve profits but we are delighted that staff also likes the installations," says Vrajesh Kikani, Managing Director, Kikani Exports. The mill reports a positive impact on profitability resulting from successful optimization of a number of factors, such as waste, ring traveler lifetime, machine speed and energy consumption etc.

Production focuses on 100% cotton combed compact yarns, in the count range Ne 20 to Ne 40, for weaving and knitting end-uses. The mill has been able to reduce waste by half since installing USTER® SENTINEL. Enhanced overall productivity is a consequence of reducing pneumafil waste. USTER® SENTINEL also monitors the productivity of all spindles, feeding back all the

required links and information to help yarn producers make optimization decisions at ring spinning based on reliable data.

Among potential problems for all spinners is inconsistent yarn quality characterized by low twist, caused by loose fibers blocking travelers – especially excessively worn ones. Only USTER® *SENTINEL* can identify spindles malfunctioning in this way, since the issue does not cause end-breaks but still produces yarns which are too weak for high-speed warping and weaving machines. Then unique Off-Standard feature of USTER® *SENTINEL* safeguards against 'hidden' quality risks such as this.

**Bobbin build-up report gives practical support**

End-break levels are a key indicator of ring spinning performance, and USTER® *SENTINEL* recognizes this by providing an intuitive bobbin build-up report for every parameter influencing end-breaks. Spinners can then initiate improvements relative to their own mill, taking account of ambient conditions and energy consumption, as well as machine speed, wear of mechanical parts and personnel.

The bobbin build-up report also provides for higher performance, along with optimized cops. Comprehensive analysis of the speed curve – and its impact on quality throughout cop build-up – is a key element of the enhanced way of optimizing ring spinning performance. Cop build-up quality is the new dimension of optimization, enabling managers to select the correct machine settings for higher production yields, while keeping quality at the desired levels. Furthermore, it is now possible to compare ring spinning performance between different machines.

"The bobbin-build up report offers us potential savings on travelers, optimizing their lifetime," says Kannan. He makes use of this facility for ring traveler performance comparisons by using the end-break information to indicate the end of traveler life cycles. The bobbin built-up report allows the mill to monitor traveler wear related to age, checking stable end-break rates through the entire doff duration. This report shows the current state in intervals of five minutes, and an overview provides information about end-breaks per 1,000 spindle-hours.

**Fact-based feel-good advantages**

Reports give status information at five-minute intervals, including end-breaks and piecings during that period. "Information about piecing speeds helps me to identify each operator's skill level so that I can optimize the operation schedules and processes. Only by assigning manpower carefully it is possible to maintain ideal working conditions," says Kannan. USTER® *SENTINEL* handles complete personnel management, including shift planning and staff assignment for all machines in the system – integrated with monitoring of critical ring spinning parameters. This makes personnel management in ring spinning fact-based and less time-consuming.

Reliable detection of slip, rogue and idle spindles is what makes USTER® *SENTINEL* popular among shop floor staff. LEDs indicate spindles showing an issue or positions where an end-break occurs, directing personnel quickly to fix the problem. Incidents are also shown on the machine display, providing an overview of spindles where attention is needed. "Operators really enjoy working thanks to USTER® *SENTINEL,* as it makes it easy to spot an end-break, even when patrolling far away. They enjoy the experience of handling their job efficiently and are under less stress – both of which increase the feel-good factor at work," says Kannan.

Their goal is to optimize productivity – and the happiness of their staff: Vrajesh Kikani, Managing Director (left) and M. Kannan, General Manager Kikani Exports

## The long view

Optimizing the potential of ring spinning covers many aspects, taking advantage of USTER® *SENTINEL* and the data it provides: waste saving, compressed air saving, energy saving, cuts saved at winders and increased productivity and quality. Says Kikani: "USTER® *SENTINEL* works as a ring spinning optimization system, increasing profitability where it matters most…every day."

Kikani visited the USTER booth at ITMA 2019 in Barcelona. He was interested to learn about further technologies and how a mill will be managed in future. "I'm amazed about the advantages for ring spinning through connectivity. I can see more profit optimization potential. With USTER® *SENTINEL* and USTER® *QUANTUM* already installed, only USTER® *QUALITY EXPERT* is needed to correlate ring quality data and winding quality data in a single system."

There is one key performance indicator still not integrated the system but no less important to the company: "Enjoyment. A happy staff supports great performance and is a positive cost factor for the mill in the long run," says Kannan.

For more information, please visit: www.uster.com/sentinel

**Contact for journalists**
Kathrin Niedurny
Marketing Content & Communication Manager

Uster Technologies AG
Sonnenbergstrasse 10
8610 Uster
Switzerland

Phone +41 43 366 3889
Mobile +41 79 895 9309
kathrin.niedurny@uster.com

For other media-related requests, please contact:
publicrelation@uster.com

**About Uster Technologies**

USTER is the world's leading provider of quality management solutions from fiber to fabric.

Uster Technologies offers high-technology instruments, systems and services for quality control, prediction, certification and optimization in the textile industry. This includes systems for quality management, laboratory testing and in-line process control for fibers, staple and filament yarns, fabric inspection as well as value-added services.

USTER provides the globally-acknowledged USTER® *STATISTICS* benchmarks for trading, textile know-how training, consulting and worldwide after-sales services – always aspiring to fulfill the textile market's needs, to drive innovation forward with 'quality in mind'.

Uster Technologies AG is headquartered in Uster, Switzerland and operates worldwide. It has sales and service subsidiaries in the major textile markets and Technology Centers in Uster (Switzerland), Knoxville (USA), Suzhou (China) and Caesarea (Israel).

[www.uster.com](www.uster.com)

[YouTube](YouTube)

[LinkedIn](LinkedIn)

[Facebook](Facebook)