

Two-way track to optimum fiber cleaning

How customer feedback contributes to ongoing progress by Uster

Uster, Switzerland, 14th December 2021 – Uster fosters a highly effective dialogue with its customers – so that spinning mills play a continuing role in the development of system improvements. Customer needs are fed back directly to Uster R&D experts, leading to constant progress in fiber cleaning, with reductions in costs, less waste and a stress-free experience for the spinners. It's a two-way track to progress.

The Uster Jossi Vision Shield illustrates this perfectly, with both the model T and model 2 well established in the market. Over 2,000 installations in spinning mill blowrooms around the globe testify to its success. But the Uster development teams continue to be driven by an ambition to explore still further improvements. Their work doesn't necessarily result in a completely new fiber cleaning system, but it does make a valuable difference to spinners, which is well worth talking about.

Performance for relaxation

The unrivaled detection capabilities of the Jossi Vision Shield come from the sensors and the powerful imaging recognition technology. This is a sophisticated image analysis technique perfected by Uster. The smallest particle of contaminant will be picked out, helped by unmatched image recognition.

Such great detection performance might make some spinners nervous that too much good cotton might be ejected with the contaminants. But they can relax with Uster Jossi Vision Shield! Its speed measurement feature even provides a notable reduction in waste. By continuously measuring the velocity of the passing cotton tufts, the system can adapt the duration of each ejection, so that a minimum of material is removed with the contaminant. Mill trials have proved that optimizing ejection times in this way results in significantly less waste per ejection.



Imaging Spectroscope developed for contamination of various types of colored synthetic material, including polyester.



Information flow

The software built into Jossi Vision Shield is under continuous improvement. Algorithms are adapted to take account of customer feedback, which is proactively requested and passed on via Uster Service to the research and development teams. This two-way connection between the mills and Uster R&D is the secret of success in developing exactly what customers need. The fact that the information passes different Uster experts makes it a sophisticated solution. Each of them – also from textile technology and product management department – add knowledge and experience. Uster literally means it when saying "your feedback is important to us."

One example of the impact of this feedback is the `Laydown Change Button´. Spinners based in various markets requested the facility to mark the change-over time for a new laydown. The new feature helps with this, and also allows to them to aggregate the statistical data correctly.

Furthermore, some customers told the service team there could be improvement potential with hardware – so the R&D team found a solution to reduce the downtime of products. With the software too, several enhancements were made for the overall stability of the system, which were not directly visible to the customers.

Ongoing integration of practical experience in the software and continuous deployment has become standard for Uster fiber cleaning. "We consider the fact that inputs of customers are applied with each software update as part of our success model," says Suresh Kris, Vice-President Global After Sales & Service. The information flow was maintained, even in pandemic times, as Kris and his teams stayed in contact with customers via digital communication.



Uster Jossi Vision Shield – detection and elimination of natural and synthetic contamination



Contamination control: now it's Total

Spinners want to take the safest options when it comes to contamination control. At the same time, they don't want to waste good cotton through tight fiber cleaning settings. Most of all, they need to keep their yarn production under control. So, they will welcome the latest improvements focused on KPIs for irregularity in performance. The new data allows subsequent processes to be taken into account, for added value and ease of operation.

Spinners at every market level can gain major benefits from Jossi Vision Shield. In the highest quality segment, fiber cleaning settings can be set to even tighter tolerances, without increasing waste. For less critical applications, spinners can retain existing quality settings and see waste greatly reduced, with fewer ejections. In all cases, mills can expect significant improvements in the balance between quality and efficiency.

Raising contamination management to the next level requires combined data: that means Total Contamination Control, using the power of Uster Quantum and Uster Jossi Vision Shield. Total Contamination Control ensures precisely-controlled contamination levels in yarns, with minimum waste – and at minimum possible cost. Uster is the only single-source provider of this integrated solution.