



Security



Prevention



Flexibility

## **USTER® QUANTUM 4.0**

The connected yarn quality assurance system

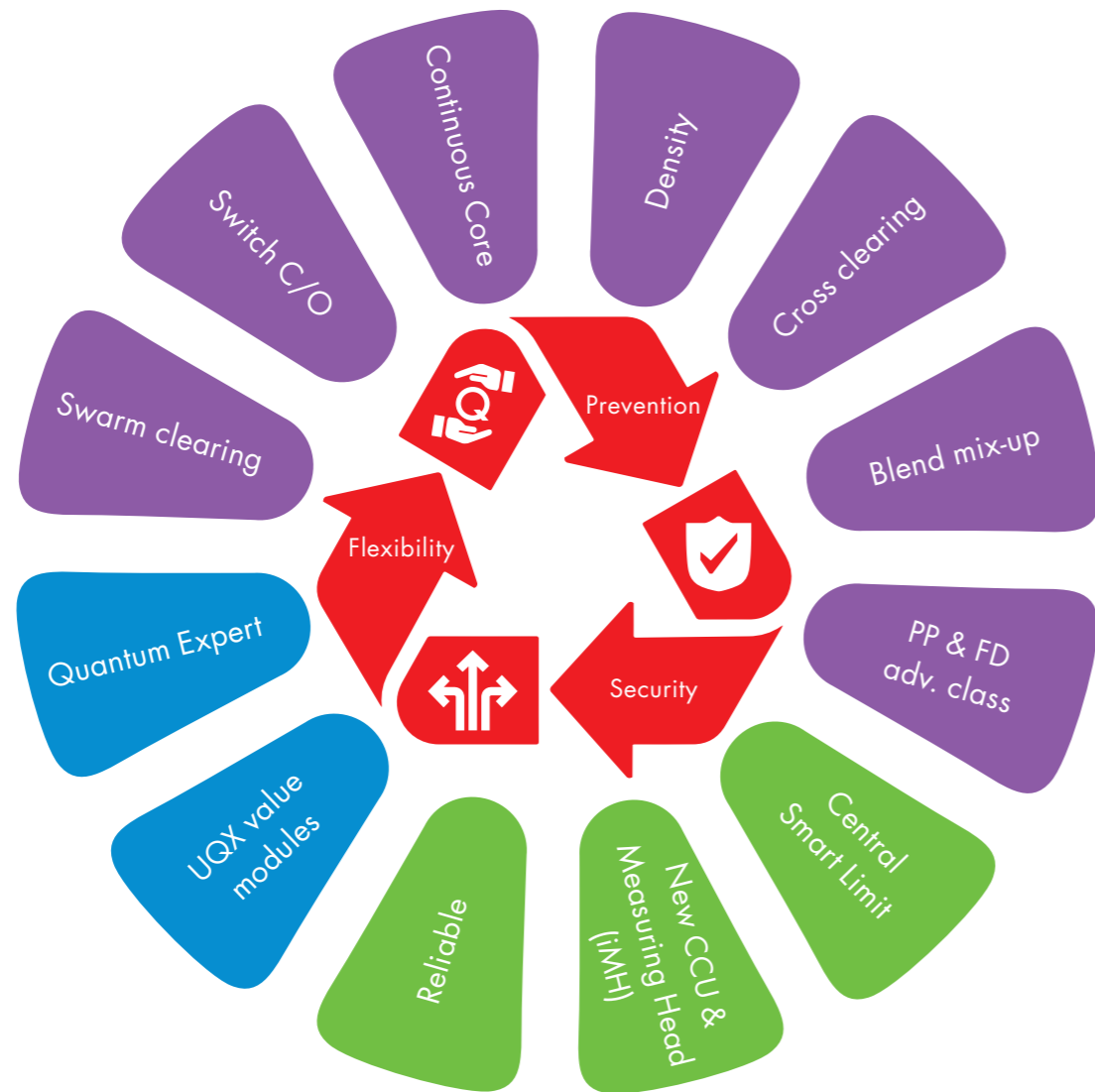
A new era of the connected yarn clearer begins – embodying Security, Prevention and Flexibility. It is the beautifully-designed ensemble of powerful new features, intelligent instrument connections and a simplicity-embracing user interface, building on the globally-established Quantum. And now Uster Quantum 4.0 combines capacitive and optical clearing in one solution. The Uster Smart Duo solution provides new customer values.

**USTER®**  
Think quality

Smart Duo  
technology

Connected  
clearer

Tried and  
trusted



#### Density clearing

Combined capacitive and optical signal monitors yarn density continuously and after each splice, to detect issues with compact yarns or different twists.

#### Cross clearing

Uncovers and eliminates hidden defects, with a double check of the main signal by the assistance sensor.

#### Capacitive / Optical switch

Enhanced flexibility – one clearer meets any customer requirements.

#### Swarm clearing

Detects accumulation of small defects below the clearing limit which are disturbing only due to their frequency.

#### Central Smart Limit button

Allows adjustment of all available smart limits with one button.

#### Advanced foreign matter (FD) and new polypropylene (PP) classification

Shows advanced classification for even deeper contamination control.

#### Continuous core detection (option)

Continuously detects missing core and off-center core.

#### Blend mix-up (option)

Capacitive and optical sensor combination to identify the mix-up of different raw materials in greige and white yarns.

#### Next generation central clearing unit (CCU)

The seventh generation of the CCU with a state-of-the-art 16:9 touchscreen for easy readability and new graphical reporting.

#### Quantum Expert

Newly designed and implemented Expert system for the yarn clearer, enables link to the quality management platform Uster Quality Expert (UQX).

The challenges of Industry 4.0 demand flexibility, rapid innovation and customer-centricity. Quantum 4.0 fulfils the vision of an all-in-one solution for connected yarn quality. Combining capacitive and optical sensors in one clearer, it prepares mills for a Quantum leap in value through any future uncertainties.

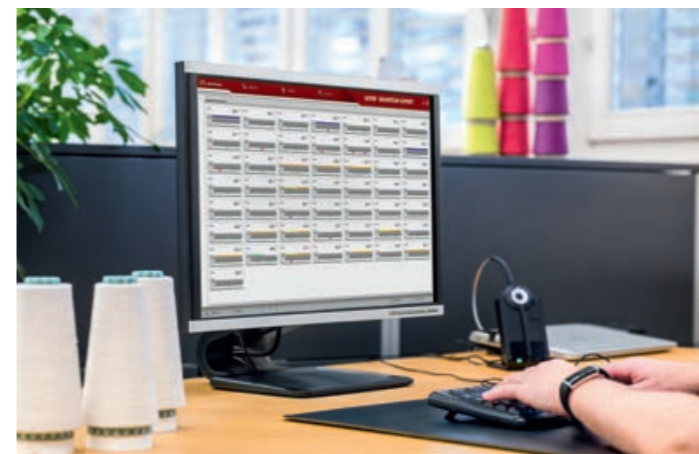
- The Smart Duo safeguard meets rising customer expectations with flexibility
- Preventive and connected yarn clearing overcomes the complexity of digitalization
- The globally-established Quantum experience takes the next leap in value



#### The Smart Duo safeguard

The combination of both sensor technologies comes with extra detection channels to unlock new clearing standards. Mills no longer have to decide on the 'capacitive or optical' question – the two-in-one combination prepares them for any uncertainties in future yarn applications.

- Enhanced flexibility – all in one clearer
- New detection with potential to reduce cuts
- Powerful features – density, cross clearing and more



#### Overcoming complexity

Its name and new features show that Quantum 4.0 embraces the new era of digitalization in textiles. Previously, mills missed the chance to profit from the mass of complex data gathered, by relying on slow and costly analysis.

Now, linked with Quantum Expert and Uster Quality Expert, preventive and connected yarn clearing makes sense of it all, reducing costly cuts and ensuring yarn quality.



#### Leap in value with Quantum experience

Latest measuring heads, improved even over previous Quantum generations, have proven reliability in the most demanding mill environments.

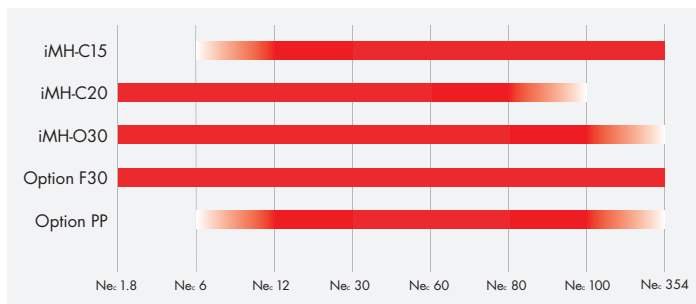
- Intelligent combination of multiple sensor signals to control quality
- Intuitive operation on wide-screen CCU
- New processors and design for combined and enhanced features and stable performance
- Optimized for long service life
- Smart and intuitive to use, tried and trusted

# USTER® QUANTUM 4.0

## product configuration

With Uster Quantum 4.0 the Smart Duo combination simplifies choices with the two iMH types (C15 F30 and C20 F30) and embraces flexibility and security. Furthermore, the basic iMH offering remains with the C15, C20 and O30 heads.

	Features	C15/C20/O30	C15F30/C20F30 (incl. opt. basic clearing)
Standard Basic	Q Data	•	•
	Swarm Clearing	•	•
	Quantum Expert	•	•
	Advanced Classification	•	•
Standard Smart Duo	Hairiness		•
	Density		•
	Cross Clearing		•
	Switch capacitive/Optical		•
	Foreign matter/Vegetable		•
Optional	Polypropylene		•
	Core yarn clearing		•
	Shade Variation		•
	Blend mix-up		•
	RSO 3D	•	•
UQX	Value modules of UQX (TCC, RSO and more)	•	•



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