



# **USTER® EVS FABRIQ VISION**

The fabric quality assurance system

Technical Data

May 2019

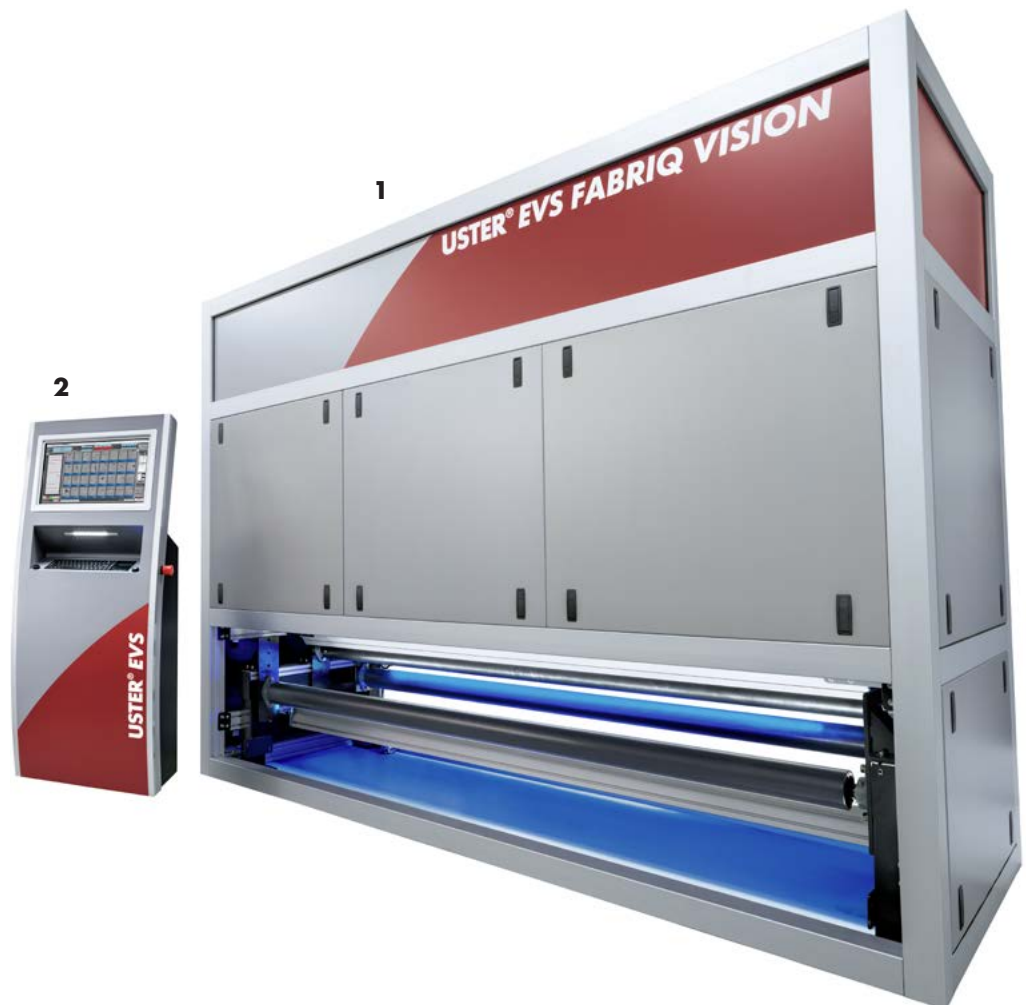
# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

USTER® EVS FABRIQ VISION ensures this is achieved, by using automated control during intermediate and final inspection. The system's ability to capture any visible defects allows fabric yield to be optimized and prevents claims.

### Elements

of the USTER® EVS FABRIQ VISION installation



### Basic installation

- 1 Test unit with spectroscopes
- 2 UEVS Control Unit including touch screen monitor
- 3 Album (no illustration)

### Options

- 4 All in one PC (no illustration)
- 5 Additional album computer (no illustration)
- 6 Optimized Cut Control with laser pointer (no illustration)
- 7 Infrared marker (no illustration)

# USTER® EVS FABRIQ VISION

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### Basic installation

<b>Overall installation</b>	<b>Functions</b>	<ul style="list-style-type: none"> <li>– USTER® EVS FABRIQ VISION visualizes defects onscreen in the user interface</li> <li>– Integrated image acquisition and processing</li> <li>– Real-time integrated image acquisition processing</li> <li>– All defects are detected, categorized, saved and displayed on the operator interface</li> <li>– High-speed detection capabilities</li> <li>– Color (RGB) or black and white (monochrome) image processing</li> <li>– Full color defect image display</li> <li>– Album review cleans and optimizes for final cutting</li> </ul>
	<b>Included in the delivery</b>	<ul style="list-style-type: none"> <li>– Test unit with spectroscopes</li> <li>– UEVS Control Unit including touch screen monitor</li> <li>– Illumination unit</li> <li>– Encoder (length meter)</li> <li>– Application software</li> </ul>

### Subsystem of the USTER® EVS FABRIQ VISION:

<b>Test unit (1)</b>	<b>Application range</b>	<ul style="list-style-type: none"> <li>– Recommended for woven, knitted and warp knitted fabrics</li> <li>– Special patterns and designs on request</li> <li>– Automotive, technical textiles and medical, home textiles, apparel and composites</li> </ul>
<b>Installation options</b>	<b>In-line</b>	<ul style="list-style-type: none"> <li>– After the coating-line, dyeing-line or at the exit of a finished range as stand-alone or together with USTER® EVS FABRIQ SHADE</li> </ul>
	<b>Off-line</b>	<p>As a stand-alone system installed at the following locations:</p> <ul style="list-style-type: none"> <li>– Plant's final quality control post</li> <li>– Warehouse's incoming inspection post</li> <li>– Cut &amp; sew mapping before spreading</li> <li>– Integrated with USTER® EVS FABRIQ SHADE</li> </ul>
	<b>Illumination</b>	<ul style="list-style-type: none"> <li>– Depending on the characteristics of the defects the system can use either a transmitted or reflective light source, which can differ between the inspection lines</li> </ul>
	<b>Inspection width</b>	<ul style="list-style-type: none"> <li>– Inspection width = fabric width + lateral movement of the fabric caused by the fabric flow</li> <li>– Max. fabric inspection widths: <ul style="list-style-type: none"> <li>– 2 250 mm</li> <li>– 3 000 mm</li> <li>– 3 700 mm</li> <li>– 4 400 mm</li> </ul> </li> <li>– Max. fabric width for BFA (Broken Filament Analyser) <ul style="list-style-type: none"> <li>– 1 500 mm</li> </ul> </li> </ul>

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UEVS Control Unit (2)	<b>Computer software</b>	<ul style="list-style-type: none"><li>- USTER® EVS FABRIQ VISION intuitive touch application software</li><li>- Windows operating system</li><li>- System pre-configured and locked down</li><li>- Simple full system update process</li></ul>
	<b>Computer hardware</b>	<ul style="list-style-type: none"><li>- Computer with Intel® processor</li><li>- 1 internal 500 GB hard drive</li></ul>

### Options

All in one PC (4)	<b>Application</b>	Instead of USTER® EVS Control Unit
Additional Album PC (5)	<b>Application range</b>	Additional Album PC for the application of the album review only
Optimized Cut Control (OCC) with laser pointer (6)	<b>Application range</b>	<ul style="list-style-type: none"><li>- After the album review, the defect map is synchronized at the OCC, which stops the cutting table automatically at the precise point of the planned cut of defective fabric</li><li>- The laser pointer indicates the exact position of defects during the cutting table process</li></ul>
Infrared marker (7)	<b>Application range</b>	<ul style="list-style-type: none"><li>- To locate the exact position of defects and cutting points with high accuracy, USTER uses an infrared marker to put invisible marks on the fabric selvage</li><li>- This is used later in the sync process at the OCC, when the infrared sensor detects the invisible marks</li></ul>

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### Application Software for USTER® EVS FABRIQ VISION

Reports	<b>Type of report</b>	<ul style="list-style-type: none"> <li>– Defect map</li> <li>– Defect images</li> <li>– Defect lists</li> <li>– Defects distribution</li> <li>– Statistical graph</li> <li>– Statistics per section</li> <li>– Defects grading</li> </ul>
	<b>Album mode</b>	<ul style="list-style-type: none"> <li>– The album contains the history of past roll inspections</li> <li>– Specific roll inspections can be recalled, which allows the user to perform the complete set of actions in offline mode</li> </ul>
	<b>Roll list</b>	<ul style="list-style-type: none"> <li>– The roll selection window allows to select a roll to work on, export and delete rolls</li> </ul>
Coding and Classification	<b>List of codes</b>	<ul style="list-style-type: none"> <li>– Alphanumeric codes can be attributed to the defects that are of importance</li> </ul>
	<b>Classification</b>	<ul style="list-style-type: none"> <li>– The classification module enables the user to define several classes to get automatic classification based on the classes defined</li> <li>– The classification module is used to attain quickly most of the cases of a given defect type or to get an initial base classification</li> </ul>
Optimized Cut Control (OCC)	<b>Display and printout of the reports</b>	<ul style="list-style-type: none"> <li>– The Cut Optimization module allows optimizing for the best quality, ensuring the best yield</li> <li>– It permits to cut out portions of bad quality fabric, defining the best length for each roll</li> <li>– The Cut Optimization is a combination of various permutations and combinations based on the selection of options</li> </ul>
Input data, output of results, languages, units system security	<b>Dialog and report languages</b>	English, German, French, Italian, Spanish, Portuguese, Turkish, Hebrew, Polish, Dutch, Czech, Chinese or Japanese can be selected (other languages on request)
	<b>Possible units</b>	<ul style="list-style-type: none"> <li>– Length: foot, yard or meter</li> <li>– Width: inch or millimeter</li> <li>– Points per 100: foot, yard or meter</li> <li>– Majors per 100: foot, yard or meter</li> <li>– Speed: ft/min, yd/min or m/min</li> </ul>
Selftest	<b>Function check</b>	<ul style="list-style-type: none"> <li>– Remote support capabilities built-in</li> <li>– Diagnostic tools with extensive event logging</li> </ul>

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### Installation conditions

#### General ambient conditions

#### Mill climate

- The temperature should be maintained below 45° C and humidity should be kept below 80 % without condensation
- The general electronic devices of the system may behave abnormally and usually have higher failure rates above the specified limits

#### Installation

#### Electrical connection

Single phase with protective conductor

#### Mains voltage range

100 – 240 VAC

#### Mains frequency

50/60 Hz

#### Power consumption

Maximum 1 000 VA

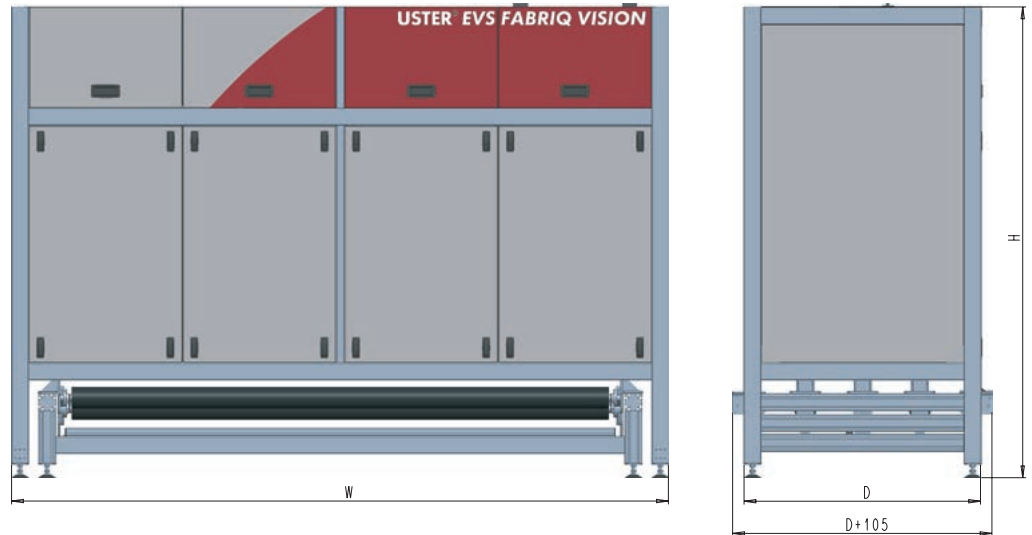
#### Compressed air connection

Not required

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### FABRIQ VISION test unit

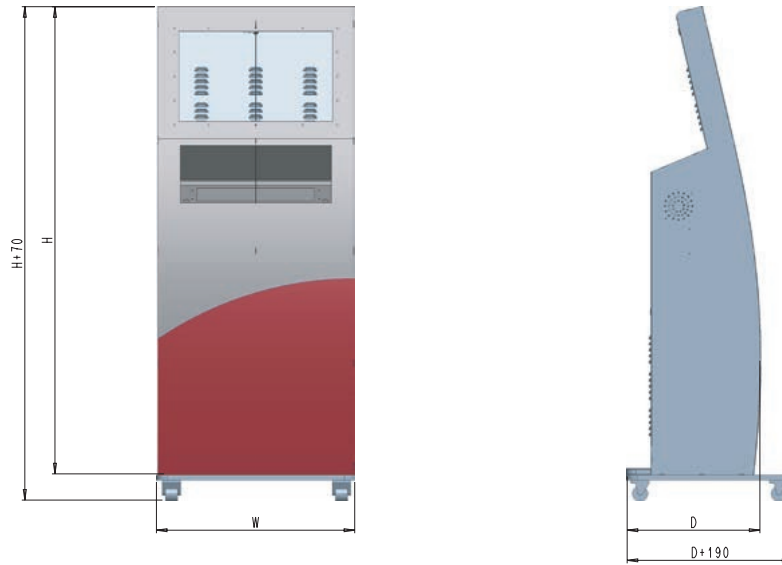


<b>FABRIQ VISION test unit</b> Dimensions in mm (referring to drawing above)	<b>Inspection width mm</b>	<b>W=width mm</b>	<b>H=height mm</b>	<b>D=depth mm</b>	<b>Weight kg (including rollers)</b>
	BFA 1 500	2 260	2 150	800	1 100
	2 250	3 050	2 150	6 801/10 802	1 300
	3 000	3 600	2 150	680/1 080	1 500
	3 700	4 150	2 150	680/1 080	1 700
	4 400	4 700	2 150	680/1 080	1 900

<b>FABRIQ VISION test unit</b> Dimensions in yards (referring to drawing above)	<b>Inspection width yds</b>	<b>W=width yds</b>	<b>H=height yds</b>	<b>D=depth yds</b>	<b>Weight kg (including rollers)</b>
	BFA 1.64	2.47	2.35	0.88	1 100
	2.46	3.34	2.35	0.741/1.182	1 300
	3.28	3.94	2.35	0.74/1.18	1 500
	4.05	4.54	2.35	0.74/1.18	1 700
	4.81	8.09	2.35	0.74/1.18	1 900

**USTER® EVS FABRIQ VISION**  
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**UEVS Control Unit**



<b>UEVS Control Unit</b> Dimensions in mm (referring to drawing above)	<b>W=width</b> <b>mm</b>	<b>H=height</b> <b>mm</b>	<b>D=depth</b> <b>mm</b>	<b>Weight</b> <b>kg</b>
	190	171	399	135

<b>UEVS Control Unit</b> Dimensions in yards (referring to drawing above)	<b>W=width</b> <b>yds</b>	<b>H=height</b> <b>yds</b>	<b>D=depth</b> <b>yds</b>	<b>Weight</b> <b>kg</b>
	0.21	0.19	0.44	135



Uster Technologies has made all possible efforts to ensure that all information is accurate at the time of publication. Hereby it is declared that alterations to the product may be possible at any time. In these cases the information contained in this technical datasheet is subject to change without notice.

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