



# **USTER® EVS FABRIQ VISION**

The fabric quality assurance system

Technical Data

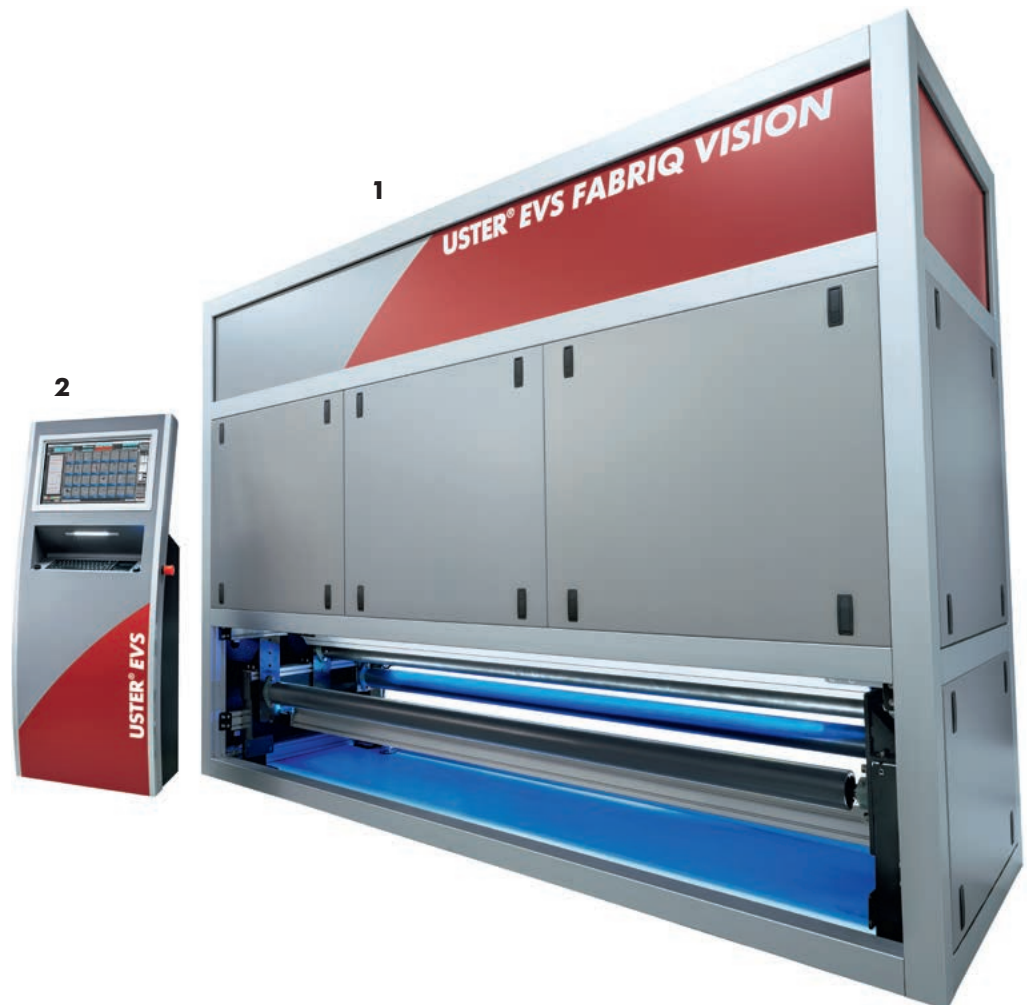
August 2022

# 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 touchscreen monitor
- 3 All in one Album review workstation (without illustration)
- 4 Rollers (without illustration)

### Options

- 5 All in one Control Unit (without illustration)
- 6 Additional All in one Album review workstation (without illustration)
- 7 Optimized Cut Control with laser pointer (without illustration)
- 8 Infrared marker (without illustration)
- 9 BFA Rollers (without illustration)

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

### 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 spectrosopes</li> <li>- UEVS Control Unit including touch screen monitor</li> <li>- Illumination unit</li> <li>- Encoder (length meter)</li> <li>- Application software</li> <li>- All in one Album review workstation with software</li> </ul>
<b>Subsystem of the Uster EVS Fabriq Vision:</b>		
<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>- 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>

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

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>
All in one Album review workstation (3)	<b>Computer software</b>	Album review workstation for the application of the album review only
Rollers (4)	<b>Hardware</b>	Material: Aluminum/Steel Roughness: Ra <1.6 µm Concentricity/runout 0.25 mm for Ø100/0.5 mm for Ø140 mm Ø100 mm, for long systems fabric width 3.7 & 4.4 m Ø140 mm

### Options

All in one Control Unit (5)	<b>Application</b>	Instead of Uster EVS Control Unit
Additional All in one Album review workstation (6)	<b>Application range</b>	Additional All in one Album review workstation for the application of the album review only
Optimized Cut Control (UEOCC) with laser pointer (7)	<b>Application range</b>	<ul style="list-style-type: none"> <li>- After the album review, the defect map is synchronized at the UEOCC, 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 (8)	<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 UEOCC, when the infrared sensor detects the invisible marks</li> </ul>
BFA Rollers (9)	<b>Hardware</b>	Material: Aluminum/Steel Roughness: Ra <0.8 µm Concentricity/runout 0.05 mm diameter 100 and 140 mm

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

### 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 Manual Defect 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>Manual Defect Classification</b>	<ul style="list-style-type: none"> <li>– The classification module enables the user to define and manually apply several defect classes to get a defect 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>
Cut Optimization	<b>Cut Optimization module</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>

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

### 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

115 VAC or 230 VAC

#### Mains frequency

50/60 Hz

#### Power consumption

Maximum 1,000 VA

#### Compressed air connection

Not required

#### Single phase with protective conductor

Proper grounding cable and connection pit >4 mm<sup>2</sup>

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

### Uninterrupted power supply (UPS)

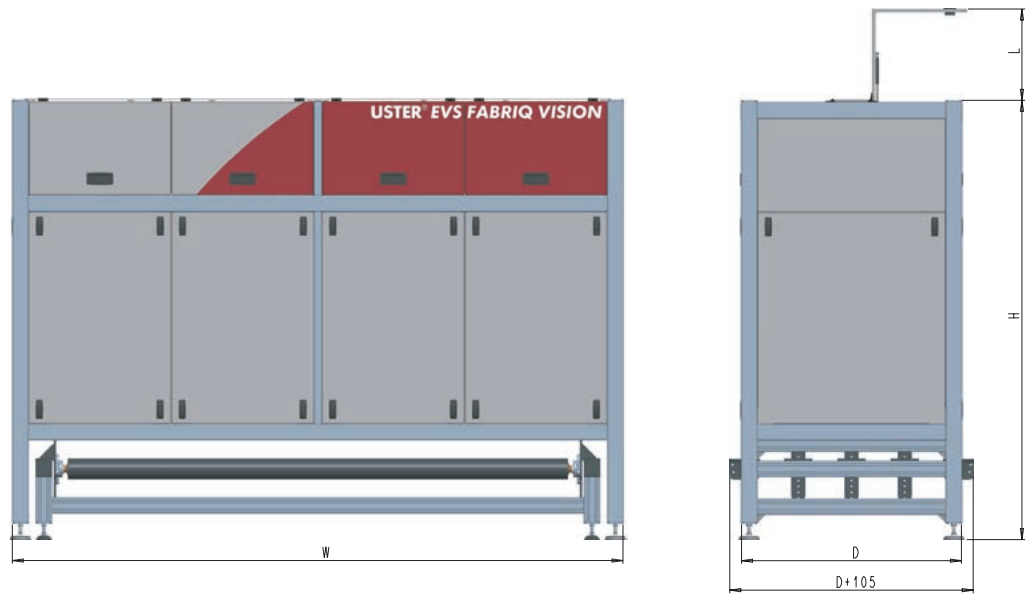
UPS must be provided by the customer

	<b>UPS Bypass Type</b>	ON-Line or Line-Interactive
	<b>Max. dimensions to store 290x400x130 mm in control unit cabinet</b>	D x W x H
<b>Electrical Input</b>	<b>Nominal Voltage</b>	According to local standards
	<b>Frequency</b>	According to local standards
<b>Output</b>	<b>Nominal Output Voltage</b>	120 VAC or 230 VAC
	<b>Power Capacity</b>	850 VA/480 W
	<b>Voltage regulation</b>	+/-3%
<b>Environment</b>	<b>Safety markings</b>	According to local standard
	<b>Ambient operating temp.</b>	0 to 45 °C
	<b>Relative humidity</b>	0 to 80%
<b>Connections</b>	<b>Input Connector</b>	IEC C14
	<b>Output Connectors</b>	2x IEC C13

# USTER® EVS FABRIQ VISION

## The fabric quality assurance system

### Fabriq Vision test unit



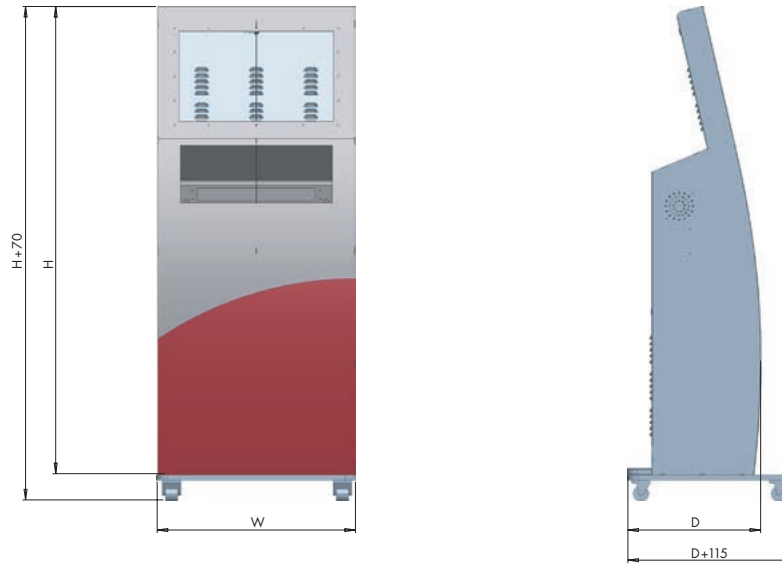
<b>Fabriq Vision test unit</b> Dimensions in mm (referring to drawing above)	<b>Inspection width mm</b>	<b>W=width mm</b>	<b>H=height mm/Total</b>	<b>D=depth mm</b>	<b>Weight kg (including rollers)</b>	<b>L=Height of lid on top (mm)</b>
BFA 1,500	2,250	2,260	2,150/2,600	800	1,100	450
	3,000	3,000	2,150/2,600	680/1,080	600	450
	3,700	3,740	2,150/2,600	680/1,080	700	450
	4,400	4,440	2,150/2,600	680/1,080	800	450
	5,140	5,140	2,150/2,600	680/1,080	900	450

<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/Total</b>	<b>D=depth yds</b>	<b>Weight kg (including rollers)</b>	<b>L=Height of lid on top (yds)</b>
BFA 1.64	2.46	2.47	2.35/2.84	0.88	1,100	0.49
	3.28	3.28	2.35/2.84	0.74/1.18	600	0.49
	4.05	4.09	2.35/2.84	0.74/1.18	700	0.49
	4.81	4.85	2.35/2.84	0.74/1.18	800	0.49
	5.62	5.62	2.35/2.84	0.74/1.18	900	0.49



**USTER® EVS FABRIQ VISION**  
The fabric quality assurance system

**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>
	650	1,550	440	85

<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>lbs</b>
	0.71	1.7	0.48	187

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.

August 2022



**Uster Technologies AG**

Sonnenbergstrasse 10

8610 Uster

Switzerland

T. +41 43 366 36 36

F. +41 43 366 36 37

sales@uster.com

www.uster.com