



USTER® *EVS FABRIQ VISION N*

The fabric quality assurance system

Technical Data

June 2023

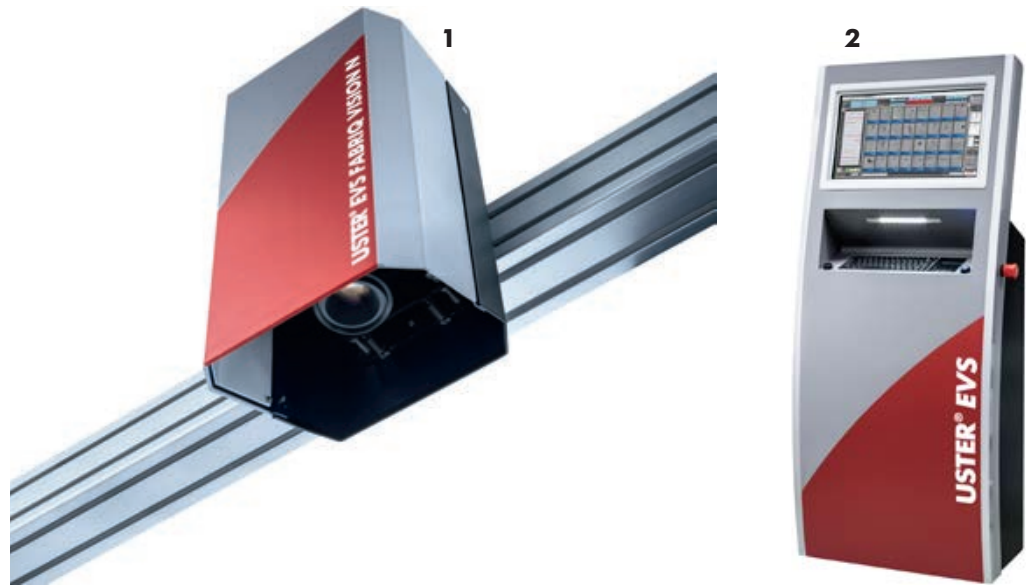
USTER® EVS FABRIQ VISION N

The fabric quality assurance system

Uster EVS Fabriq Vision N allows fabric producers to implement automated fabric inspection even if space is limited. 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 N installation



Basic installation

- 1 Spectrosopes
- 2 UEVS Control Unit including touchscreen monitor

Options

- 3 All in one Control Unit (no illustration)
- 4 All in one PC workstation for review
- 5 Optimized Cut Control (no illustration)
- 6 Infrared marker (no illustration)
- 7 Laser pointer (no illustration)

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Basic installation

Overall installation	Functions	<ul style="list-style-type: none"> - Uster EVS Fabriq Vision N visualizes defects onscreen in the user interface - Real-time integrated image acquisition processing - All defects are detected, categorized, saved and displayed on the operator interface - High-speed detection capabilities up to 1,000 m/min - Color (RGB) or black and white (monochrome) image processing - High resolution to detect smallest defects <0.5 mm
	Included in the delivery	<ul style="list-style-type: none"> - Spectroscopes - UEVS Control Unit including touch screen monitor - Illumination units - Encoder (length meter) - Application software - All in one PC workstation for review

Subsystem of the Uster EVS Fabriq Vision N:

Test unit (1)	Application range	<ul style="list-style-type: none"> - Recommended for in-line inspection of woven, knitted, warp knitted and nonwoven fabrics
Installation options	In-line	<ul style="list-style-type: none"> - After the coating-line, dyeing-line or at the exit of a finished range as stand-alone or together with Uster EVS Fabriq Shade
	Illumination	<p>Depending on the fabrics characteristics, different light sources can be applied in different angles and positions.</p> <ul style="list-style-type: none"> - White LED - Blue side light - UV - Infrared
UEVS Control Unit (2)	Computer software	<ul style="list-style-type: none"> - Uster EVS Fabriq Vision N intuitive touch application software - Windows operating system - System pre-configured and locked down - Simple full system update process
	Computer hardware	<ul style="list-style-type: none"> - Computer with Intel® processor - 1 internal 500 GB hard drive

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Options

All in one Control Unit (4)	Application	Instead of Uster EVS Control Unit
Additional All in one review workstation (5)	Application range	Additional All in one review workstation for the application of the data review only
Optimized Cut Control (UEOCC) with laser pointer (6)	Application range	<ul style="list-style-type: none">– After the data 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– The laser pointer indicates the exact position of defects during the cutting table process
Infrared marker (7)	Application range	<ul style="list-style-type: none">– 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– This is used later in the sync process at the UEOCC, when the infrared sensor detects the invisible marks

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Operating Software for Uster EVS Fabriq Vision N

User interface	Data visualization	Real-time visualization of quality data during inspection, including <ul style="list-style-type: none">– Defect images– Defect map– Defect list– Measurement graphs (width, speed, GSM)
Processing tools	Alerts and warnings	Indication of alerts in different levels indicate drop in quality or performance for quick time-to-action according to customer-specific business rules. <ul style="list-style-type: none">– Repeating defects– Defect size– Defect amount– Customized rules
	Automatic Pre-classification	Automatic real-time pre-classification of defects for efficient understanding <ul style="list-style-type: none">– Shape– Size– Contrast– Repeating interval
Measurements	Width and length measurement	Continuous measurement of width and length of the roll during production <ul style="list-style-type: none">– Indication of measurement on graph– Indication of min, max and average width in header
Monitoring	Uniformity	Continuous monitoring of fabric uniformity of the roll during production <ul style="list-style-type: none">– Indication of measurement in graph– Consider deviation as defect according to customized rules
	Grammage (GSM)	Continuous monitoring of grammage over whole width and length <ul style="list-style-type: none">– Indication of gsm deviation from reference according to customized rules– Indication of gsm variance on graph
Cut Optimization	Cut Optimization module	<ul style="list-style-type: none">– The Cut Optimization module allows optimizing for the best quality, ensuring the best yield– It permits to cut out portions of bad quality fabric, defining the best length for each roll– The Cut Optimization is a combination of various permutations and combinations based on the selection of options

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Input data,
output of results,
languages,
units system security

Dialog and report languages

English, German, French, Italian, Spanish, Portuguese, Turkish, Hebrew, Polish, Chinese or Japanese can be selected

Possible units

- Length: foot, yard or meter
- Width: inch or millimeter
- Points per 100: foot, yard or meter
- Majors per 100: foot, yard or meter
- Speed: ft/min, yd/min or m/min

Selftest

Function check

- Remote support capabilities built-in
- Diagnostic tools with extensive event logging

Fabriq Album and Fabriq Assistant provide tools for reviewing the quality data captured by the inspection 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-
- for higher ambient temperatures the connection of an AC is recommended (AC must be provided by the customer)

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

Gross weight of the basic function

FABRIQ VISION N

- Spectroscope: 2.5 kg/piece
- Control unit: 100 kg

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Uninterrupted power supply (UPS)

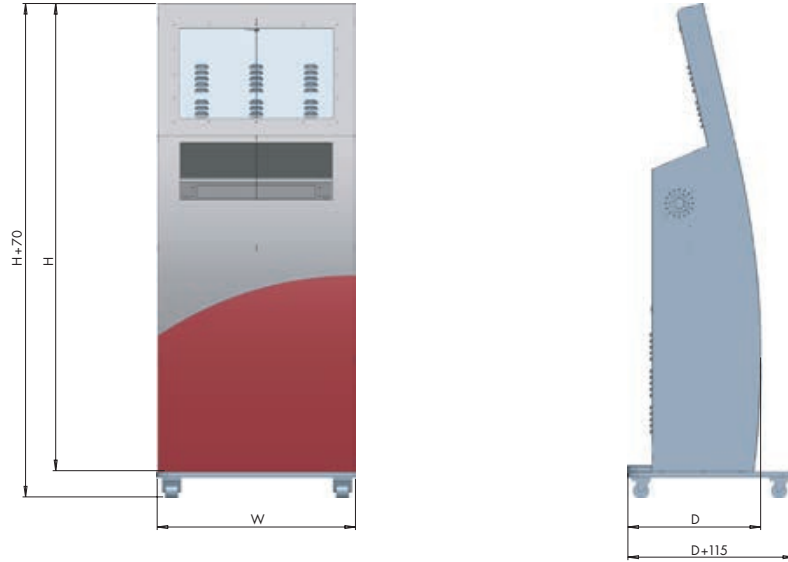
UPS must be provided by the customer

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

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UEVS Control Unit



UEVS Control Unit Dimensions in mm (referring to drawing above)	W=width mm	H=height mm	D=depth mm
	650	1,550	440

UEVS Control Unit Dimensions in yards (referring to drawing above)	W=width yds	H=height yds	D=depth yds
	0.71	1.7	0.48

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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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