



# WebControl S



Inline surface inspection  
of foils, films and textured webs

# WebControl Surface

## Defect detection in smooth foils and technological webs with simple to highly complex textures

An amazingly fast, high-performance and 100% reliable system that detects smallest irregularities such as weaving flaws and faulty stitches, dense spots, cracks, scratches and holes, even in heavily textured materials. This minimizes waste and guarantees that only flawless material is processed.

### System features

#### WebControl Surface (WC S)

#### Sensors

- Pixargus Hybrid Power multi-camera sensor, consisting of GigE CMOS camera sensors
- Able to detect differences in colour

#### Sensors unit

- Innovative sensor unit in turnkey array design
- Sturdy stainless steel and aluminium construction
- Completely encapsulated multi-camera sensors at fixed distances
- Web widths: 20 to 3,500 mm
- Protection class IP 64

#### Illumination unit

- Lighting integrated in sensor head unit; using high-power LEDs
- Long service life
- Symmetrical light distribution in the measuring field
- Maximum light intensity

#### Computer/Cabinet/Operator panel

- Industrial computer with Intel®-Core i technology
- Microsoft Windows® operating system
- Fully integrated Pixargus stainless steel cabinet, all cabling approved for industrial use, protection class IP 54.
- 21.5" MultiTouch operator panel, 1920 x 1080 full HD

#### Pixargus WebControl S Software

- Autofocus function
- 3 different user modes, password protected
- Automatic set-up (no new set-up for recurring products/articles); start-up mode for optimized set-up (optional)
- High-capacity detection and measuring engine
- Interactive system status information
- Storage/loading of all measuring results in log files
- Storage of product-specific recipes/article parameters/internal database
- Wide range of statistical features (online or offline), evaluations by product, date, charge, coil etc.

### Benefits

Compact. Innovative. Windows®-based. Supplied on turnkey basis. Unparalleled measuring and detection performance. Latest state-of-the-art operator panel, default parameter setting, high-capacity software system.

100% surface inspection of webs at low and high process speeds. Several measuring and testing tasks can be performed simultaneously thanks to the innovative Pixargus Hybrid Power multi-camera sensors.

Thanks to the innovative array design of the sensor head, web widths of up to 3,500 mm can be flexibly handled as standard. Thus WebControl S achieves an unrivalled scalability. The choice of material makes the system perfectly suited for continuous operation under harsh production conditions

The high-power LED lighting element provides for an optimally and uniformly lit measuring field and ensures excellent measuring and inspection results. Structural irregularities/material defects (specks, pores, scratches, cracks or grooves ...), which were not detectable in the past, can now be immediately captured and processed by the camera sensors.

"Tailor-made" stainless steel cabinet accommodating all integrated computer and electrical components. Newly developed, intuitive Pixargus Human Machine Interface with optimized graphical display: Multi-touch functionality for moving objects across the screen and zooming in and out by two-finger gestures.

All functions controllable via MultiTouch panel. The new WebControl S software demonstrates how intelligent "machine vision" works: MultiArea, now allowing as many fields of view as desired to be set per camera; the new autofocus reduces set-up times; the coating check function is very important for webs in automotive applications; Defect Density Management (DDM) – and much more!

Pixargus Datamaster 4.0 available as an option. Needless to say that Excel® export functions are provided for data evaluation.

# For every application a tailor-made solution



Inline inspection and versatility of application in the automotive sector guarantees economy, efficient use of resources and high quality.

## Typical automotive products inspected

- Textile and leather fabrics for car seats
- Technological webs for interior lining
- A/C, ventilation filters etc. made of non-woven fabric
- CFRP products/composite fabrics for lightweight construction
- Metal fabrics for industrial filters, exhaust filters, oil drilling filter screens
- Foils for panes
- and many more



Profile or surface, compounds or webs. Guaranteed safety and quality for high-end materials.

## Typical aerospace products inspected

- Textile and leather fabrics for aeroplane interior equipment
- A/C and ventilation filters made of non-woven fabric
- CFRP products for lightweight construction
- Foils for panes
- Metal fabric for filters (e.g. exhaust filters)
- Other metal webs
- and many more



In facility and energy management applications, effective surface and profile inspection means fast ROI.

## Typical building & infrastructure products inspected

- Blinds and shades for windows
- CFRP products for lightweight construction
- Metal sheet, e.g. for sliding gates
- Plastic panels and corrugated metal sheet for roofs
- Metal fabric for facade cladding
- Glass fiber mats
- and many more



Ultra-precise inspection in the  $\mu\text{m}$  range for medical engineering products and high-end technology for clean room applications.

## Typical medical engineering products inspected

- Non-woven fabrics for hygienic products used in patient care
- Fabrics for emergency care/surgery products
- Semi-finished webs for manufacture of medical products
- Non-woven fabric filters for clean rooms (A/C, ventilation)
- Foils for medical use
- Metal fabric for filters in medical applications
- and many more



Quality control for input materials and/or final products as diverse as smartphones, carton packages for milk, IT, food items, etc.

## Typical consumer goods products inspected

- Coated cardboard for packaging
- Leather fabric for home furnishings
- Cling film and aluminium foil
- Carpets and laminate flooring
- Filters for vacuum cleaners
- Plastic sheets and films
- Pulp for disposable diapers
- Paper
- and many more

# WebControl S

## Surface inspection system

### System features

<b>Inspected items</b>	Webs (woven/non-woven), foils, film
<b>Measuring principle</b>	Optical, non-contact
<b>Measuring field</b>	from 20 to 3,500 mm or more
<b>Resolution</b>	$\geq 10 \mu\text{m}$
<b>Number of measured pixels</b>	Up to 1.4 billion per second
<b>Scanning rate</b>	Up to 80 kHz
<b>Line speed</b>	< 1,000 m/min and more

Standard version. Other features on request.

### Other specifications

<b>Interfaces</b>	LAN/Ethernet TCP/IP IEEE 802.3, WiFi IEEE 802.11, USB 3.0, digital I/O 24VDC
<b>Optional interfaces</b>	OPC, RFID, SPS, VGA splitter, RS 232, industrial fieldbuses, e.g. ProfiNet, Profibus-DP, Device-Net, incremental rotary encoder, marking system, etc.
<b>Power supply</b>	100...240 V AC +/-10% 50Hz (60 Hz)
<b>Protection class</b>	IP 54 (sensor head IP64)
<b>Guideline</b>	CE compliant



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