



# SENTINEL SILVER

## **SENTINEL SILVER IS A BASIC QUALITY CONTROL SYSTEM DESIGNED TO 100% INSPECT THE PRINTED WEB MATERIAL**

Sentinel Silver is equipped with one or two area scan cameras that continuously acquires high resolution images of the entire web. Thanks to this specific technology it is possible to visualize and inspect all parallel labels of one reel with a single image.

Sentinel Silver detects missing labels, splices, remaining matrix, flags on the web and other gross printing defects like missing colour, spots, substrate damages, color deviation and mis-registration.

### **SPECIAL LED DIFFUSE ILLUMINATOR**

Sentinel Silver is designed to work on all types of substrates and materials including any highly-reflective foil. The advanced LED dome illuminator permits to optimize the image quality on special finishing like hot and cold foil, embossing, metalized substrates and transparent films.

### **FAST JOB SETUP**

Sentinel boasts a fast and easy setup. Starting a new job can be a completely automatic procedure, most tasks are accomplished by pushing a single button.

Setup time is less than 10 seconds.

No computer knowledge is required to operate thanks to an intuitive interface and touch screen operations.

## **Entry Level Inspection System for LABELS & NARROW WEB**



### **INSTALLATION ON PRINTING PRESSES**

Installed on a printing machine Sentinel checks the quality of the entire job and in case of defect it immediately alerts the operator to avoid large amounts of waste.

### **INSTALLATION ON REWINDING MACHINES**

Installed on a rewinding machine Sentinel controls the quality of the entire print job. In case of defect Sentinel slows down the machine and stops the defect in position for allowing the operator to check and fix.

With Sentinel installed on your rewinding machine you can be sure that defective material will not be delivered to your customers.

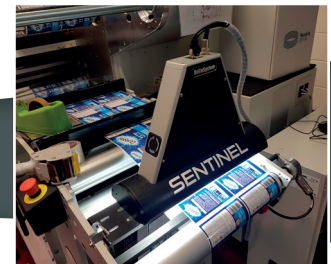
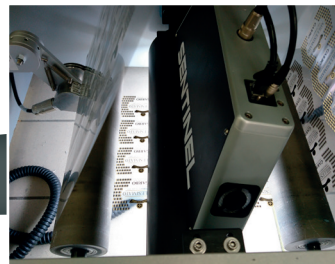
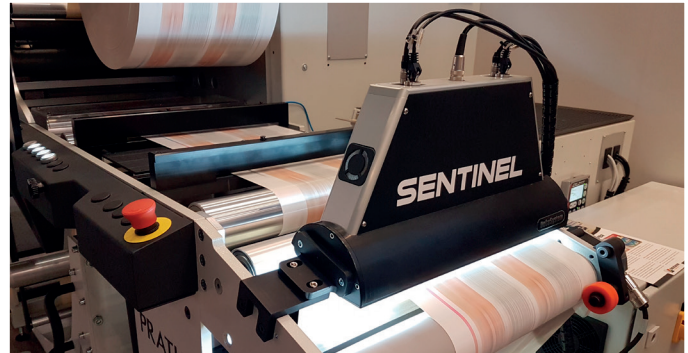
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## STANDARD FEATURES

- Easy integration onto all common printing presses and finishing machines
- Easy to learn and easy to use GUI interface
- All operations can be carried out using the touch screen
- Simple and quick setup
- Multiple areas with independent sensitivity settings
- Masking areas
- Great reliability in defect detection
- Web viewing with live image with digital zoom and full repeat navigation
- Defects are clearly displayed to the operator with toggle feature
- Hold and Zoom of the defective image
- Different display modes: defect detection and defect history
- Full defects report and automatic storing of all production process data
- Different levels of Login
- Alarm on repetitive defects
- Automatic compensation of web shift, no web guiding required
- Scalable resolution (depending on speed)
- Possibility to inspect booklet labels
- Connection to a flagger device
- Automatic shutdown

## OPTIONS

- In-line Delta E spectral measurement and color control
- Printing Format length measurement
- Signal tower with LED indicator
- Second screen for large web view
- Workflow link
- Data and defects information saved on a dedicated server
- Custom illuminator for special ink
- One year remote support and free software upgrades
- Pro support: on site computer warranty



## TECHNICAL DATA

DESCRIPTION	Banda	STEP OF ENCODER = 1							STEP OF ENCODER = 2						
		RisX	RisY	Vmax	DM-ZU	DM-ZU	DM-ZS	DM-ZS	RisX	RisY	Vmax	DM-ZU	DM-ZU	DM-ZS	DM-ZS
Sentinel SILVER	max	mm	mm	m/min	mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	mm	m/min	mm <sup>2</sup>	mm	mm <sup>2</sup>	mm
Sentinel M-Scan 250	250	0,10	0,10	122	0,14	0,43	0,48	0,78	0,10	0,20	220	0,29	0,60	0,95	1,10
Sentinel M-Scan 350	350	0,14	0,14	171	0,28	0,60	0,93	1,09	0,14	0,27	308	0,56	0,85	1,87	1,54
Sentinel M-Scan 450	450	0,18	0,18	205	0,46	0,77	1,54	1,40	0,18	0,35	369	0,93	1,09	3,09	1,98
Sentinel M2-Scan 350	350	0,07	0,07	91	0,07	0,30	0,23	0,55	0,07	0,14	164	0,14	0,42	0,47	0,77
Sentinel M2-Scan 450	450	0,09	0,09	117	0,12	0,38	0,39	0,70	0,09	0,18	211	0,23	0,54	0,77	0,99
Sentinel M2-Scan 550	550	0,11	0,11	134	0,17	0,47	0,58	0,86	0,11	0,21	242	0,35	0,66	1,15	1,21

## OPTIONS

Double monitor	PRO SUPPORT	Auto shut down	PDF REPORT	format measurement	Multiple areas	Barcode-datamatrix-ocr	Control from database	PDF Comparison
option	option	yes	yes	option	yes	no	no	no

- Number of Camera Sentinel M: 1
- Number of Camera Sentinel M2: 2
- Camera type: color 5Mpixel
- Color Variation (delta E measurement): 7

V.MAX: maximum speed  
 DM-ZU (mm<sup>2</sup>): Minimum defect in uniform area in square millimeter  
 DM-ZU (mm): Minimum defect in uniform area in millimeter (we suppose to have a defect like a dot)  
 DM-ZS (mm<sup>2</sup>): Minimum defect in structured area in square millimeter  
 DM-ZS (mm): Minimum defect in structured area in millimeter (we suppose to have a defect like a dot)

Technical data and system specifications refer to the state at the time of printing. We reserve the right to modify them in the interest of a continuous program of further development.