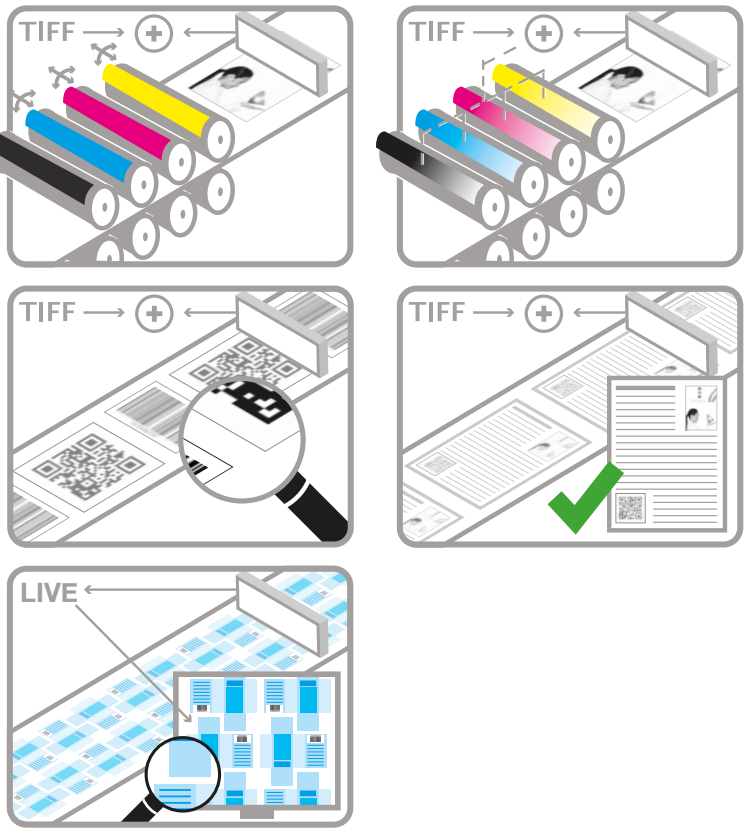
IBS-100



FULL INSPECTION COLOUR AND REGISTER CONTROL SYSTEM

Q.I. PRESS CONTROLS

IBS-100

FULL INSPECTION COLOUR AND REGISTER CONTROL SYSTEM

IBS-100 enables image-based density regulation, colour register control, cut-off control and side-lay control with 100% full inspection on both packaging and digital presses. As an additional feature everything is fully visible during the printing process via web-viewing. The operator can zoom in on the control screen to areas that need attention in order to be inspected in detail. The IBS-100 offers inspection at an extremely high resolution. Besides exact pinpointing minute errors, missing jet detection (ink jet printing) the high resolution also functions to recognize small text, barcodes and 2D codes.

Applications IBS-100
- Automatic control of ink keys, ink fountain rollers.
- Automatic control of colour register in all directions from all colours to each other (Colour-to-colour register).
- Measuring the register on multiple locations on the printing cylinder to define register deviations and to control the web growth behaviour (Fan-out control & Plate to Plate Register).
- Alarm in case of production process failures (Production process monitoring).
- Press presetting tools and extensive reporting of production relevant information to optimise the printing process (Printing process optimisation).
- Missing jet detection.
- Barcode and 2D code verification and data matching.
- 100% inspection.
- Web-viewing.

What are the unique features?
- Combined functionality of colour and register in one scanner bar + 100% inspection.
- Works by measurements in the print without the use of marks (Image based system).
- Web viewing, visualising the printed matter for the operator.
- Extensive “remote diagnostics” via VPN connection.
- Measurement of colours in print in CIELab colour values.
- Easy to operate by means of a touch screen.

What are the advantages of IBS-100?
- Single bar scanner reduces the need of multiple camera’s.
- Less labour-intensive thanks to a full range of automation.
- Less waste due to automatic colour and register optimisation while starting up.
- Alarms triggered by printing problems such as clogged inkjet nozzles.
- Reproduction with absolute colour stability, independent of job, printing company or press.
- Missing jet detection without the need of test patterns.
- Easy to expand for product quality reports via Intelligent Quality Management.

Options:
- Front to back register control ensures that the front of the printed web is brought into register with the back of the printed web.
- Waste gate control: dumping unsellable copies when produced.
- Error reporting button on operator screen.
- Alarm signals via traffic light.
- DocMarker for marking documents good/bad.

Specifications

Scan Bar:

Type:	CMOS – Trilinear RGB line
Inspection width:	367 / 587 / 807 mm
Vertical resolution:	600 x 600 DPI at 140 m/min 600 x 279 DPI at 300 m/min 300 x 300 DPI at 466 m/min 300 x 233 DPI at 600 m/min 200 x 190 DPI at 900 m/min
Web stability condition:	± 0.5 mm (focus depth)
Light source:	Dual white LED array
Dimensions:	65 mm * 197 mm * 494 / 714 / 934 mm
Weight:	3.2 / 4.7 / 5.3 kg
IP code:	IP30
Certifications:	CE

Colour uniformity measurement:

Colour distance measurements:	CIEDE2000, CIE94, CIE1976

Colour and register control functionality from the image:

Digital reference image:	RIP data; 1-Bit TIFF or TIFF/G4 files*
Colours:	CMYK / 2 x PMS only in colour bars*
Accuracy CIELab colour value:	1ΔE
Accuracy raster percentage:	± 1 %
Accuracy dot gain:	± 2 %
Accuracy K-value:	± 2 %
Accuracy Density:	± D0.02
Accuracy Colour register:	± 0.01 mm
Colorimetrics measurements:	CIE L*a*b*, ΔE* CIELAB
Maximum colour register error:	± 3.0 mm
Minimum density:	0.6 D for CMYK
Density determination:	Density, Dot gain, Contrast

Measuring conditions:

Reference white:	Absolute, relative
Exposure profiles:	D55
Density standards:	DIN 16536/Status-E, ANSI Status T

Barcode reading:

Min. silent zone:	5 mm left and right
Min. contrast:	20%
Quality measurement:	ISO/IEC 15415

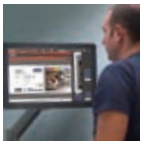
Supported barcodes:
2/5 Industrial, 2/5 Interleaved, Codabar, Code 39, Code 93, Code 128, EAN-8, EAN-8 Add-On 2, EAN-8 Add-On 5, EAN-13, EAN-13 Add-On 2, EAN-13 Add-On 5, UPC-A, UPC-A Add-On 2, UPC-A Add-On 5, UPC-E, UPC-E Add-On 2, UPC-E Add-On 5, PharmaCode, RSS-14, RSS-14 Truncated, RSS-14 Stacked, RSS-14 Stacked Omnidirectional, RSS Limited, RSS Expanded, RSS Expanded Stacked

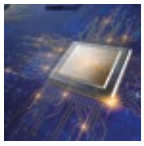
2D code reading:

Min. contrast:	20%
Max. width / height ratio:	1:10
Max. slant:	30°
Quality measurement:	ISO/IEC 15415

Supported 2D codes:
DataMatrix ECC200, GS1 DataMatrix, QR Code, GS1 QR Code, Micro QR Code, Aztec Code, GS1 Aztec Code, PDF417

Specifications may change without further notice.
*under development



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