



► Features

- Software can generate the inspection report in PDF format
- Optical resolution is up to 0.05mmx0.05mm, inspection accuracy is up to 0.2mmx0.2mm
- With the function of color difference distribution map, the area with large color difference can be highlighted
- Suction can be adjusted automatically according to paper size
- The defects can be marked by three level, serious, normally and negligible
- The defects will be checked again by deep learning algorithm to avoid false defects

► Specifications

Items	HyperProof-Sheet Proof Machine HT-SP1040
Max. sheet inspection size	1,040mm × 720mm
Applicable paper type	Metalized and common papers, such as art paper, silver and gold paper, etc.
Paper quality	40~450 g/m ²
Resolution	0.05mm × 0.05mm
Inspection accuracy	0.2mm × 0.2mm
Template type	Electronic file(one-up or multi-up), qualified sheet
File format	PDF, BMP, TIFF
Color variances detected	Only for big color variance inspection
Defect Type	Hickies, stain, fleck, stripe, scratch, misprint, bite, ink spot, mis-registration, bar code defects
Layered comparison function	Optional (third-party pdf development library needed)
Inspection time per sheet	≤ 30s (800mm*600mm sheet size)
Total power	3kw
Weight	400KG
Dimension	1,700mm × 1,000mm × 1,400mm

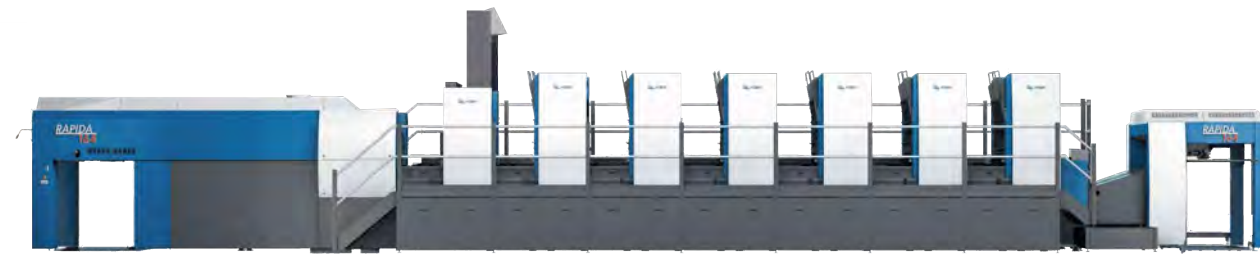
HyperProof is a print quality inspection and proofing machine, normally used to check the quality of first print before mass printing and sampling inspection during printing. It is suitable to inspect a variety of materials like printed sheets, leaflets and booklets for industries of pharmaceuticals, cigarettes, consumer goods packaging, and so forth.

It applies camera to scan the printed sample on the suction platform, load PDF file or image of good print as the template to compare to find out if any difference between template and sample, so as to alert quality issue for printing adjustment.

► Defects Example



HyperQC—Inline Print Inspection System for Offset Press



► Composition



HyperQC-Inline Print Inspection System for Offset Press, is applicable to inline printing quality inspection of white board paper, gloss art paper, aluminized paper and laser paper, etc. It can be integrated on a variety of offset press machines, such as Heidelberg, KBA, Komori, Mitsubishi, Manroland, etc. and performs real-time quality inspection, and alert the defects during the process.



Heidelberg



Mitsubishi

► Features

- Easy to be installed in various offset press, installation position locates in protection cover, no impact on current operations
- Real-time inline inspection to avoid continuous defects and serious defects
- Sound and light alarm for continuous defects
- Less than 2min to switch new job
- Different inspection resolution can be set in different zones flexibly
- Dynamic tolerance setting and regional self-study function
- Support proof inspection with PDF file for first print

► Specifications

► Defects Example



Items	HyperQC—Inline Print Inspection System for Offset Press
Max. inspection size	1020mm × 720mm
Paper weight	60-350g
Max. inspection speed	15,000sheets/hour
Resolution	0.08mm × 0.08mm
Min. defects inspection resolution	0.1mm ²
Min. color variation defects	$\Delta E \geq 3$
Misregistration	± 0.1 mm
Defects type	Thick Ink, light ink, cross color, smear, pasting plate, fringe, bite, ink dots, holes, wrinkle, mosquito and oil dots, etc.
Applicable Press	Some kinds of gravure presses and various offset presses like Heidelberg, KBA, Komori and Mitsubishi

HyperCarton-Print Inspection Machine for Folding Cartons



HyperCarton-Print Inspection Machine for Folding Cartons is one kind of offline inspection machine commonly used to inspect the print quality of cigarette blanks, pharmaceutical, cosmetic, food, daily consuming, and FMCG cartons, tags, labels, and corrugated board, etc. It is able to inspect the quality of printing, foil stamping, embossing, varnishing, lamination, hologram, and variable code, etc.

It can configure maximum 6 cameras to capture the image(s) of cartons one by one, compare with standard master, reject the defective cartons, and separate the good ones and bad ones into different collection module, so as to make sure that only good products are delivered to customer.

► Camera Function

- The standard camera No.1 is color camera for printing defects and common foil stamping defects
- The standard camera No.2 is mono camera for lamination defects, uv varnish defects and embossing defects
- Additional optional cameras are available for inspecting special foil stamping, hologram, variable data, backside print, etc.

► Applications



► Features

- Feeding method: printing side downwards (same way with folder gluer), to avoid scratches during feeding
- Fully automated and user-friendly software enable quick setups in minutes
- Multi-master feature to inspect the folding carton products with varying images in specified region
- The combination of deep learning and traditional algorithms makes inspection more accurate and stable
- Statistic feature generates an inspection report in PDF per each job
- Other options: suction feeder for easily scratched cartons, left/right side output for rejected cartons

► Specifications

Items	HT500	HT700	HT800B
Max. inspection sheet size(W*L)	500mm×500mm	700mm×550mm	800mm×500mm
Min. inspection sheet size(W*L)	90mm×90mm	90mm×90mm	100mm×100mm
Paper thickness	90~500gsm	90~500gsm	150~500gsm, E\F flute, <=3mm
Max. inspection speed	300m/min	300m/min	300m/min (cardboard) 200m/min (corrugated)
Min. defect size (as a spot)	High contrast: 0.15mm Low contrast: 0.25mm	High contrast: 0.15mm Low contrast: 0.25mm	High contrast: 0.15mm Low contrast: 0.25mm
Min. defect size (as a line)	High contrast: W≥0.15mm L≥5mm Low contrast: W≥0.25mm L≥5mm	High contrast: W≥0.15mm L≥5mm Low contrast: W≥0.25mm L≥5mm	High contrast: W≥0.15mm L≥5mm Low contrast: W≥0.25mm L≥5mm
Min. color variance (ΔE)	ΔE≥3		
Min. registration deviation	±0.15mm	±0.15mm	±0.2mm
Accepted products handling	Shingle stream module, direct output, counting module		
Quantity of rejection gate			2 (one for cardboard, one for corrugated)
Rejected products handling (cardboard)	Shingle stream module, direct output		Shingle stream module, left-side output
Rejected products handling (corrugated)			Shingle stream module, left-side output
Dimension	7920mm×1440mm×1490mm	7920mm×1440mm×1490mm	8200mm×1440mm×1490mm
Power and air supply	AC380V/50Hz, 18KW, 0.7~0.8MPa	AC380V/50Hz, 18KW, 0.7~0.8MPa	AC380V/50Hz, 18KW, 0.7~0.8MPa

HyperLabel-Label Printing Inspection Machine



HyperLabel, label printing inspection machine is used to inspect the print quality of rotary cigarette, pharmaceutical, cosmetic, food, daily consuming, and FMCG labels and packages, etc. It is able to inspect the quality of printing, foil stamping, embossing, varnishing, lamination, hologram, and variable code, etc.

It can configure several cameras to capture the image(s) of narrow-web material, compare with standard master, as soon as defect is checked out, alert the users with light and sound to handle the defect timely.

► Features

- Support for setting up master within 2-3min for quick inspection
- Maximum inspection speed up to 200m/min, with high production efficiency
- Uniquely designed combination of light source enhances defect inspection capability
- Support for inspecting print defects and multiple variable data at the same time
- Various defect handling methods: sound and light alert
- Support to store inspection record into database in real time for traceability afterwards

► Applications



► Specifications

Items	Parameters
Max. inspection width	330mm/370mm/450mm
Max. inspection speed	200m/min
Min. defect size (as a spot)	0.1mm (contrast \geq 20DN)
Min. defect size (as a line)	W \geq 0.1mm L \geq 5mm (contrast \geq 20DN)
Min. color variance (ΔE)	$\Delta E \geq 3$
Min. registration deviation	± 0.1 mm
Applicable materials	White paper, Coated paper, Silver paper, Mirror copper paper, Laser cardboard, Self-adhesive labels, Transparent/semitransparent materials, Plastic films, etc
Max. unwinding/rewinding diameter	700mm
Core inner diameter	3inch/6inch (customized)
Inspectable defects	Print defects such as text, color variation, overprint deviation, missing printing, dirty spots, knife lines, flying ink, paste, foreign matters, etc.
Variable code inspection	Variable code reading and comparison, code repetition, code absence, code error, etc.
Variable code type	Batch No. Barcode: Code128、ITF25、EAN13、Code39、EAN8、UPCA、UPCE、UCC/EAN-128, etc 2D code: QR、DM、PDF417, etc
Power supply	7kW, 380V, 50Hz
Weight	2000kg
Machine dimension	3020mmx1250mmx1500mm

JetTuch-Digital Spot UV Coating Machine with Cold Stamping



JetTuch-Digital Spot UV Coating Machine with Cold Stamping, adopts DOD inkjet technology via inkjet heads to print UV varnish without any mold or plate for flexible and cost-effective finishing process. It can easily create 3D effect and metallic lustre on the material by applying digital printing technology.

► Specifications

Items	AD580	AD350	A350	D3
Technology	DOD technology X-POLISHING inkjet system			
Supported format	TIFF\PDF\PS			
Function	Spot UV, 3D UV, foil stamping, sandy effect			
Cold foil	Option. (The max. Length of aluminum film is 500 meters. It has pull-back function to save aluminum film.)			
Registration precision	±0.15mm(Four cameras)		±0.15mm(Two cameras)	
Max. paper size	580 X 760mm	350 X 645mm	350 X 645mm	530 X 760mm
Min. paper size	297X210mm	297 X 210mm	297 X 210mm	297X210mm
Max. coating width	580mm	350mm	350mm	530mm
Max. coating speed	3000 sheet/hour (720DPI, small dot) Remark: thicker coating effect brings lower speed.			A4 297x210mm 20sheets/min A3+ 320x464mm 10sheets/min B2 530x760mm 6sheets/min
Coating thickness	10µm to 100µm (one pass) 10µm to 5mm (multiple-pass)		10-100µm	10-100µm
Inkjet mode	One-pass Multiple-pass	One-pass Multiple-pass	One-pass	Multiple-pass
Collection mode	Table			
Power	12KW/380V50Hz			
Weight	2000KG	1800KG	1200KG	1200KG
Dimension	6500X1600X1850mm	6500X1600X1850mm	4200X1600X1850mm	6000X1600X1850mm

► Applications

Business cards, personalized packaging, book covers, greeting cards, magazines, invitations, posters, product brochures, labels, ceramics, metal products, desk calendar, etc.

► Features

- **Highly efficient data processing and robust inkjet control system**
File upload → Camera register → AI file edit → RIP processing → Add printing jobs → Inkjet printing, done
- **Basic setup extension**
Single pass high speed mode or scanning mode to meet different production and process requirement
- **Wide range of substrates**
Applicable material weight: 80gsm-600gsm, with different substrates such as paper, plastic, metal etc. It's not necessary to have pre-coating for permeable material when choosing multiple-pass mode. One-pass mode requires pre-coating for permeable material
- **Four-cameras/Tow-cameras registration system**
Real-time to measure the position of sheet during running so as to get a high precision of ±0.15mm registration
- **High speed or high thickness**
In high-speed mode(one-pass mode), the production can reach 3000 sheet/hour while in low-speed mode(multiple-pass mode) the coating thickness can reach 1-2mm
- **Spot UV and cold foil stamping can achieve fine lines pattern**
The lines and gap can reach 0.1mm, clear and solid, good 3D effect
- **The suitable inkjet heads and UV varnish ensure of stable performance and embellishment quality**
- **Negative pressure and ink supply system on basis of PLC**
Professional sensor and controller with quick response and high control precision (±0.01KPA), ensuring long lifespan, reducing the ink supply variation, helping to keep stable printing quality

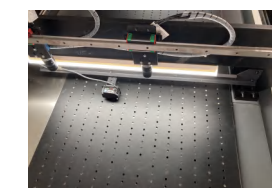
► Machine Composition



Feeder



Rectifying



Camera



Inkjet



Cold stamping



Curing

JetsLabel-Label Digital Printing Machine



JetsLabel-Label Digital Printing Machine is a hybrid label press that combines traditional printing technology with digital printing. It is with great cost-effective, which is the ideal choice for printing companies who are expanding production capacity or developing digital production lines. JetsLabel helps customers to build a complete set of digital printing production line. In the face of increasing personalized and customized printing demand, one step ahead in the market competition, bringing a surge in orders and profits.

► Special Functions

- Dust-removal system**
 Reducing material waste and downtime to ensure stable and reliable high-speed and high-quality printing by effectively remove dusts including paper scraps, powders and other visible particles.
- Corona treatment system**
 Effectively improve the surface of substrates to increase the adhesion of inks
- Arc-tension control system**
 Delivers accurate tension control and better droplet placement
- UV-LED pre-curing**
 “Freezing” ink droplets to control dot gain before overlaying follow-up colors or doing a full curing
- Inkjet head automatic maintenance system**
 Allows full automatic purging ,wiping, and capping for convenient unattended operation
- Integrated ink supply and negative pressure system**
 Imported PLC, integrating automatic ink supply, intelligent negative pressure control and other control systems, the negative pressure accuracy can reach $\pm 0.01\text{kp}$
- Variable data printing**
 Support variable data printing, applicable to various industries like packaging, labels, hangtags, tickets, RFID, lottery, etc.
- Buffer module (Option)**
 Optional paper storage module to cooperate with other processing devices, such as die-cutting, chip reading and writing, detecting, rejecting, etc.
- Varnishing/Stamping module (Option)**
 Optional varnishing/stamping module, to achieve relief, 3D, stamping, silver an other special functions.

► Technical Features

- Support 1000m continuous printing
- Except the store decoration or ground POP advertising prints, this press can also print long posters, signs and a series of other prints
- Able to produce mixed substrate advertising sheet (with label), helping to enlarge business scopes
- Provide customers with a variety of post-press solutions: a variety of post-press processes, such as laminating, coating, cold stamping, die-cutting, stripping, etc.
- Realize inline or offline printing

► Specifications

Items	TS-108	TS-216
Inkjet head	DOD piezoelectric Kyocera inkjet head	
Max.printing width	108mm	213mm
Ink type	LED-UV curing ink	
Resolution	600x600dpi/600x1200dpi	
Number of inkjet heads	5 heads (Expandable)	10 heads (Expandable)
Printing speed	50m/min	
Color	4 ink channels+spot color	
Ink tank volume	3L	
Data interface	High-speed ethernet	
RIP software	Print Factory, MT, Onxy	
Core diameter	76mm (3" air shaft)	
Roll feeding width	Max.φ500mm	
Rewinding diameter	Max.φ500mm	
Pre-curing	Air cooling	
Final curing	Water cooling	
Substrate width	Max.230mm	Max.250mm
Substrate type	Coated and uncoated paper, PP, PVC, BOPP, etc.	
Substrate thickness	0.08-0.5mm (0.003-0.02")	
Working environment	Low dust, less light Temperature: 15-30°C (22-26°C suggested) Relative humidity: Non-condensation 25%-80% (55%-65% suggested)	
Power supply	Single phase/220V/30A	
Air supply	Dry compressed air 6-8bar	
Dimension	2000x1300x1850mm	2000x1430x1850mm
Weight	1430kgs	1700kgs

✓ Inline Inkjet Printing System for Offset Press



The Inline Inkjet Printing System for Offset Press effectively combines the process of inkjet printing machine with the process of offset press, and can complete the real-time variable data inkjet printing under the condition that the offset press working speed is 10,000-15,000 sheets per hour.

► Specifications

Items				Inline Inkjet Printing System for Offset Press			
Series	Series UQ		Series UC				
Application	Cigarette packaging		Folding carton				
Model	UNIQR12		UNIQC12	UNIQC15			
Ink-jet speed	12,000sheets/h		12,000sheets/h	15,000sheets/h			
Resolution	Horizontal 720dpi vertical 300/480/540/600/720dpi, etc. Multilevel adjustable						
Ink-jet type	QR code/Variable barcode/Numbers						
Max. ink-jet width	72mm						
Max. curing width	20mm(Customized)		55mm(Customized)				
Variable data inspection(Standard)	Variable data real-time read and inspection. Inspect repetition code, missing code, wrong code, unrecognized code and other defects by comparing with source files. Variable data ink-jet printing quality defects, such as white line, white spot, ink leakage, mis-register.						
Printing quality inline inspection (Option)	Applicable material: ivory cardboard(customized for laser cardboard/metallic cardboard) Inspectable defects: dirty spot, omission, flying ink, ink streak, scumming, mis-register, color variance						

► Features

- Real-time variable data ink-jet printing during printing, print and ink-jet completed by one process
- Speed is synchronizing with offset press, no need to separate production, high efficiency and low management costs
- High precision ink-jet printing, consistent with offset press, accuracy ups to ± 0.1 mm
- Save space (Ink-jet printer and paper stack turnover space), save operators (4 person)
- No twice damage on the products, the rate of qualified products is much higher than the ink-jet printer, reducing costs



Web-fed Inline Inkjet Printing System



The Web-fed Inline Inkjet Printing System reserves the installation space by changing the paper delivery path of the web, designs and installs the additional bracket to install all the hardware of the inkjet printing system, so that the variable data can be inkjetted in real time during the press process.

► Specifications

Items		Web-fed Inline Inkjet Printing System	
Series	Series UA		
Application	Cigarette packaging	Flexible packaging	
Model	UNIQA25	UNIQA15	
Ink-jet speed	250m/min	150m/min	
Resolution	Horizontal 720dpi vertical 300/480/540/600/720dpi, etc. Multilevel adjustable		
Ink-jet type	QR code/Variable barcode/Numbers		
Max. ink-jet width	72mm		
Max. curing width	20mm(Customized)		
Variable data inspection(Standard)	Variable data real-time read and inspection. Inspect repetition code, missing code, wrong code, unrecognized code and other defects by comparing with source files. Variable data ink-jet printing quality defects, such as white line, white spot, ink leakage, mis-register.		
Printing quality inline inspection (Option)	Applicable material: ivory cardboard(customized for laser cardboard/metallic cardboard) Inspectable defects: dirty spot, omission, flying ink, ink streak, scumming, mis-register, color variance		

► Features

- Exclusive and reliable industrial nozzle; large ink drop, large amount of ink, hole invagination, self-heating, not easy to plug the hole broken line, eliminate white line
- "DRR" waveform control, 3 cycle combined with dual pulse waveform technology to increase frequency and control the drop point
- Combination of ink cycle and negative pressure, precisely control on 5mm water column pressure
- Easy to use BARCODEPRINTER typesetting software, easy to learn and use, low requirements for operators

