

HP Indigo 20000 Digital Press



30-inch wide web solution
for packaging applications



Breakthrough digital web platform for flexible packaging, labels, and sleeves

The groundbreaking HP Indigo 20000 Digital Press is a 30-inch wide, roll-to-roll solution capable of producing diverse digital applications, including flexible packaging, labels, and shrink sleeves on film or paper from 10 to 250 microns.

Meet growing market demand for versatility in labels and packaging

The global packaging market is growing steadily, alongside higher demand for shorter run lengths, shorter lead time, and higher print quality. This trend is accompanied by supply chain pressures, growing SKU proliferation, and frequent and seasonal redesigns. Conventional printing has a limited ability to adapt while maintaining profitability. On-demand printing with the HP Indigo 20000 Digital Press frees converters and brand owners from these constraints.

Brand-accepted, gravure-matching quality

HP Indigo's superior liquid Electrolnk technology is the only digital colour printing process that matches gravure printing. The 7 on-press ink stations enable converters to meet even the most stringent corporate branding requirements, using HP IndiChrome Pantone-approved on-press 4-, 6- and 7-colour emulations, and spot inks to achieve up to 97% of PANTONE® colours. One Shot Colour printing technology delivers perfect registration on all substrates.

Achieve high productivity and cost efficiency

The speed and imposition efficiency achieved by the 762 mm web press make it a highly cost-effective digital labels and flexible packaging solution. The high-capacity press prints colour jobs at up to 42 linear metres per minute in Enhanced Productivity Mode (EPM).

Expand flexible packaging opportunities

With the introduction of the HP Indigo 20000 Digital Press, digital printing has become a viable solution for flexible packaging production. The press can produce the majority of flexible packaging applications, including food packages, using surface or reverse printing. Digitally printed materials can be converted using standard laminating and finishing equipment to create just-in-time and cost-effective short-runs.

Take digital label production to the next level

Offering the highest productivity in digital label production, the press makes it cost-effective to move medium-to-long, pressure-sensitive label runs to high-quality digital production, and transforms digital production opportunities for applications such as sleeves, wrap-around labels, and in-mold labeling (IML). The HP Indigo 20000 Digital Press completes a full digital portfolio for any printing capacity and application mix.

High-capacity solution for digital labels and packaging



High performance, high production flexibility

Designed for demanding, 24/7 production operations, the HP Indigo 20000 Digital Press offers consistent quality and flexibility for diverse packaging jobs.

Superior agility. HP Indigo technology provides agility for changing colour sequences on the fly, enabling easy switching among surface, reverse, and sandwich printing with zero overhead.

Digital freedom. With no make-ready required and quick changeovers between jobs, the press is not limited in the number of jobs it can produce per day.

High capacity. Using colour technology innovation, the press increases speed by 33% in Enhanced Productivity Mode (EPM), producing 42 linear metres per minute in HP Indigo's distinct quality.

Application diversity. The press supports web-based packaging applications including the wide majority of flexible packaging types, any label, sleeves, and more.

Wide media gamut. The press prints on synthetic or paper substrates from 10 to 250 microns including film, various pressure-sensitive label stocks, shrink materials, and more. Its priming unwinder enables printing on off-the-shelf materials without any preliminary processes.



End-to-end packaging

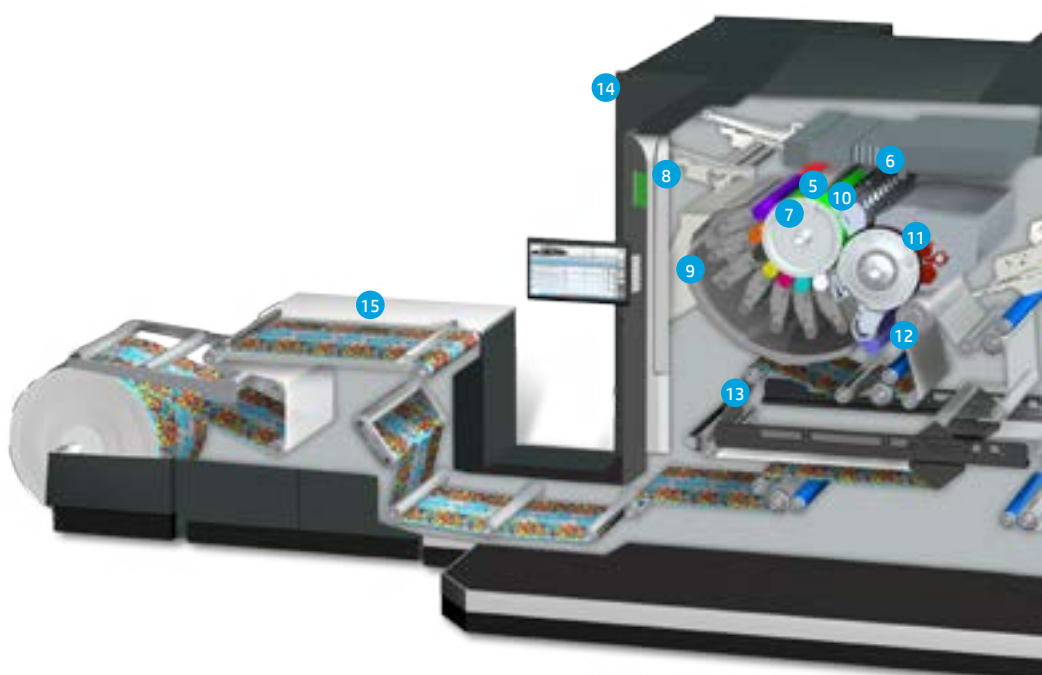
Together with hand-picked, market-leading partners, HP Indigo users enjoy a well-integrated ecosystem for the press that provides converters with all the tools they need from order to fulfilment for various labels and packaging applications.

Powerful print server. The HP SmartStream Labels and Packaging Print Server is designed specifically for HP Indigo by Esko. It includes best-in-class job management tools to automate and simplify workflow, as well as a powerful Colour Engine. The Colour Engine is a fully integrated solution for complete colour management. It quickly creates profiles that match PANTONE and spot colours, ensuring accurate and efficient colour matching from any technology to an HP Indigo press.

The print server is equipped with a dedicated Adobe RIP for consistent and high-quality output and enables proprietary bi-directional connectivity with Esko Automation Engine, or direct connectivity with any MIS system via JDF protocol.

HP Indigo Worldwide Services— Driving your production excellence

A comprehensive system of tools, knowledge and support ensures you are able to print what you need, when you need it, at the highest level of efficiency and Indigo print quality. Our certified service teams are committed to meeting your end-to-end needs for accelerated ramp-up, increased system utilisation and maximum uptime.



Multiple VDP solutions. HP SmartStream Labels and Packaging VDP Tools, Powered by Esko, provide automatic printing of unique elements such as barcodes, text, singular numbers, photos, and security features. HP SmartStream Designer is a easy to use and powerful VDP authoring tool for Adobe Illustrator and InDesign, enabling the creation of sophisticated high-value jobs including HP SmartStream Mosaic's one-of-a-kind variable designs.

Converting and finishing solutions. HP Indigo 20000 Digital Press output is compatible with standard finishing solutions. In addition, HP Indigo partners with leading vendors in the market to offer optimised solutions for digital applications including flexible packaging, labels, sleeves, and IML. The AB Graphics Digicon 3000 was designed as a modular solution for label and flexible packaging converting. Comexi Nexus L20000 is a highly optimised solution for flexible packaging lamination, offering fast curing time, low waste and fast setup.

High automation. Pre-press tools, production management and more drive superior quality, efficiency, and profitability by lowering human intervention and creating automated flow of jobs.

Regulatory compliance. HP Indigo develops solutions and inks that enable converters to produce food labels and packaging that can comply with regulations and industry standards. HP Indigo ElectroInk is safe and suitable for printing on packaging, under set conditions of use and compliance with Good Manufacturing Practices (GMP) for non-food contact surfaces.

For more information, please refer to the Labels and Packaging Workflow Solutions Brochure and HP Indigo for Food Packaging Regulatory White Paper.



Sustainability

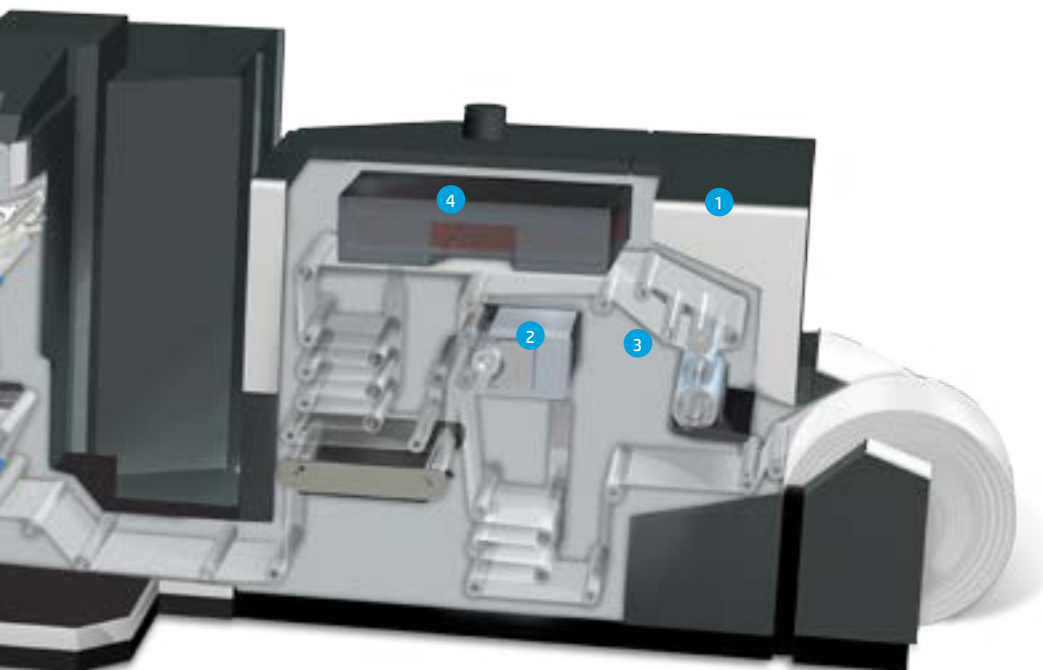
HP Indigo's digital, zero setup process minimises waste, translating into significant cost and time savings while improving environmental scorecards. On-demand digital printing also reduces waste and over-stocking throughout the supply chain, allowing converters to offer their end customers more sustainable packaging solutions.

Lower your carbon footprint with HP Indigo. Reduced press substrate waste—a few metres vs. hundreds of metres in analogue processes.

Takeback programme. A recycling and takeback programme as part of HP Indigo's environmental responsibility helps reduce environmental impact (may vary by countries).

Eco-friendly packaging. Provide eco-friendly packaging solutions by printing on biodegradable materials.

Use HP SmartStream products and partner solutions with the HP Indigo 20000 Digital Press to improve production efficiency and support digital growth. To learn more visit hp.com/go/smartstream



1. Priming unwinder
2. Corona treatment unit
3. Priming unit
4. Dryer
5. Charge roller
6. High-speed laser writing head
7. PIP (Photo Imaging Plate)
8. PIP Automated Replacement System (PARS)
9. Binary Ink Developers (BIDs)
10. Cleaning station
11. Blanket
12. Impression cylinder
13. Internal web handling system
14. Ink cabinet
15. Rewinder

Technical specifications

Printing speed	31 m/min in 4-colour mode; 42 m/min in EPM; 25 m/ min in 5-colour mode
Image resolution	812 dpi at 8 bit, addressability: 2438 x 2438 dpi HDI (High Definition Imaging)
Line screens	175, 180, 180m , HMF-200
Image size	740 x 1100 mm maximum; Repeat length: 550 mm minimum, 1100 mm maximum
Substrate thickness	10 to 250 microns
Substrate type	Film (PET, BOPP, BOPA), shrink film (PETG, PVC, OPS) label stock (PE label), pre-laminates (PET/ALU/PE) and paper.
Web width	Maximum width: 762 mm / Minimum width: 400 mm
Priming unwinder	Max roll diameter: 1000 mm Max roll weight: 850 kg Core inside diameter: <ul style="list-style-type: none">• Standard 6 in adapter• Optional 3 in
Rewinder	Maximum roll diameter: 800 mm Maximum roll weight: 700 kg
Print server	HP SmartStream Labels and Packaging Print Server, Powered by Esko
Press dimensions	Width: 9730 mm; Height: 2400 mm; Depth: 4700 mm
Press weight	15,000 kg
HP Indigo ElectroInks*	
Standard 4-colour printing	Cyan, magenta, yellow, and black
5-colour printing	Cyan, magenta, yellow, black, and white
HP IndiChrome 6-colour printing	Cyan, magenta, yellow, black, orange, violet, and violet for packaging
HP IndiChrome Plus 7-colour printing	Cyan, magenta, yellow, black, orange, violet, violet for packaging, and green
HP IndiChrome off-press spot inks	HP IndiChrome Ink Mixing Service for spot colour creation using CMYK as well as orange, violet, green, reflex blue, rhodamine red, bright yellow, and transparent
PANTONE® colours	Supports PANTONE PLUS®, PANTONE MATCHING SYSTEM®, and PANTONE Goe™ HP Professional PANTONE Emulation Technology using CMYK on-press; HP IndiChrome on-press; HP IndiChrome Plus on-press; HP IndiChrome Ink Mixing Service for achieving up to 97% of the PANTONE® colour range.
Options	
Expanded colour capabilities	5, 6, or 7 on-press ink stations
Reinsertion	Simplex
Extended inspection capabilities	Reverse Inspection Bridge (RIB)

*Food products and packaging are a highly regulated sector, with varying requirements depending on where they are placed on the market. Therefore, converters are reminded to ensure that all materials utilised in the printing process are suited for the intended application and its conditions of use, and that the printing is performed in accordance with Good Manufacturing Practices. HP Indigo compliance with food packaging regulations: FDA, Title 21 of the Code of Federal Regulations for indirect food contact; Swiss Ordinance on Materials and Articles in Contact with Food, RS 817.023.21; EUPIA Guideline on Printing Inks Applied to the Non-Food Contact Surface of Food Packaging Materials and Articles (November 2011); Council of Europe Resolution ResAP (2005/2) for indirect food contact; Nestlé Guidance Note on Packaging Inks, exclusion lists for indirect food contact; German Food Law and Article 3 of the EU framework regulation 1935/2004, for non food contact.



Winner: InterTech Technology Awards 2014

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