HP Indigo 20000 Digital Press

30 inch wide breakthrough digital web printing solution for flexible packaging

The groundbreaking 30 inch wide roll-to-roll HP Indigo 20000 Digital Press is poised to transform the film converting market with its capability to digitally produce the vast majority of flexible packaging applications.

Printing any job on-demand at any time with no make-ready and minimum waste, the press offers converters and brand owners a prime opportunity for new business that responds to changing needs of consumers and the marketplace.

Upsurge in demand. The global flexible 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 diversity, 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. HP Indigo technology also enables variable data printing including text, graphics, barcodes, and security elements.

Brand-accepted gravure print quality. Using HP Indigo's unique ElectroInk technology, the press delivers the high print quality required by brand owners who set gravure as their color quality

benchmark for flexible packaging. The 7 on-press ink stations enable converters to meet even the most stringent corporate branding requirements, using HP IndiChrome Pantone-certified on-press 4-, 6- and 7-color emulations, opaque white ink, and off-press mixed spot inks to match over 97% of PANTONE® colors.

Wide format captures most jobs. The press supports 30 inch web width, 29 inch wide image format, and 44 inch repeat length, capturing most consumer flexible packaging applications.

Easy fit into existing production. The 30 inch wide web format facilitates quick ramp up and easy integration into current flexible packaging production processes.

Wide media gamut. The press can handle substrates from 0.4 to 10 pt., printing on film, paper, and aluminum. The priming unwinder, with its environmentally friendly, water-based primer, enables printing upon off-the-shelf materials. HP Indigo One Shot Color technology provides perfect color registration including on heat-sensitive materials.

To learn more, visit www.hp.com/go/graphic-arts
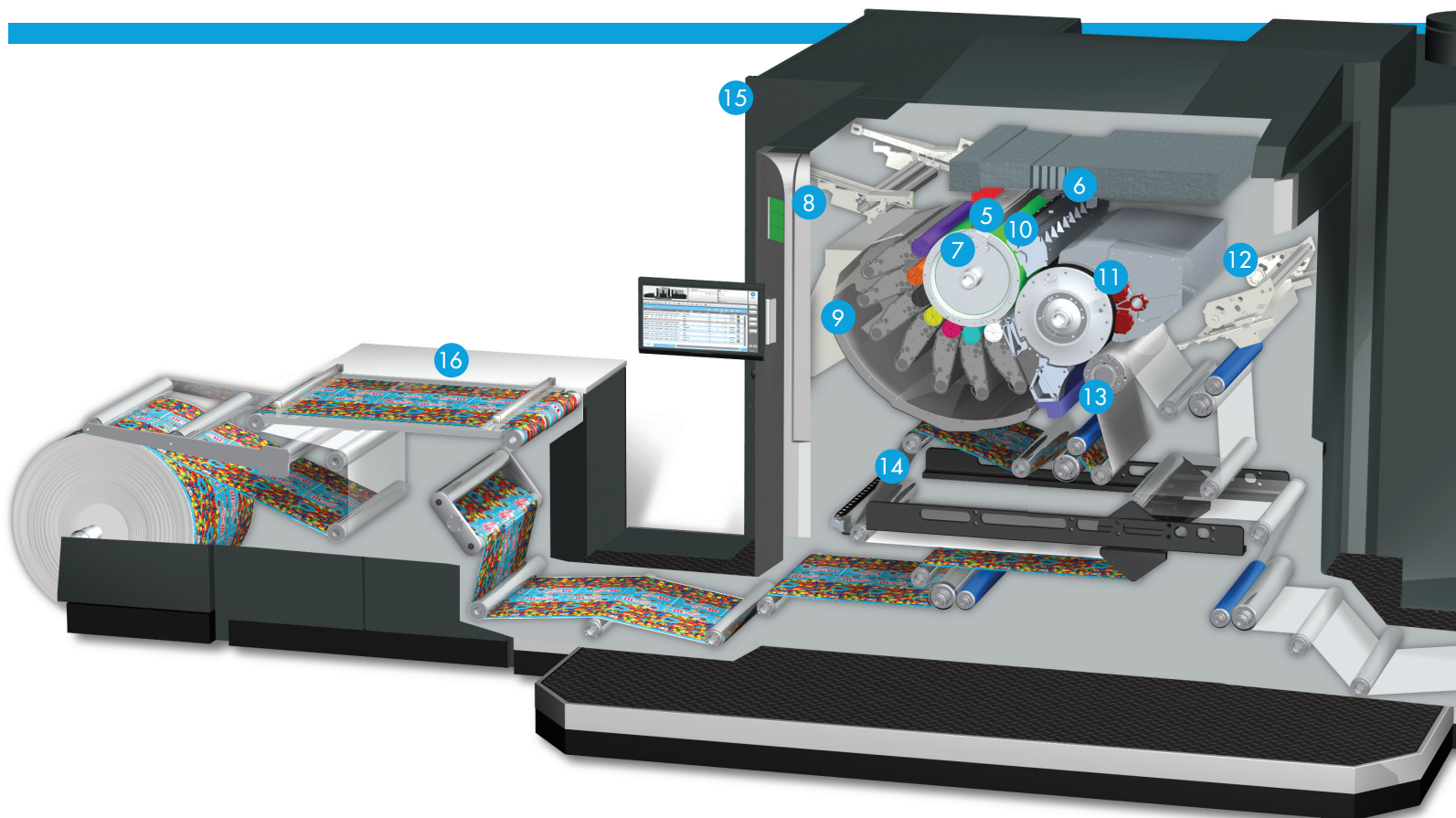
HP Indigo 20000 Digital Press

30 inch roll-to-roll press opens new packaging opportunities

High performance, high production flexibility. Designed for demanding, 24/7 production operations, the press offers consistent quality and flexibility for diverse jobs.

- Flexible packaging applications require both surface printing on opaque material and reverse printing on clear material. HP Indigo color switching technology provides agility for changing color sequences and colors on the fly.
- Ability to produce over 10 different jobs per day.
- Maximum press throughput of 147 linear feet per minute, using Enhanced Productivity Mode.
- Four-color mode enabling 112 linear feet per minute or 5-color mode enabling 88 linear feet per minute.
- Supports multiple packaging applications such as prime labels, shrink sleeves, and laminate tubes.

End-to-end packaging excellence. The HP Indigo 20000 Digital Press is more than a press—it is a full production solution. HP Indigo has built a well-integrated ecosystem specifically designed for the packaging market. This provides converters all the tools needed from order to completion to deliver the highest quality packaging.

- The powerful HP SmartStream Labels and Packaging Print Server, Powered by Esko, supports scalable RIP power, ICC profiling, step and repeat, and automated workflow.
- The press and its supplies comply with food packaging regulations commonly applicable to or referenced by flexible packaging converters.
- The press system and supplies support flexible packaging industry standard finishing such as dry bond lamination and form-fill-seal.
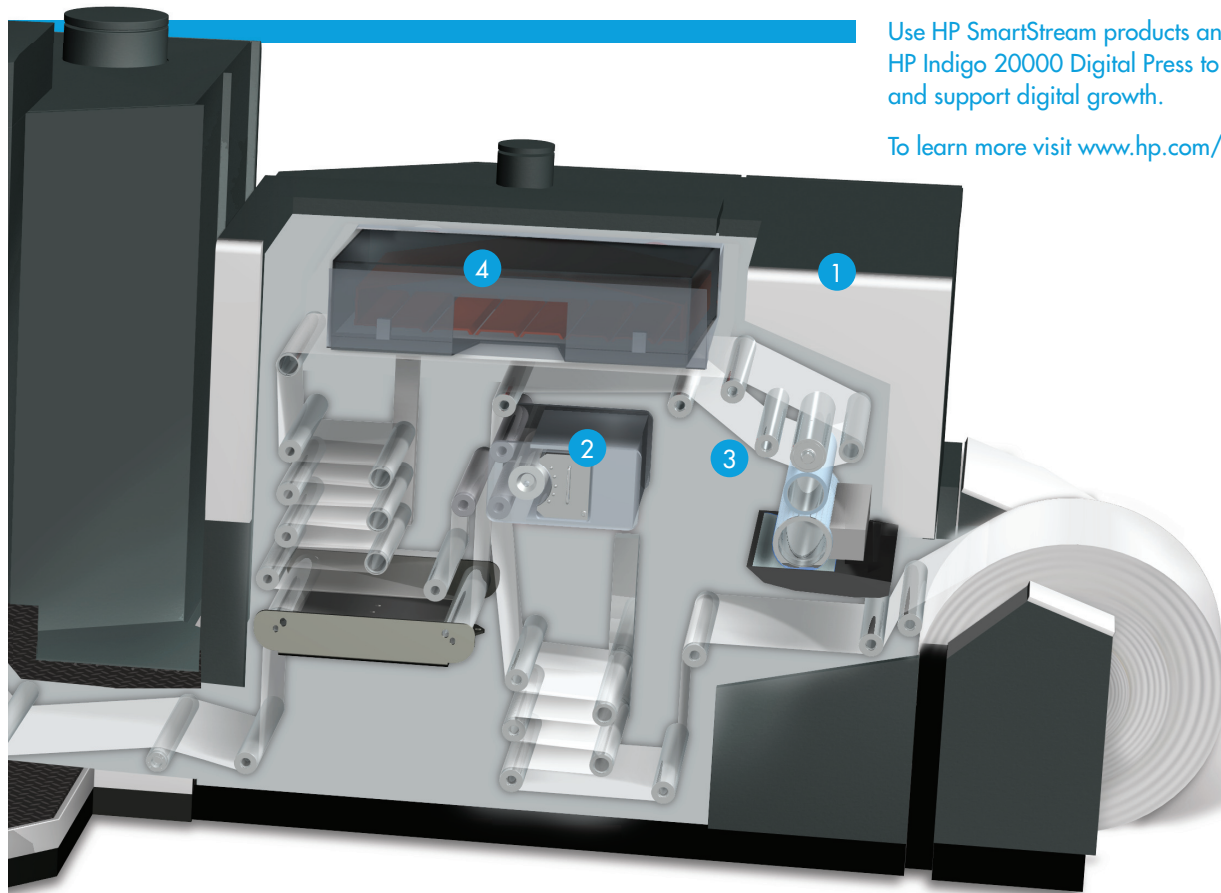
Sustainability. HP Indigo's on-demand printing technology enables converters to improve environmental scorecards by cutting waste from the supply chain.

- No plates or cylinders—eliminate waste between jobs.
- Save more than 12 tons of print film waste per year.
- Save more than 100,000 square feet of flexo plates per year.
- Save more than 25,000 gravure cylinders per year.
- Provide eco-friendly packaging solutions by printing on biodegradeable film.

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. Blanket Automated Replacement System (BARS)
13. Impression cylinder
14. Internal web handling system
15. Ink cabinet
16. Rewinder

Technical specifications

Printing speed	112 ft/min in 4-color mode; 147 ft/min in EPM; 88 ft/min in 5-color mode
Image resolution	812 and 1219 dpi at 8 bit, addressability: 2438 x 2438 dpi HDI (High Definition Imaging)
Line screens	175, 180, 180m
Image size	29 x 43 in maximum; Repeat length: 21.6 in minimum, 44 in maximum
Substrate thickness	0.4 to 10 pt.
Substrate type	Film, (PE, PET, BOPP, CPP, PA, PVC, OPS), paper (Cello), aluminum, and biodegradable materials
Web width	Maximum width: 30 in / Minimum width: 15.7 in
Priming unwinder	Max roll diameter: 39.4 in Max roll weight: 1870 lb Core inside diameter: • Standard 6 in • Optional 3 in
Rewinder	Maximum roll diameter: 31.5 in Maximum roll weight: 1540 lb
Print server	HP SmartStream Labels and Packaging Print Server, Powered by Esko
Press dimensions	Width: 383 in; Height: 94 in; Depth: 185 in
Press weight	33,000 lb

HP Indigo ElectroInks*

Standard 4-color printing	Cyan, magenta, yellow, and black
5-color printing	Cyan, magenta, yellow, black, and white plus
HP IndiChrome 6-color printing	Cyan, magenta, yellow, black, orange, and violet
HP IndiChrome Plus 7-color printing	Cyan, magenta, yellow, black, orange, violet, and green
HP IndiChrome off-press spot inks	HP IndiChrome Ink Mixing System (IMS) for spot color creation using CMYK as well as orange, violet, green, reflex blue, rhodamine red, bright yellow, and transparent
PANTONE® colors	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 off-press (IMS) for achieving up to 97% of the PANTONE® color range.

Options

Expanded color capabilities	5, 6, or 7 on-press ink stations
Reinsertion	Simplex and duplex capability

*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 utilized 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.

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