HP Indigo WS6800
Digital Press

A high-capacity, high-quality narrow-web labels and packaging solution

Maximum efficiency and versatility for a broad range of applications to drive growth

The HP Indigo WS6800 Digital Press is the leading narrow-web printing solution for mainstream labels and packaging production, delivering breakthrough productivity, versatility, and intelligent automation. The press delivers the proven quality embraced by the world's leading brands.

High-volume production

The press delivers high productivity for the vast majority of labels and packaging jobs. Produce up to 40 linear metres per minute in colour using Enhanced Productivity Mode (EPM). Benefit from high output with a larger 320 x 980 mm image format. An inline spectrophotometer saves time on colour calibrations and colour profiles.

The leader in print quality and colour

HP Indigo's superior liquid ElectroInk technology is the only digital colour printing process that matches gravure printing. With high resolution printing and perfect registration, the HP Indigo labels and packaging solution can deliver the eye-catching, distinctive packaging envisioned by designers. Converters can meet even the most stringent corporate branding requirements using up to 7 ink stations and a colour gamut that reaches up to 97% of PANTONE® colours.

Application versatility

The press offers unmatched application flexibility, enabling production of a wide range of pressure-sensitive labels, sleeves, IML, wrap-around labels, flexible packaging and folding cartons. It supports 12 to 450 micron materials, both standard, off-the shelf substrates with in-line priming, as well as pre-treated materials. New inks open opportunities for high-value applications and new markets.

End-to-end workflow

Benefit from the HP Indigo workflow ecosystem including the built-in high-automation Workflow Suite Powered by Esko, and an array of integrated MIS, pre press and converting solutions from partners.

Boost your sustainability

Make business more environmentally responsible by shifting production to HP Indigo digital technology, offering reduced production waste, energy efficiency, and carbon-neutral manufacturing.

Industry benchmark in labels and packaging production

Unmatched productivity

The leading mainstream solution, the HP Indigo WS6800 Digital Press offers unmatched production efficiency with advanced automation, higher productivity, and serviceability.

Colour automation. An inline spectrophotometer using closed loop control eliminates manual colour calibrations and adjustments. Create colour profiles and match PANTONE® colours up to 75% faster compared with current processes. Hit the right colour from the first to the last label today, tomorrow and next year.

Enhanced Productivity Mode (EPM). EPM increases press throughput by 33% for most new colour jobs and by 25% when adding white ink for faster turnaround time and lower costs. Advanced decision-making tools help select suitable jobs.

Automatic Alert Agent. Automated early detection and quality control system helps identify inconsistencies between the digital file and the printed images in real time, comparing the digital reference to scanned printed frame using the inline scanner.

Automated repeat control. Continuous, closed-loop repeat control for an easy and robust process in long runs preserves precise accuracy of repeat length and image length.

Advanced diagnostics and troubleshooting. HP Indigo Print Care increases press uptime by assuring quick and accurate problem solving either by the operator or remote support.

Production Excellence Routines. Clear and robust daily, weekly and monthly maintenance procedures are integrated into the press software to ensure the press in kept in top shape.

Keeping you up to date. Many press enhancements and upgrades are available as options for HP Indigo WS6000 Series Digital Press owners.

Application versatility

The HP Indigo WS6800 Digital Press is a unique solution allowing converters to produce any narrow-format label, flexible packaging, sleeve, or folding cartons job, on any substrate, with easy and quick changeovers between applications.

New inks. Open new markets and expand digital capabilities with inks developed especially for labels and packaging market needs. HP Indigo ElectroInk White for Sleeves is a high slip ink that improves efficiency in the converting of shrink sleeves, by reducing the friction coefficient (CoF).

Widest media gamut. The press supports the widest range of media in digital production including synthetic and paper substrates from 0.5 to 18 pt. Print on either pre-optimised substrates or standard off-the-shelf materials using inline or offline priming solutions. Many eco-certified substrates as well as environmentally friendly primers, varnishes, and adhesives are supported.

Inline Priming Unit. This unique capability allows use of standard, non-treated substrates while eliminating the need for pre-planned treatment, making the support of last-minute jobs easier and quicker than ever before. Designed for easy operation and high performance, the Inline Priming unit is automatically controlled by the press software.

One Shot Colour technology. All colour separations are laid down simultaneously in a single pass on the substrate, for accurate and repeatable colour-to-colour registration, including on heat-sensitive materials.

Security printing. Provides an end-to-end security printing solution with superior print quality producing microtext printing as small as 0.7 pt, variable data printing (VDP) capabilities, and integration with a variety of creation and inspection solutions from the world's leading providers.

Advanced workflow solutions

Together with hand-picked market-leading partners, HP Indigo has built a well-integrated ecosystem that provides converters with all the tools they need from order to fulfillment

Powerful print server. HP SmartStream Labels and Packaging Print Server is designed especially 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 quickly creates profiles that match PANTONE and spot colours. The print server is equipped with a dedicated Adobe RIP for consistent, high-quality output. The server also enables proprietary, bi-directional connectivity with the Esko Automation Engine, or direct connectivity with any MIS system via JDF protocol.
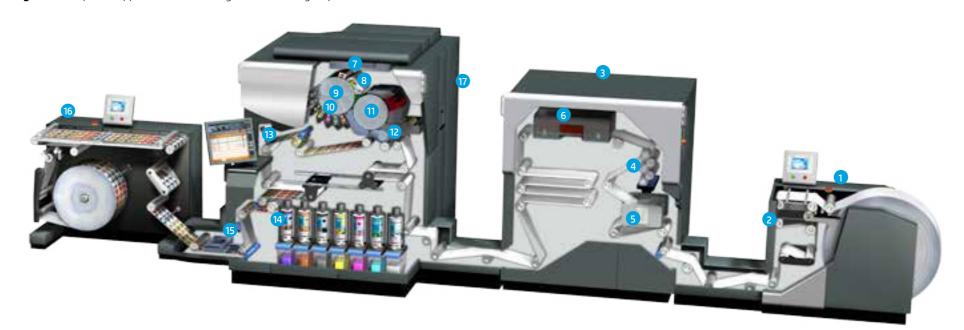
Multiple VDP solutions. HP SmartStream Labels and Packaging VDP Tools, Powered by Esko, provide automatic printing of unique elements such as barcodes, text, singular numbers, photos, and security features. HP SmartStream Designer is an entry-level VDP offering with unique creative functionalities.

Converting solutions. A full range of solutions is provided by AB Graphics International and other leading vendors.

Please refer to the Labels and Packaging Workflow Solutions brochure for more information.

Use HP SmartStream products and partner solutions with the HP Indigo WS6800 Digital Press to improve production efficiency and support digital growth. To learn more visit hp.com/go/smartstream

1. Unwinder
2. Web guide
3. Inline Priming Unit
4. Priming station
5. Corona
6. Dryer
7. High-speed laser writing head
8. Charge roller
9. Photo Imaging Plate (PIP)
10. Binary Ink Developers (BIDs)
11. Blanket
12. Impression cylinder
13. Inline spectrophotometer
14. Ink cabinet
15. Inline scanner
16. Rewinder
17. Imaging oil recycling system

Technical specifications

Printing speed	Up to 30 m/min in 4-colour mode Up to 40 m/min in Enhanced Productivity Mode Up to 60 m/min in 1- or 2-colour mode
Image resolution	812 dpi at 8 bit, addressability: 2438 x 2438 dpi HDI (High Definition Imaging)
Line screens	175, 180, 196, 210 lpi
Image format	320 x 980 mm maximum
Substrate thickness*	12 to 450 microns
Substrate type	Pressure-sensitive label stock, paperboard, and unsupported films
Web width	Max. width: 340 mm / Min. width: 200 mm
Unwinder	Input roll max. diameter: 1000 mm Core inside diameter: • Standard: 3 in • Optional: 6 in Max. roll weight: 270 kg
Rewinder	700 mm max. roll diameter
Print server	HP SmartStream IN100 Labels and Packaging Print Server and Colour Engine, Powered by Esko
Press dimensions	Length: 5780 mm, Width: 3940 mm, Height: 83 in; Inline Priming Unit: Length: 1410 mm; Width: 1560 mm; Height: 1760 mm
Press weight	5400 kg; Inline Priming Unit: 1800 kg
HP Indigo ElectroInks	
Standard 4-colour printing	Cyan, magenta, yellow, and black
Additional process inks	White, white for sleeves
HP IndiChrome 6-colour printing	Cyan, magenta, yellow, black, orange, and violet
HP IndiChrome Plus 7-colour printing	Cyan, magenta, yellow, black, orange, violet, and green
HP IndiChrome off-press spot inks	HP IndiChrome Ink Mixing System (IMS) 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®, 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® colour range.
Options	
Expanded colour capabilities	5, 6, or 7 on-press ink stations; HP IndiChrome Ink Mixing System
Enhanced Productivity Mode	Enables EPM
Inline Priming Unit	Enables easy on-demand treatment of substrates
Configurations	Dual mode inline finishing connectivity kit, flexible packaging packer arm support in rewinder, Automatic Alert Agent, Colour Automation Package
Print server options	HP SmartStream Labels and Packaging VDP Tools, Powered by Esko HP SmartStream Labels and Packaging Prepress Tools, Powered by Esko
Reinsertion	Simplex and duplex capability

*Media characteristics vary. HP cannot guarantee performance of media not listed in the Media Locator and recommends testing prior to use.

PANTONE®
Digital Color

Intertek

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