



HP Indigo WS6000 Digital Press

High-volume, digital production for medium-run labels and packaging



Progressive Profitable Printing

A breakthrough in high-volume labels and packaging digital production

The HP Indigo WS6000 Digital Press is the most technically advanced, roll-fed digital solution, targeting high-volume, medium-run labels and packaging mainstream production. The new technology supports high-speed printing, long format of print, radical ease of use, and dedicated IT resources for printing and workflow, resulting in higher efficiency, productivity, quality, and new business opportunities. Designed for high-volume production — approximately 980,000 linear feet per month — this press is designed for conventional mainstream production volumes. The HP Indigo WS6000 Digital Press delivers extremely high quality and a crossover point with conventional printing of approximately 13,000 linear feet, which captures 80% of jobs in the label market today.

HP Indigo offers the most productive, high-speed, digital solutions for short- and medium-run label and packaging production.

Productivity hits a new high with the HP Indigo WS6000 Digital Press

The HP Indigo WS6000 Digital Press is the cost effective solution for medium-run length label and packaging production. The total production cost of printing jobs up to 13,000 linear feet is significantly lower than that of conventional technology. In fact, the HP Indigo WS6000 Digital Press can economically print 80% of label jobs.

The HP Indigo WS6000 Digital Press offers a level of productivity that enables you to dedicate your conventional press to what it does best — small amounts of long-run jobs. The HP Indigo WS6000 Digital Press runs at throughputs of up to 98 feet per minute for 4-color jobs, and produces up to 295,000 square feet or 980,000 linear feet per month from numerous jobs, utilizing single daily shifts. Enhancing your productivity, the press supports repeat length of 12.48 x 38.58 inches — efficiently using each frame of the substrate and reducing media waste.

In addition to eliminating the time-consuming process of make-ready, set-up, and platemaking of conventional production, the HP Indigo WS6000 Digital Press offers numerous features to maximize ease-of-use and uptime.

Higher productivity also means higher profitability

By generating increased volumes of medium-length runs, owners of the HP Indigo WS6000 Digital Press reach a higher level of production efficiency and flexibility.

With an installed base of over 5,000 digital presses worldwide, reliability and uptime are true hallmarks



of the HP Indigo product family. Innovations in the HP Indigo WS6000 Digital Press extend this proud tradition, such as:

- A new intuitive, touchscreen interface. Uses sophisticated user logic to provide simpler, more direct operator-to-press commands.
- Automated operator tasks. Eliminates or reduces many press interactions.
- Larger on-board ink containers. Triple the size of previous generation ink containers; the larger ink cans (1.5 kg) keep your press running with less intervention for longer periods, enabling you to maximise productivity.
- Faster system start-up. A streamlined process permits more productive hours.
- On-press Fast Ink Replacement (OFIR) technology. Enabling on-the-fly replacement of special/spot colors, OFIR technology dramatically reduces the time needed for swapping colors, thus improving the press productivity and making spot color jobs very simple to execute.

Increase uptime with on-press and remote support

To help you meet even the tightest deadlines, HP increases press uptime with the innovative HP Indigo Print Care toolset. Assuring quick and accurate problem detection, as well as fast resolution, HP Indigo Print Care offers convenient on-press and remote



diagnostics, guided troubleshooting, live video-sharing communications with remote support teams, and remote access to the press PC. HP Indigo Print Care also displays press status and statistical data for both the operator and production manager to help them monitor press activity.

SmartPlanner 3.0 for Label Printers

SmartPlanner 3.0 for Label Printers is a new estimation and business analysis tool developed by HP. SmartPlanner allows you to plan, estimate, and compare the time and costs between producing a job on an HP digital or conventional label presses. This allows you to make accurate and informed decisions about the best production method for your label jobs.

Good news from the financial pages

By virtue of its remarkable speed and productivity, the HP Indigo WS6000 Digital Press pushes the economic break-even point with flexo to the level of tens of thousands. That means you can transfer more jobs from flexo to be economically printed on your HP Indigo digital press.

In addition to high revenue generation per operator, the press also features a favorable footprint-to-output ratio that minimizes the use of valuable floor space. The energy consumption per label ratio has also dropped, making the HP Indigo Digital Press even more environmentally friendly. To complement cost effectiveness, the HP Indigo WS6000 Digital Press supports a wide range of certified substrates, including pressure sensitive label stocks; synthetic/film, coated, uncoated, and recycled paper facestocks, with a variety of adhesives. The HP Indigo WS6000 Digital Press also supports a wide gamut of films and synthetics; polyester, polypropylene, BOPP, vinyl, and various flexible packaging laminated structures. Automated substrate-related process parameters (SPP) technology extends the media gamut to support a wide selection of substrates.

The HP Indigo WS6000 Digital Press boasts a higher crossover point versus conventional technologies, enabling you to print up to 13,000 linear feet (producing approximately 120,000 labels based on 9.2 labels per linear foot). This covers 80% of the share of orders in the label market. In addition, the productivity is significantly improved due to the higher press speed, enhanced features, and the longer repeat length.

Grab buyers' attention with top-shelf color quality

HP Indigo digital presses are renowned as the only digital printing technology that produces a level of quality that exceeds that of conventional. With the exclusive HP ElectroInk liquid ink, you have the choice of using mixed spot inks and 4-, 6-, or 7-color PANTONE® simulations. The extensive color gamut lets you address the strictest brand and color requirements for labels and packaging.

With seven ink stations, the press gives you the option of extending CMYK process with orange, violet, and green. HP Indigo white ink serves as an excellent backing color and enables you to print on a broad range of metalized and transparent substrates.

The HP Indigo Labels and Packaging Color Kit, Powered by EskoArtwork ensures excellent color matching for digital proofing and printing and quickly defines color gamut conversion according to the colors on the press. The software recognizes the colors available on the press and makes an automatic conversion from any given color to the color space of the press.

Touch screen user

interface:

- Intuitive and easy to use.
- Remote assistance to press operator by support center.

Rewinder

Easy-to-use touch screen panel, splicing table and web handling make changing substrates quick and easy.

Packer arm

7-station color ink cabinet:

- 7 color stations, allow Pantone emulation of 4, 6, 7 colors and spot color printing.
- On-the-fly On-press Fast Ink Replacement (OFIR) system for easy spot color printing.

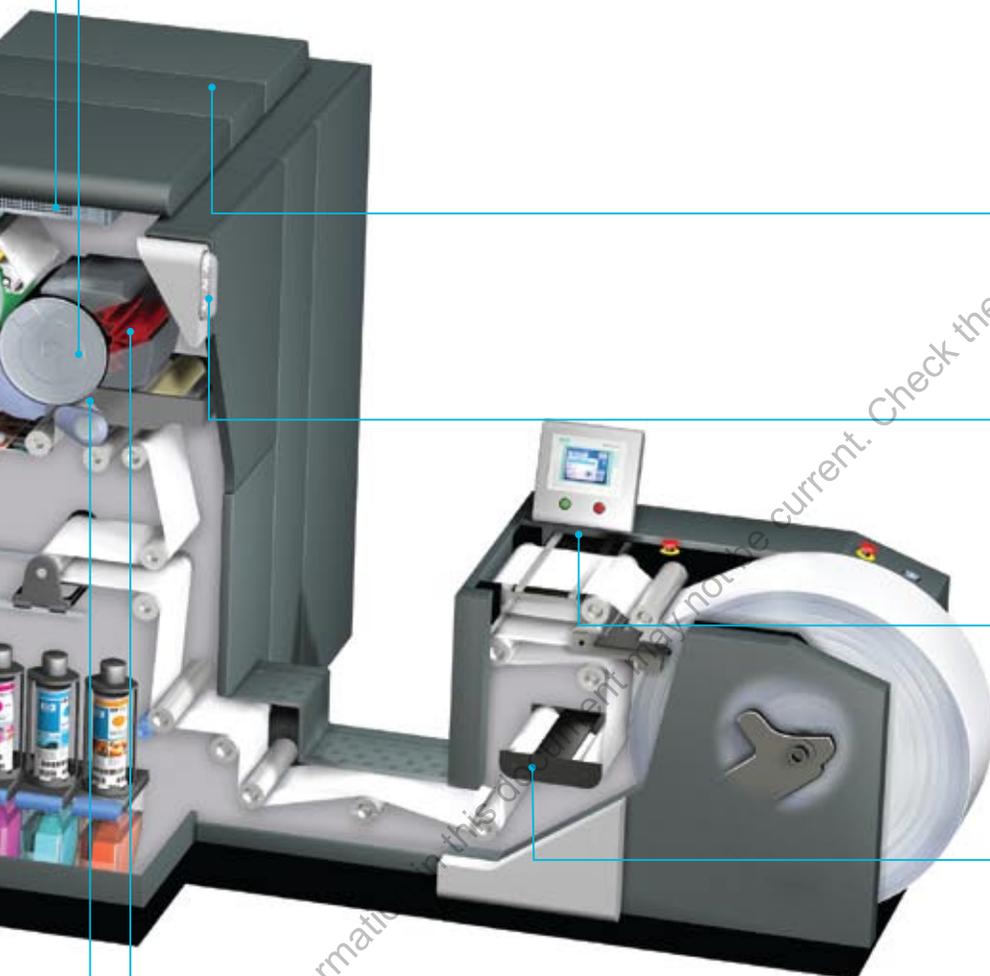
Large ink cans

Require less frequent replacement.

Inline densitometer

Closed loop color adjust for unmatched color consistency.





High speed writing head
812 dpi (8 Bit/pixel) at 775Mpix/sec using a 22 beam laser.

One-shot process
Assures perfect registration by accumulating all image separations on the blanket and transferring them to the substrate simultaneously in one shot. Supports repeat print length of 12.48 x 38.58 in, efficiently using the substrate and reducing waste.

Imaging oil recycling system
Reduces oil consumption and waste.

Attention lights
Allow operator to monitor multiple presses without remaining in immediate vicinity.

Unwinder
Easy-to-use touch screen panel, splicing table and web handling make changing substrates quick and easy.

Web guide
Automated web guide for continuous substrate control.

Blanket cylinder
Supporting high print speed. New mechanism for quick and easy installation.

External blanket heating
Accurate local temperature control optimizing print process per substrate type.



Expand your portfolio and your profitability

Time-to-market is often the most critical factor for your customers. The HP Indigo WS6000 Digital Press lets you service your customers with faster response and job turnaround.

The HP Indigo WS6000 Digital Press supports substrates from 0.47 to 17.7 mils in thickness. So, with a single press, you can accommodate labels as well as other profitable applications, such as flexible packaging, shrink sleeves, and folding cartons. With the power of variable data printing, you can offer customers product personalization and security features, single product numbering, individualized tickets, and game pieces, as well as track and trace and asset protection.

The bottom line is clear: HP Indigo WS6000 Digital Press is your key for opening profitable new applications and opportunities.

A proven end-to-end solution tailored to your specific business goals

The HP SmartStream Labels and Packaging Print Server, Powered by EskoArtwork, a high performance RIP, Digital Front End (DFE) and workflow controller, that assures highly efficient file processing. The robust DFE easily feeds the press 50 jobs per day, while offering maximum color management and prepress tools as added options.

Add-on options provide best-in-class color control, and pre-press tools for bar-coding, enhanced step and repeat, and high-quality, variable data output. The server enables connectivity to central EskoArtwork workflow solutions, as well as to other workflow components, such as web-to-print and MIS solutions.

With extensive space for storing a tremendous number of jobs, the server scales to adopt system upgrades

and increased workflow requirements. It can reside in your prepress environment or near the press. The solution also addresses your production needs through ICC color management and includes pre-press tools in the native environment of Adobe® Illustrator™.

To complete your custom-made solution, HP has aligned with industry-leading providers of optimized hardware and software products. HP also partners with a number of well-established regional companies. Additional information can be found on the 'My HP Indigo' portal.

AB Graphic (www.abgint.com)

ABG Digicoat: offers an affordable in-house coating solution, and can be used to apply water-based primers or optionally UV curable over print varnishes.

ABG Digicon label finishing: the Series 2 Digicon range from AB Graphic International offers an unprecedented variety of options for digital print finishing. Solutions are available either inline or offline, incorporating flexo varnishing and semi-rotary die cutting along with the options of overlaminating, semi-rotary screen printing, hot foil blocking, and embossing, as well as an inspection system. The modular design allows for any combination of processes to be carried out in a single pass, and its sophisticated control system enables quick changeovers with minimal waste.

Michelman (www.michem.com)

Environmentally friendly, water-based DigiPrime coatings provide excellent HP Indigo ink adhesion on a variety of substrates.

Media partners

Avery Dennison/Fasson, UPM-Raflatac, Manter/Fedrigoni Group, Innovia Films, Wausau Coated Products, and many others offer a wide variety of label and flexible packaging substrates. All certified media products are listed on the HP Indigo media locator.

Technical Specifications

Printing speed	Up to 98 feet per min. in 4-color mode Up to 196 feet per min. in 1 or 2-color mode
Image quality	Resolution: 812 and 1219 dpi at 8 bit, 2438 x 2438 dpi addressability HDI (High Definition Imaging)
Line screens	144 (sequin), 175, 180 lpi
Image format	12.48 x 38.58 in maximum
Substrate thickness	0.47 to 17.7 mils
Substrate type	Self-adhesive label stock, films, and folding cartons
Web width	Max. width: 13.39 in / Min. width: 7.87 in
Input System	Input roll max. diameter: 39.37 in Core inside diameter: <ul style="list-style-type: none">• Standard: 3 in• Optional: 6 in Max. roll weight: 595 lb
Output System	27.56 in max. roll diameter
HP Indigo inks:	
Standard 4-color printing	Cyan, magenta, yellow, and black
Additional colors	White ink
PANTONE® colors	<ul style="list-style-type: none">• PANTONE-licensed HP IndiChrome on-press 6-color printing using CMYK as well as orange and violet• PANTONE-licensed HP IndiChrome off-press Ink Mixing System, for spot color creation, using CMYK as well as orange, violet, red, green, blue, bright yellow, and transparent• HP Professional PANTONE Emulation Technology (PANTONE-licensed CMYK values for 4-color PANTONE simulation, utilizing ICC profiles to provide optimized simulation values for the specific press and media combination)
Reinsertion	Simplex and duplex capability
Electrical requirements	Input voltage: 3-phase, 400 VAC, ± 6%, 3 x 50 Amp (no transformer) 50/60 Hz Power consumption: 18 KW (avg. during print)
Dimensions of overall press	Width: 236.6 in / Depth: 150.9 in / Height: 82.3 in
Press weight	7055 lb
DFE Architecture	HP PrintLink software architecture – real time, bi-directional data exchange
Supported image formats and standards	PS (Adobe certified), composite and pre-separated PDF 1.7, EPS, DCS 2, Esko-Graphics native format; any format which can be imported to Adobe CS and be sent as PS to Esko (TIFF, JPG, BMP, EPS)
Optional equipment/configurations:	
HP Smart Stream Digital Print Server Options	HP SmartStream Labels and Packaging Color Kit, Powered by EskoArtwork HP SmartStream Labels and Packaging VDP Tools, Powered by EskoArtwork
Expanded colors capabilities	5th, 6th, and 7th color printing; HP Indigo Ink Mixing System
Flexible Packaging	Packer arm support in rewinder

The information in this document may not be current. Check the HP website for a current version.

North America

Hewlett-Packard Company
1001 Summit Boulevard
Mailstop 401
Atlanta, GA 30319
USA
Tel: +1 800 289 5986
Fax: +1 404 648 2054

Europe, Middle East and Africa

Hewlett-Packard Company
Avenue Céramique 241
6221 KX Maastricht
The Netherlands
Tel: +31 88 750 1723
Fax: +31 88 750 1715

Asia Pacific

Hewlett-Packard Company
Depot Road 138
Singapore 109683
Tel: +65 6727 0777
Fax: +65 6276 3160

Latin America

Hewlett-Packard Company
Blue Lagoon Drive 5200
Suite 950
Miami, FL 33126
USA
Tel: +305 267 4220
Fax: +305 265 5550
informahpindigo@hp.com

Israel

Hewlett-Packard Company
Kiryat Weizmann
P.O. Box 150
Rehovot 76101
Israel
Tel: +972 8 938 1818
Fax: +972 8 938 1338



To learn more, visit www.hp.com/go/graphic-arts or www.hp.com/go/myhpindigoweb

© 2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

PANTONE® and other PANTONE, Inc. trademarks are the property of PANTONE, Inc

4AA1-7758ENUS, August 2009. This is an HP Indigo digital print.

