



## 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:**

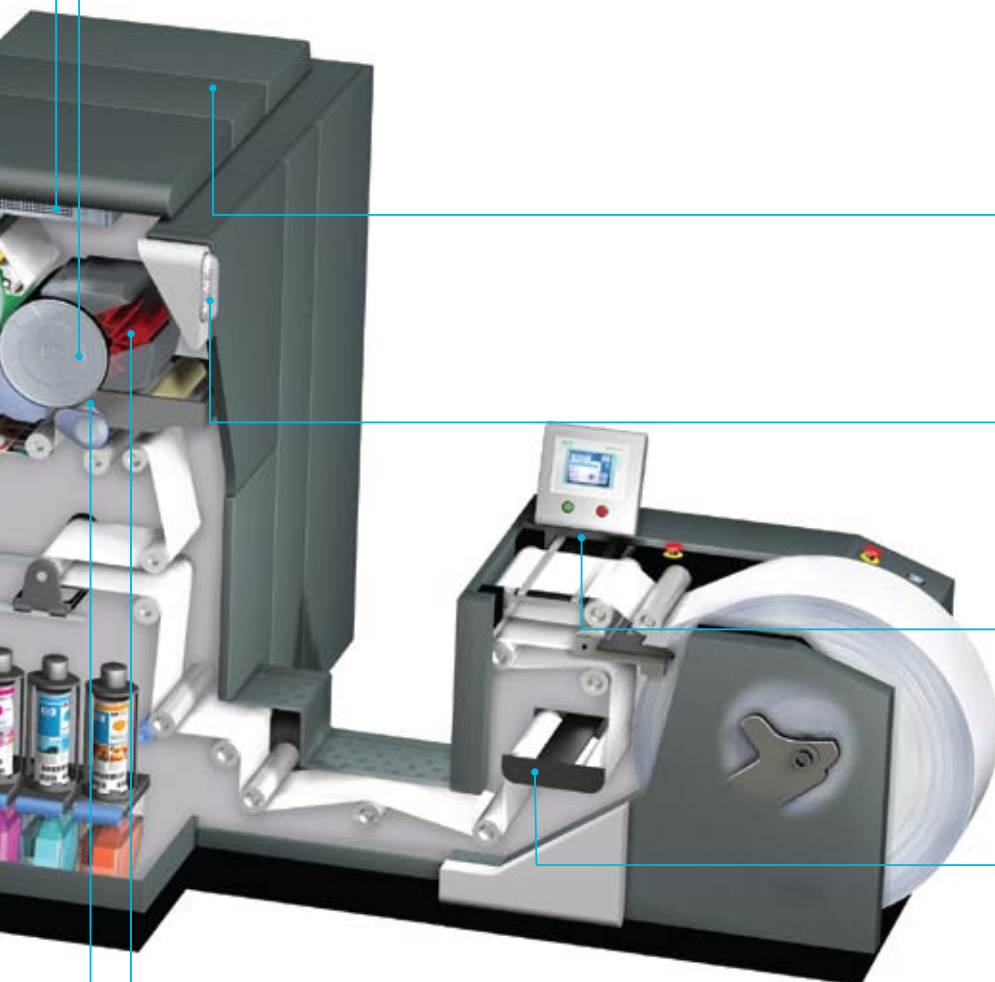
- 7 color stations, allow Pantone emulation of 4, 6, 7 colors and spot color printing.
- On-the-fly On-press Fast Ink Replacement (OFIR) system for easy spot color printing.

**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](http://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](http://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

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

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