

# Presstek 75DI®

B2 Multi-tower Digital Offset Presses

- 4- to 6-Colour Models
- Coating Models
- On-press Media Imaging
- Highly Profitable Short Runs
- Fast Job Changeover



FAST ▶ VERSATILE ▶ PROFITABLE ▶ DIGITAL ▶ GREEN



 **PRESSTEK**  
A SMARTER WAY TO PRINT

# B2 Digital Offset Presses

The Presstek 75DI delivers true offset performance in an all-digital workflow



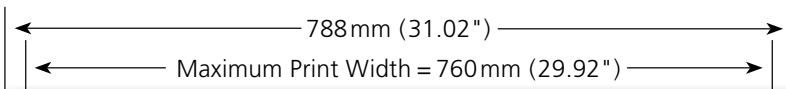
## PRESSTEK 75DI

Presstek DI digital offset presses are highly automated integrated systems that provide the speed and efficiency of digital printing while delivering the versatility, quality, and productivity of offset printing.

Featuring Presstek's most advanced DI technologies in a multi-tower design, Presstek 75DI models are a proven solution for efficiently and profitably printing a wide range of work in runs of 500 to 20,000. 75DI presses can be configured to provide the price/performance level your operation requires.

### Features

- Go from digital file to sellable colour in as little as six minutes
- Chemistry-free plates are simultaneously imaged in register and dry cleaned in just two minutes without operator intervention
- Smart inking feature presets ink keys to supply the right amount of ink to the rollers to match the image
- Superior waterless printing with less dot gain and a broader colour gamut
- Print Pantone® colour inks, varnishes and coatings in-line
- Print on any offset stock, including onion skin, cover stock and cardboard up to 0.8 mm (0.031") thick, foils, and synthetic paper
- 788 mm × 600 mm (31.02" × 23.62") sheet size
- Press speeds up to 16,000 sph
- Multi-tower design—4- to 6-colours
- In-line aqueous coater option
- Additional press automation options facilitate nearly hands-off job changes and daily maintenance routines



# Digital Speed and Offset Quality

File direct to high quality, multi-colour sheets in as little as six minutes

With extreme automation and on-press media imaging, a Presstek 75DI enables you to go from a digital file to sellable sheets in as little as six minutes. You can print on demand, turn around jobs faster, and raise productivity in both your prepress and pressroom while reducing operating costs.

Because Presstek 75DI presses are able to meet conventional offset printing specifications for ink and stock, they offer far more capabilities and higher quality for short-run and fast turnaround printing than digital toner and ink jet presses can provide.

5,000 folded carton flats printed and aqueous coated in 25 minutes from digital file to completion



16,000 A4 size pages printed and aqueous coated in 21 minutes from digital file to completion

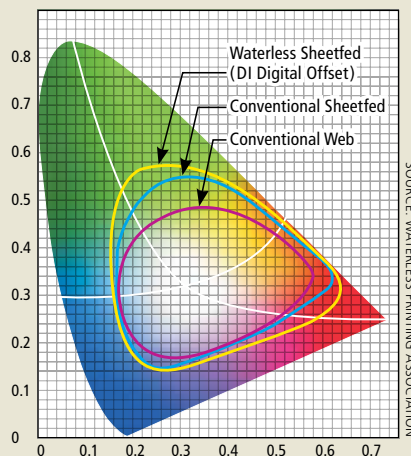
## Business Advantages

- Significantly higher throughput than comparably priced digital toner and ink jet presses
- Greater profitability than conventional offset on short and medium run lengths
- Consistent up-time with no duty cycle for 24/7/365 operation
- No click charges
- Easily print rush jobs and accommodate last minute changes
- Eliminate all the labor, equipment, steps and variables associated with off-press platemaking
- Minimal prep time; more printing time
- Consistent, easy-to-achieve high quality offset output
- Accommodate nearly any job in the marketplace, regardless of size, page count, run length, inks, or stock
- The ideal solution for short run, fast turnaround folded carton printing

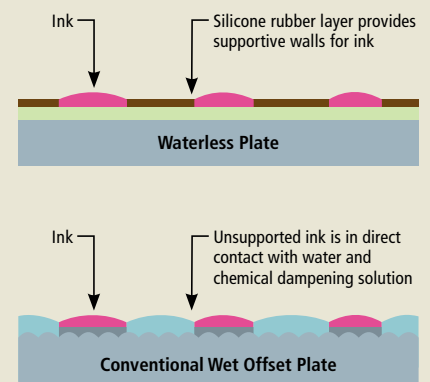
## Waterless Offset Yields Higher Quality, More Accurate Colour

DI waterless printing provides higher quality colour with higher ink densities that expand the colour gamut and produce more saturated colour.

When printing with a Presstek DI press, dot gain is reduced because the press eliminates the need for dampening solution. The dots are sharper and photographic shadow detail is rendered more clearly. Screen rulings of 200 lpi are easily reproduced and the colour is consistent.



Waterless printing provides a 20% larger colour gamut than conventional printing.



# Presstek 75DI Digital Offset Presses

Automated, all-in-one digital offset systems

## Imaging and Printing Features Combined for Unparalleled Performance

### **A** Central Control

The operator easily controls all press functions at the console. Job previews enable easy job identification and selection. Operators can load and prepare the next job in line while production of the previous job is still underway.

### **B** Auto Start Up

23 ink keys per unit are preset from the digital data for quick and easy job setup with reduced waste. Rollers have been cleaned automatically at the end of the last job and are ready for inking.

### **C** Auto Plate Advance and Mounting

Spooled ProFire Digital Media is automatically dispensed and mounted on the plate cylinders. Used plates are automatically transferred to take-up spools. Each spool contains enough plate media for 23 full-size jobs.

### **D** On-press Imaging

The imaging units simultaneously image all plates at 100 dots/mm (2540 dpi). Multiple laser diodes are directed through a single lens for precise balance and high accuracy.

### **E** Simultaneous Plate Cleaning

Prior to inking, plates are cleaned automatically as part of the imaging process. This automated operation facilitates fast throughput and high print quality.

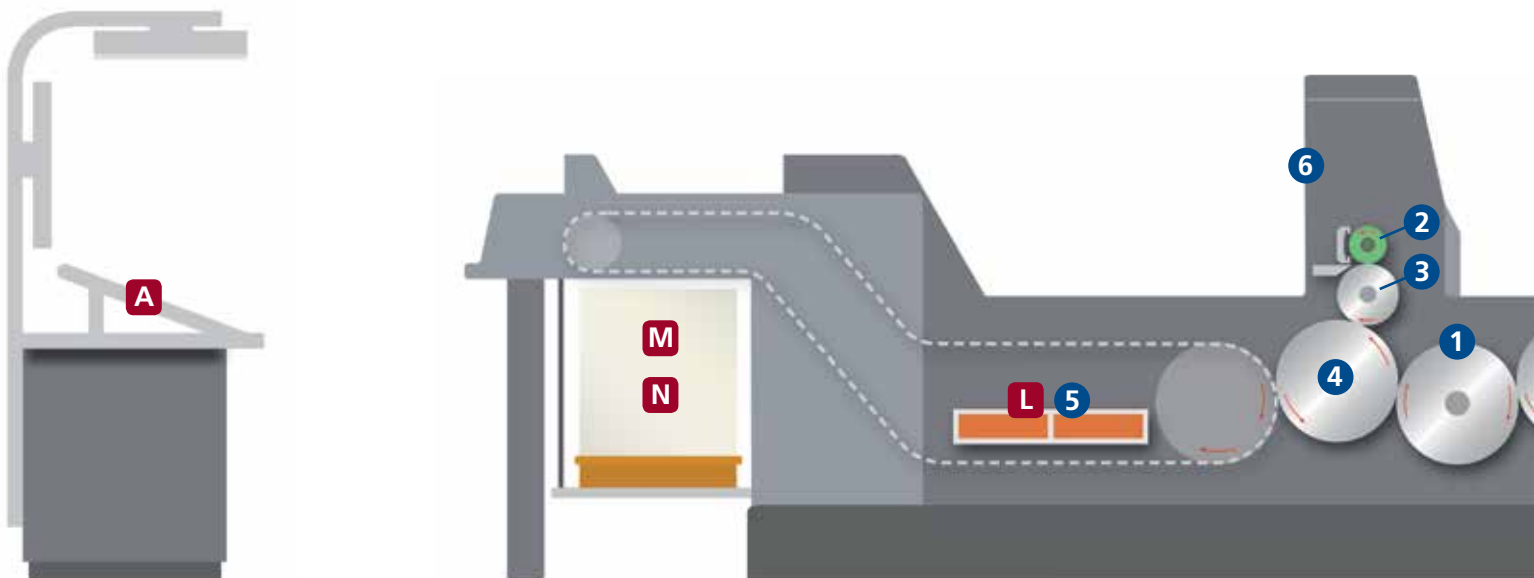
### **F** Automatic Blanket Cleaning

Blankets are automatically cleaned. This automated operation allows the Presstek 75DI to quickly begin printing at full-speed and move quickly from job to job.

## Presstek 75DI-AC: Digital Offset with In-line Coating

Presstek 75DI models are available with fully chambered anilox coating systems. Aqueous coating increases the value of a printed piece, shortens drying time for even faster turnaround, improves bindery throughput, and protects finished pieces. Flood and spot coating are supported.

- 1 Printed sheets are transported for in-line coating in one pass.
- 2 Anilox metering precisely measures and controls the amount of coating, reducing waste, speeding delivery, and improving the quality of the printed sheet.
- 3 Coating is applied to the blanket (flood coating) or pre-imaged photopolymer flexo plate mounted on the blanket cylinder (spot coating).
- 4 Impression cylinder picks up sheet for coating and completes the automated, integrated printing and coating sequence.
- 5 Air knives and infrared drying expedite completion.
- 6 When disengaged, the coating unit can be accessed while the press is printing. The coating reservoir can be refilled, the coating cylinder can be cleaned, and blankets or flexo plates mounted for the next job without losing press time.



### **G Ink Roller Temperature Control**

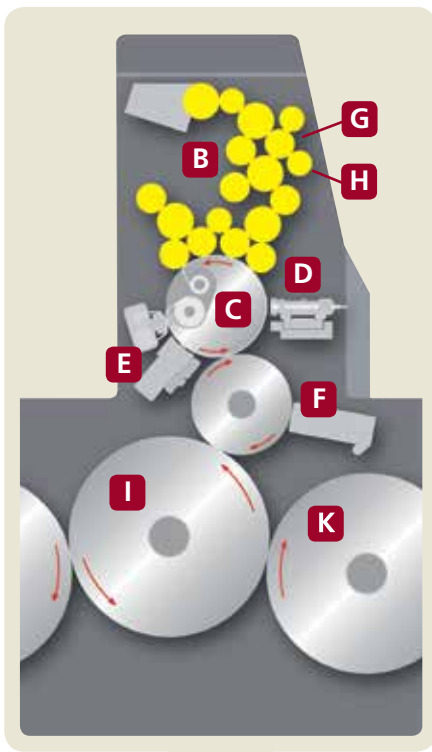
Temperatures of the ink train rollers are maintained by a controlled flow of coolant inside the rollers.

### **H Waterless Printing**

Waterless printing eliminates the need to maintain ink/water balance, making operation easier, reducing operator intervention and variables, and delivering fast makeready and superior inking.

### **I Double-Diameter Cylinder Design**

Double-diameter impression cylinders and transfer drums transport paper with minimal movement, providing stable transport of any weight stock.



### **J Reliable Paper Feed**

The suction tape feeder board simplifies the setting of brush and runner wheels, shortens time to change paper sizes, and accurately shuttles stock. During printing, an underswing and drop-away lay infeed maintains high registration accuracy even during high-speed operation. An ultrasonic-type double sheet detector prevents double sheets even when printing thick stock.

### **K Paper Transport**

The Presstek 75DI employs strong, lightweight gripper mechanisms that offer high reliability and durability. The press also utilizes cam-closed and double sprung grippers that employ torsion bars on all gripper shafts. With reliable sheet gripping, consistent registration is maintained at any speed.

### **L Infrared Dryer**

An infrared dryer expedites printing of second sides and finishing.

### **M Paper Delivery**

A decurling device, an air blower, and suction wheels driven by an independent motor all boost sheet piling performance.

### **N Quick Job Changes**

Job changeover can be achieved in as little as six minutes. At the end of printing, the autoclean cycle automatically prepares ink rollers, blankets and plate cylinders for the next form or job.



*Automatic blanket cleaning*

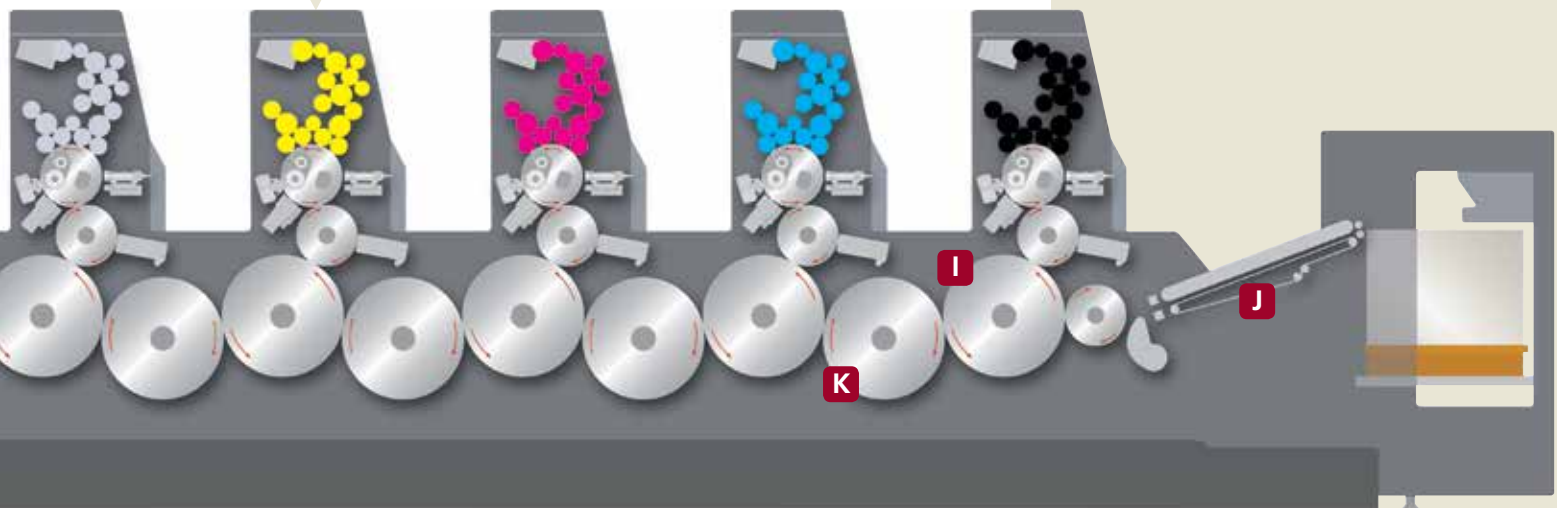
### **Built for the Job**

From its on-press imaging systems and automated makeready features to its fast press speeds and precision printing, the Presstek 75DI is built to meet the rigors of short lead times, frequent job changes, and high throughput—day after day.

Cylinders supported by ultra-precise bearings, precision induction hardened helical gears, and heavy cast-iron side frames to support these components, ensure the highest accuracy, reliability and durability year after year.



*Suction tape feeder board*



# The Highest Quality Printing by Design

A superior reprographic system

## Optimum Performance

The exceptional efficiency and quality of DI presses are the result of three Presstek technologies—press design, laser imaging and thermal plate media—working together as a highly automated system that produces outstanding output.

## High Resolution Imaging

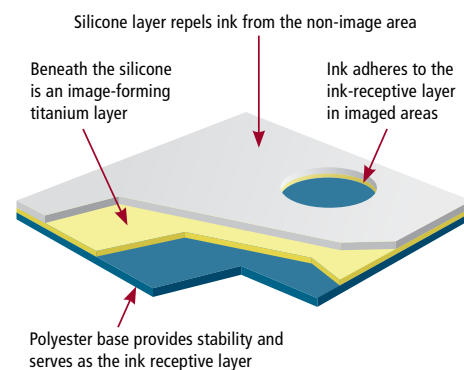
The Presstek 75DI's on-press imaging component employs multiple laser diodes deployed through a single lens. With a 16-micron beam size, Presstek 75DI imaging produces high resolution images of exceptional quality. Fine details, colour fidelity, minimum screen values, subtle gradations, and large solids are all produced with results that meet the most demanding offset printing needs.



*On-press thermal laser media imaging eliminates variables of off-press platemaking. While the imaging head (at right) is working, cleaning devices (at left) simultaneously prepare the plate for inking.*

## ProFire Digital Media

Presstek ProFire Digital Media is manufactured specifically to optimise the performance of Presstek DI presses. The highly engineered thermal reaction of lasers and plate media results in fast imaging with extremely well defined details and halftone dots.

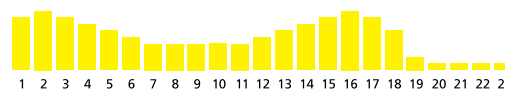
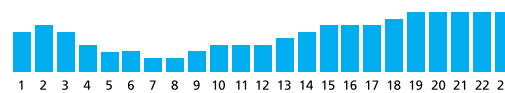


## Program Inking: Quick Job Starts and Quality Assurance

Program inking delivers job-specific ink zone data from the digital file directly to the 75DI press, automatically presetting ink keys, ink fountain roller speed, and the number of contacts by the ink ductor roller to assure the optimum ink volume. The result is that first sheets are near sellable colour, and final colour is achieved quickly with minimal operator adjustments and waste.



*Program inking automatically supplies the correct amount of ink to the ink rollers to match the image.*

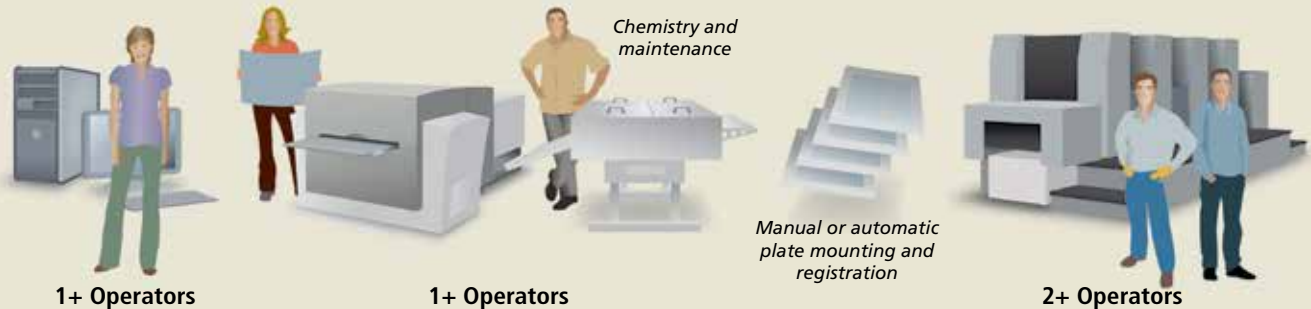


# Streamline Production

Easy integration into your digital workflow

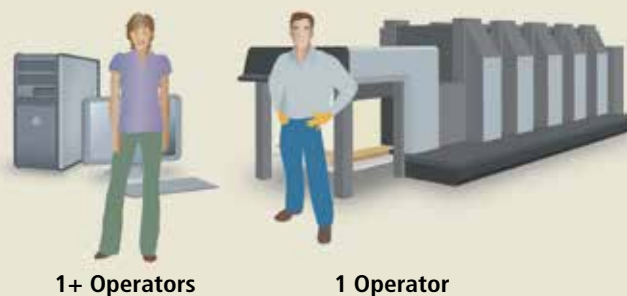
## Conventional Offset Workflow

Computer ..... Platemaker ..... Plate Processing ..... Plates ..... Offset Press



## DI Digital Offset Workflow

Computer ..... Presstek 75DI



## Easy to Integrate

A Presstek 75DI easily integrates into your digital workflow. It is simply positioned as a high performance output device on your existing network.

The Auto Print Mode initiates all necessary steps for a complete print cycle. The selected job will have plates advanced and imaged, and printing started without any operator intervention.

DI digital offset printing is a perfect solution for today's on-demand, short run business models—where output devices must produce a steady stream of digital multi-colour printing, with minimal steps and few interventions.

Personnel will easily transition to DI press operation. Presstek's training experts will have your operators working at full potential soon after installation.

## A Smaller Environmental Footprint

Many businesses have chosen DI presses, in part, to meet their environmental goals, as well as those of their customers. Using no platemaking chemistries or fountain solutions, DI presses eliminate tainted wastewater from printing operations and significantly reduce VOC emissions. In addition, the speed and automation of DI presses significantly reduces the paper waste that results from other offset methods.



## Presstek 75DI Specifications

### Printing Stock

Sheet Size <sup>1</sup>	Maximum: 788 mm × 600 mm (31.02" × 23.62") Minimum: 279 mm × 200 mm (10.98" × 7.87")
Maximum Print Format	760 mm × 580 mm (29.92" × 22.83")
Stock Thickness	0.04 mm–0.6 mm (0.0016"–0.024"); Optional 0.8 mm (0.31")
Orientation	Landscape

### Imaging System

Laser	Multi diode, single lens / one per tower
Image Resolution	100 dots/mm (2540 dots/inch)
Imaging Time	All plates simultaneously imaged in two minutes
Spot Size	16 microns

### Plate Media

Plate Material	ProFire Digital Media
Plates Per Roll	23 full format
Screen Ruling	Up to 200 lpi—FM (stochastic) and 300 lpi dependent on job
Run Length <sup>2</sup>	20,000 impressions

### Printing

Maximum Printing Speed <sup>2</sup>	16,000 sheets per hour
Number of Colours (Towers)	4–6 colour (tower) models
Inking Process	Waterless offset
Ink Keys/Rollers	23 ink keys per unit; 18 ink rollers per tower
Form Rollers	4 per tower
Standard Features	Automatic pre-setting, automated blanket cleaning, wash-up device and temperature control
Impression Cylinder Cleaning	Automation optional

### Feeder

Feeding System	Rotary type stream feeder
Feeder Board	Suction
Feeder Pile Capacity	800 mm (31.5")
Infeed System	Underswing gripper and feed drum
Delivery Pile Capacity	925 mm (36.42")

### Electromechanical

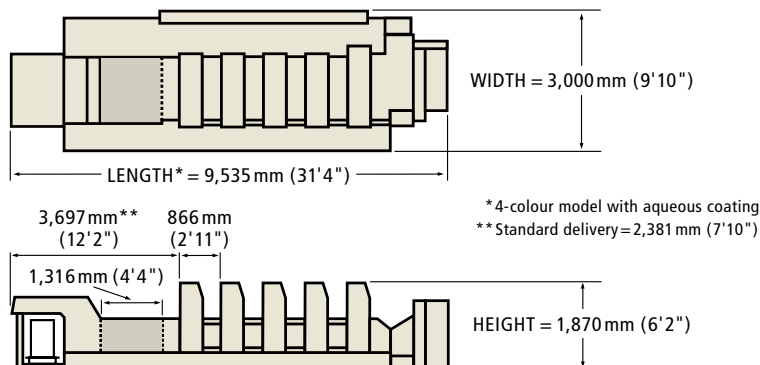
Input Power	3-phase 200 VAC 50/60Hz or other voltages
Lubrication	Automatic centralised oiling system

## Presstek 75DI-AC Specifications

(All specifications are the same as above other than those noted below)

Maximum Coating Area	760 mm × 580 mm (29.92" × 22.83")
Coating Device	Anilox metering
Drying	Six Infrared dryer lamps
Infrared Lamp Power	29.4 kW (4.9kW × 6)

## Dimensions<sup>3</sup>



<sup>1</sup> Limitations may apply depending on paper types.

<sup>2</sup> Actual numbers will be affected by ink and paper conditions.

<sup>3</sup> Dimensions do not include console, air compressor and other peripheral devices.

Product specifications are subject to change.



## Expert Service: Your Trusted Partner

Presstek provides an integrated support network of field engineers, customer care representatives, technical support engineers, and on-board monitoring of digital offset systems—all supported by advanced information sharing and technology systems.

Every aspect of our service and support program is focused on maximising the uptime and performance of your DI digital offset press.

### Guardian Service

Presstek Guardian Service is a remote diagnostics and predictive maintenance program available for DI presses. Through secure internet communication with your DI press, Presstek monitors operating conditions and performance, logs events, and can upload software upgrades to enhance press performance. The collected data enables Presstek to be proactive in maintaining the high performance of your equipment.



Contact us to learn more about Presstek eco-friendly solutions.

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