

Presstek 75DI[®]

31" Multi-tower Digital Offset Presses

- 4- to 10-color Models
- Coating Models
- UV Models
- Perfecting Configurations
- In-line Variable Data Option



FAST ▶ VERSATILE ▶ PROFITABLE ▶ DIGITAL ▶ GREEN



 **PRESSTK**
A SMARTER WAY TO PRINT

31" Digital Offset Presses

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



PRESSTEK 75DI

Presstek DI presses are highly advanced digital offset presses that automate the complete offset printing process, including plate imaging, in one integrated system. This automation provides 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 offer a six-up 30" (B2+) printing format; high quality waterless offset printing; an array of labor-, time- and cost-saving systems; and reduced waste.

A Presstek 75DI digital offset press is a proven solution for automating the printing process and producing a wide range of work in runs of 500 to 20,000 with high efficiency and profitability. 75DI presses can be configured to provide the price/performance level your operation requires.

- Highly automated digital offset presses
- Six minutes from file to sellable color
- Chemistry-free on-press plate imaging
- 31.02" × 23.62" maximum sheet size
- High quality waterless offset printing
- Up to 300 lpi and FM screening
- Print Pantone® color inks, varnishes and coatings in-line
- Print on any offset stock from 0.0016" onion skin up to 0.031" (31 pt.) board
- Press speeds up to 16,000 iph
- 4- to 10-color models
- Aqueous coating, UV ink, and perfecting models
- Hybrid models with in-line variable data printing

**WHAT CAN YOU DO
IN SIX MINUTES?**



The Right Solution for Today's Market Conditions

Combining the best of digital and offset printing, the Presstek 75DI press series is designed to meet your customers' demands for high quality, fast turnaround printing at a lower cost—while providing you with the most streamlined and versatile printing platform available.

High Throughput and Speed

With extreme automation and on-press plate imaging, a Presstek 75DI enables you to go from a digital file to sellable sheets in as little as six minutes. With job change-over this quick, you will print more jobs in less time, moving every job faster to completion and increasing your overall productivity.



A Wide Range of Applications

The 30" print area, versatile ink and stock capabilities, and high quality color reproduction of the Presstek 75DI provide an ideal solution for capturing a diversity of work in the sheetfed printing and folded carton markets. In both markets, the number of shorter run jobs is growing while time-to-delivery rapidly decreases.

31.02" (788mm)
Maximum Print Width = 29.92" (760mm)



**BRIDGING THE GAP BETWEEN DIGITAL TONER
AND CONVENTIONAL OFFSET PRINTING**

PRESSTEK

Printed on a Presstek 75DI digital offset press. 4-process colors plus Pantone® metallic silver.

23.62" (600mm)
Maximum Print Height = 22.83" (580mm)

Combining Digital Speed and Offset Quality

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

With the ability to go from digital file direct to printed sheets in as little as six minutes and print speeds up to 16,000 sheets per hour, 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 sheets printed and aqueous coated in 25 minutes from digital file to completion



15,000 letter-size pages printed and aqueous coated in 16 minutes from digital file to completion

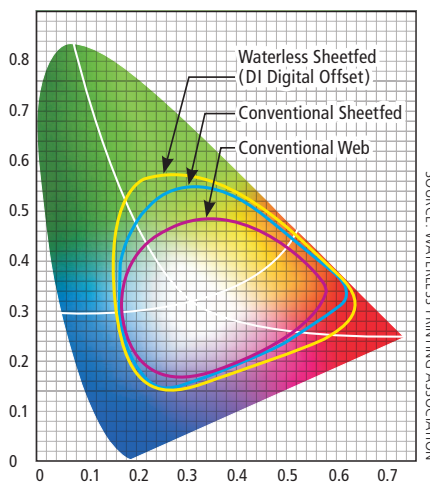


Presstek 75DI Press Features

- Go from digital file to sellable color in as little as six minutes
- Chemistry-free plates are simultaneously imaged in register, cleaned and prepared for printing without operator intervention
- Smart inking presets ink keys and supplies the right amount of ink to the rollers to match the image
- Superior waterless printing with less dot gain and a broader color gamut
- Print on any offset stock, including onion skin, cover stock and cardboard up to 0.031" (0.8mm) thick, foils, synthetic paper, and plastics
- 29.92" x 22.83" (760mm x 580mm) printing area accommodates a wide range of jobs and multiple-up printing, including 6-up letter size pages
- Additional press automation options facilitate nearly hands-off job changes and daily maintenance routines

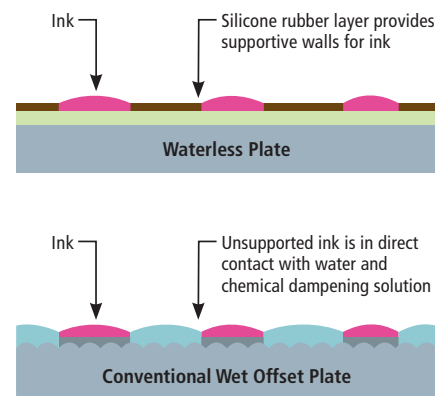
Waterless Offset Yields Higher Quality, More Accurate Color

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

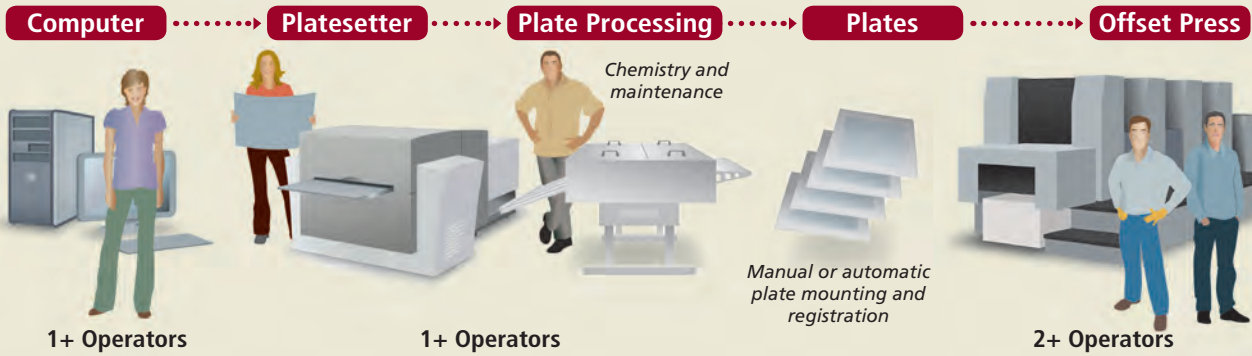


Waterless printing provides a 20% larger color gamut than conventional printing.

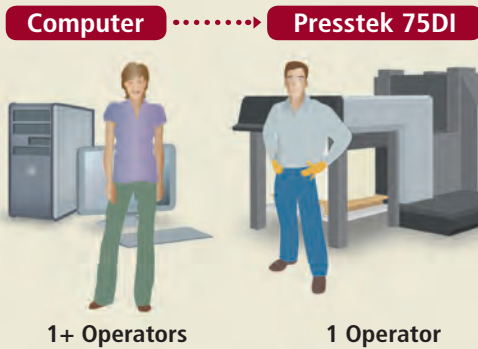
When printing with a Presstek DI press, dot gain is reduced because the press eliminates the need for dampening solution. The dots are sharper and photographic shadow detail is rendered more clearly. Screen rulings of 300 lpi and FM screening are easily reproduced and the color is consistent.



Offset Workflow



DI Digital Offset Workflow



Business Advantages

- Low cost per page, as little as 1 cent per letter-size page
- Highly profitable for runs of 500 to 20,000, the most frequent run lengths in today's market
- 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 and processing
- Expand your printing capabilities and volume without the need to upgrade off-press platemaking equipment
- 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

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.

An all-in-one system, a Presstek 75DI will increase your pressroom capacity without the need for modifications in your prepress equipment or workflow. 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. DI presses easily print on recycled stock. And, unlike liquid toner, DI output is easily de-inked in normal recycling processes.



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 2540 dpi (100 dots/mm). 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.

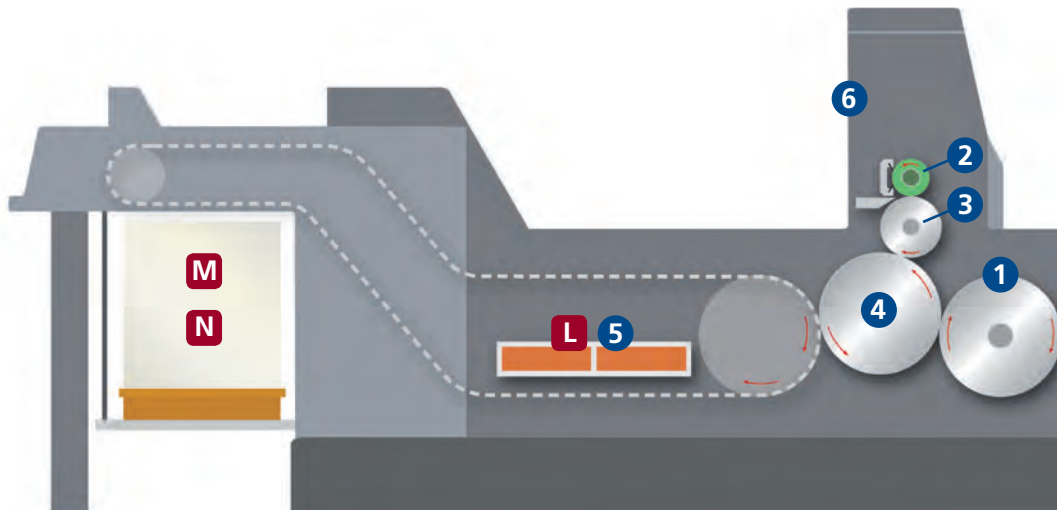
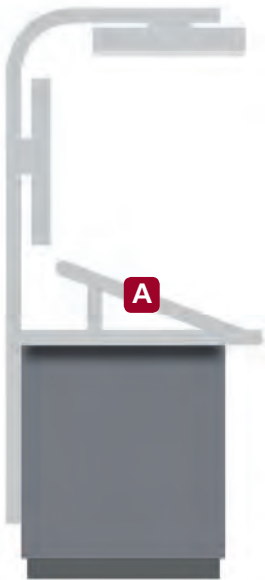
F) Automatic Blanket Cleaning

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

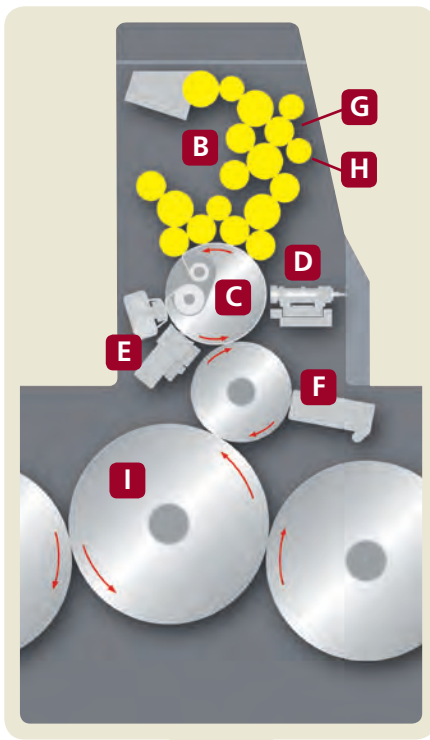
Temperatures of the ink train rollers are maintained by a controlled flow of coolant inside the rollers.

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 cover weight papers and plastics.

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.

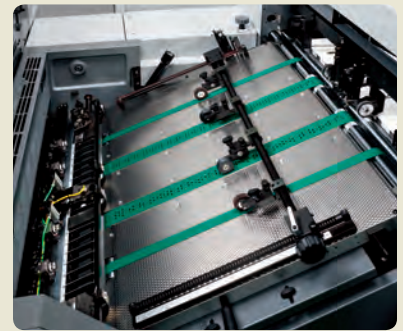


Automatic blanket cleaning

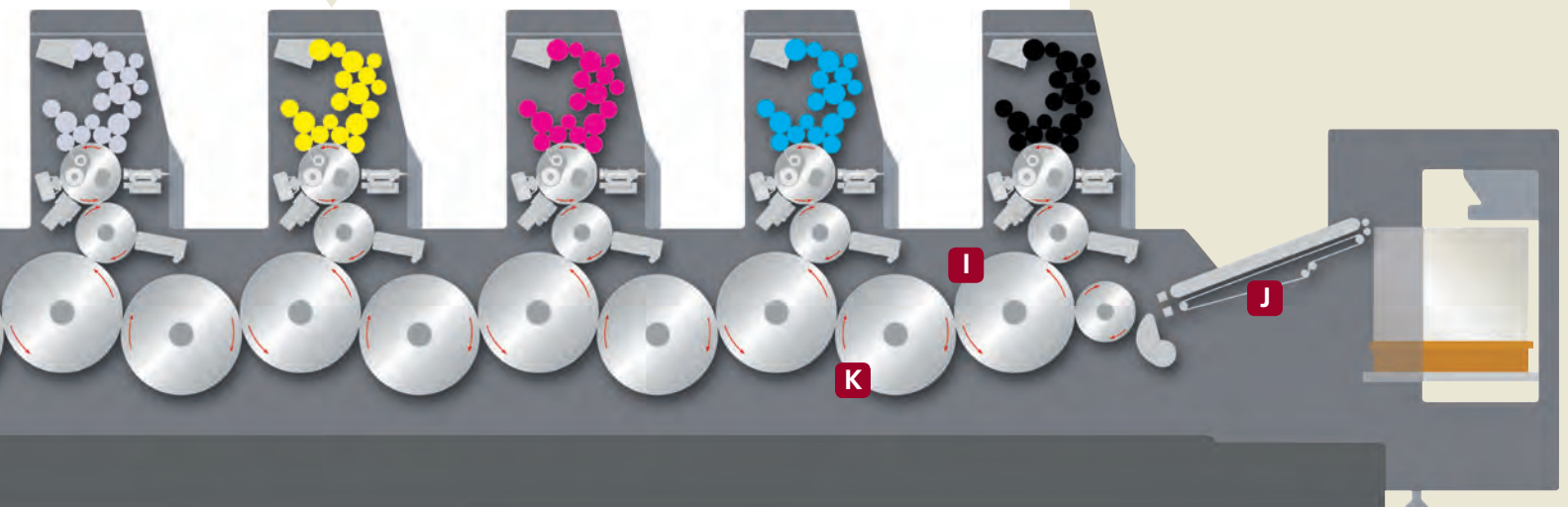
Built for the Job

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

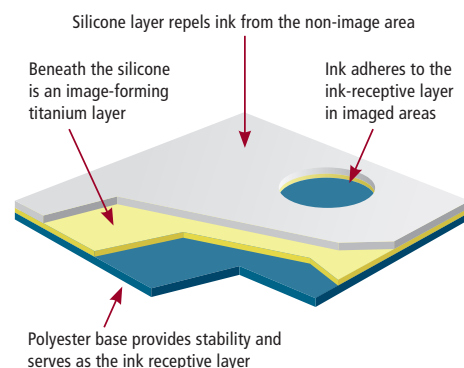
The Presstek 75DI's on-press imaging component employs multiple laser diodes deployed through a single lens. With a 16-micron beam size, Presstek 75DI imaging produces high resolution images of exceptional quality. Fine details, color fidelity, minimum screen values, subtle gradations, and large solids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



The Presstek 75DI employs thermal laser imaging, which eliminates the variables of exposure and chemistry. While the imaging head (at right) is working, cleaning devices (at left) simultaneously prepare the plate for inking.

ProFire Digital Media

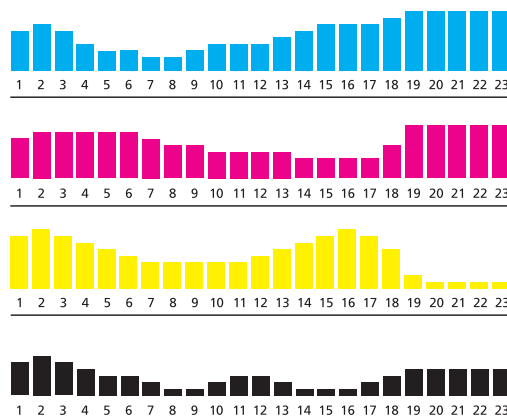
Presstek ProFire Digital Media is manufactured specifically to optimize the performance of Presstek DI presses. The highly engineered thermal reaction of lasers and plate media results in fast imaging with extremely well defined details and halftone dots.



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 color, and final color 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.



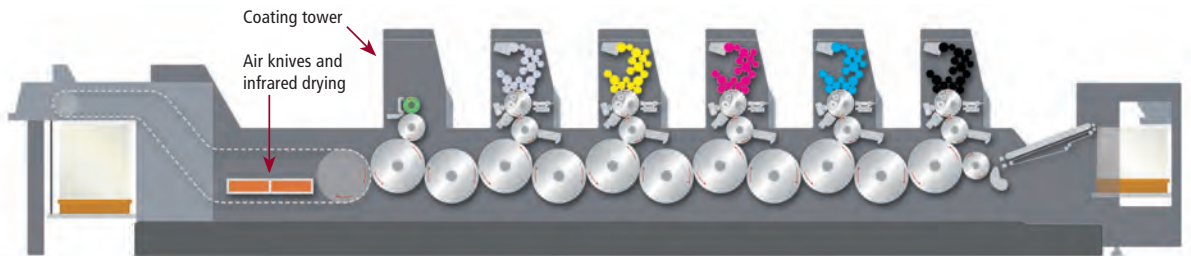
A Solution to Meet Any Need

Custom configurations to fit your business model

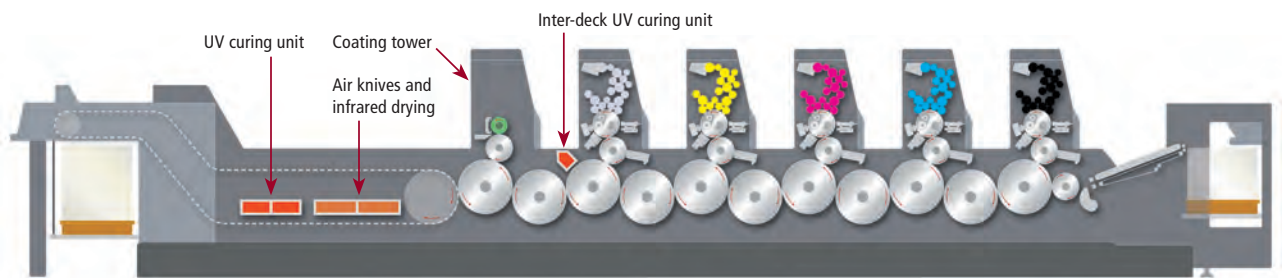
Presstek 75DI presses are available in a range of models that bring the advantages of DI digital offset printing to a large array of applications. Each model offers enhanced productivity and versatility for your business.



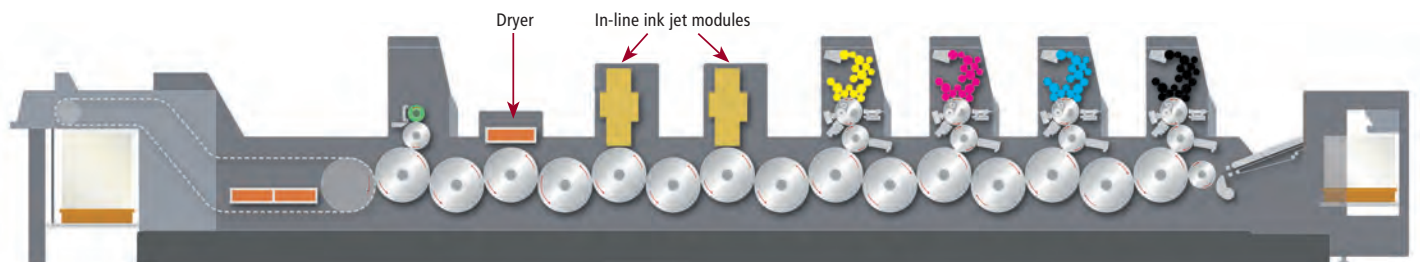
Presstek 75DI Multi-tower Presses: Beginning at four colors, up to six additional towers can be added. With simultaneous automated operations in each tower, sellable sheets can be reached in as little as six minutes.



Presstek 75DI-AC: Adding an in-line coating unit expands capabilities and provides higher value printing. The system accommodates both spot and flood coating.



Presstek 75DI-UV: UV printing configurations make possible printing on film, metallized paper, lenticular lenses, and other non-absorptive material, with fast drying time. One or more cassette-type inter-deck UV curing units can be installed over the impression cylinders for even shorter delivery time.



Presstek 75DI-IJ-Hybrid Models: By incorporating in-line ink jet printing modules, Presstek 75DI-IJ-Hybrid models combine the advantages of DI printing with variable content printing.

DI Productivity in One Pass

Fully-automatic, multi-color convertible perfecting DI presses

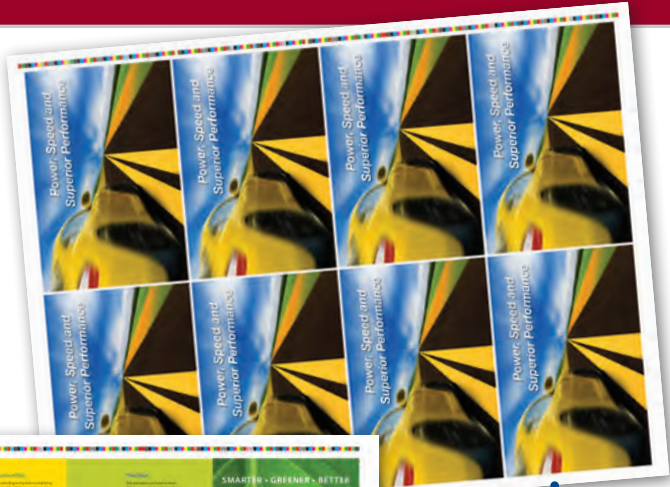
Presstek 75DI presses are available in a range of perfecting configurations with up to 10 towers and in-line coating. Presstek 75DI perfecting presses can be switched automatically between single-side printing and perfecting, boosting the already high productivity of the 75DI. In addition, 75DI perfecting presses print at speeds up to 15,000 sheets per hour, one of the fastest in the industry.

Maximizing DI Efficiency and Speed

Perfecting Presstek 75DI presses can cut in-half the entire process from digital file to completion.

- Plates are imaged and registered for both sides of the sheet in one automated step.
- All processes are performed simultaneously for both sides of the sheet.
- No time is spent piling sheets and transferring them for a second pass.
- No time is spent waiting for the first pass to dry.

These efficiencies enhance the high productivity of DI press operation, further increasing the ability of a Presstek 75DI to meet today's market conditions and raise the overall capacity of printing operations.

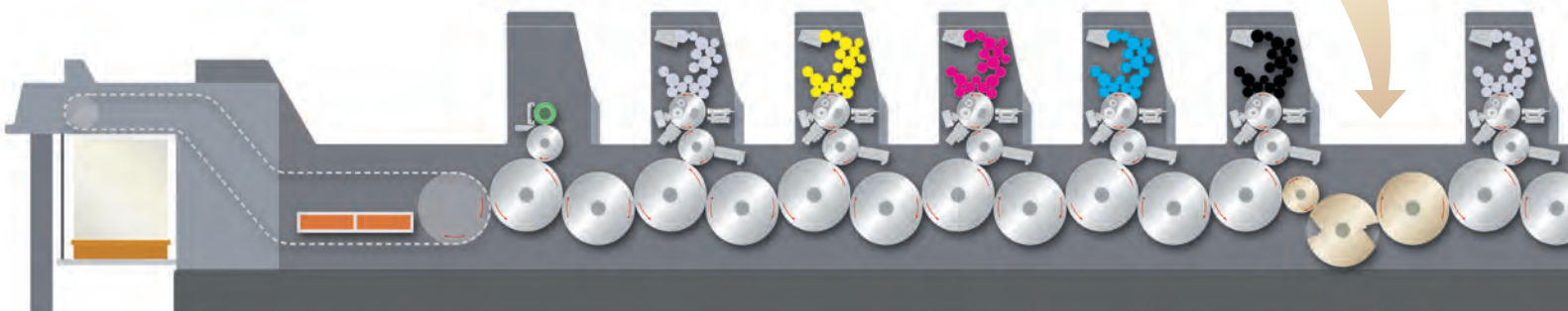
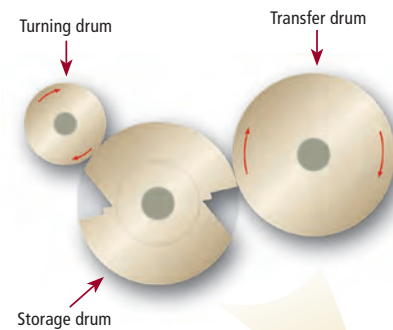


60,000 mailers printed in 36 minutes from digital file to completion

3,000 16-page booklets printed in 18 minutes from digital file to completion

Fully Automatic Mode Change

Switching between straight-line printing and perfecting modes is performed remotely from the delivery end of the press. The operator simply inputs the paper size and selects the printing mode on the touch screen control display. Perfecting device mechanisms are automatically set to match the paper size. The entire mode change can be performed within two minutes.

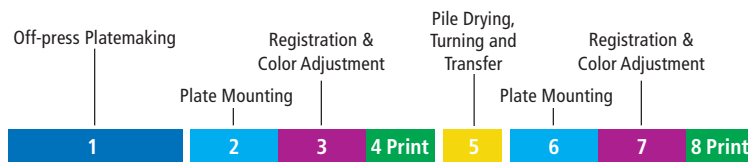


Two Technologies Are Combined for Unequaled Productivity

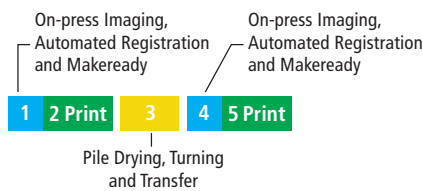
Combining the productivity of perfecting with the streamlined digital workflow of the Presstek 75DI results in a highly profitable solution and the fastest method possible for printing jobs that require 500 to 20,000 sheets printed on two sides, the majority of jobs in the market today.

Comparison of Steps: 3,000 Sheets Printed Two Sides

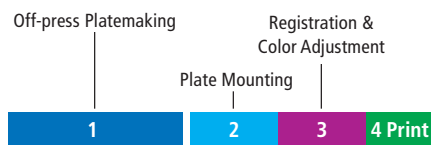
Conventional Offset Press (sheet-wise)



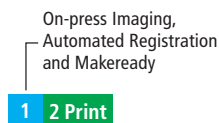
DI Digital Offset Press (sheet-wise)



Conventional Offset Press with Perfecting

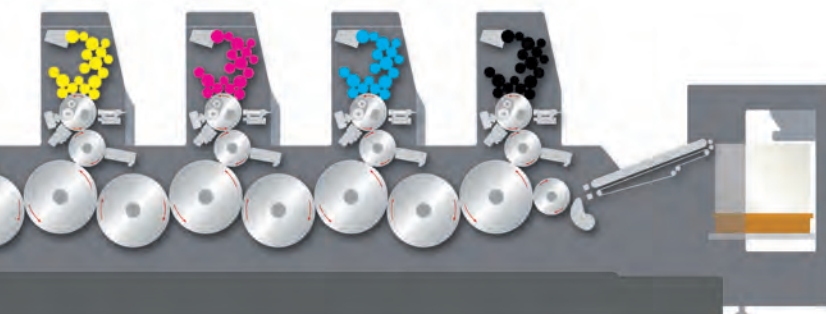


DI Digital Offset Perfecting Press



Perfecting DI that Meets Your Exact Needs

The Presstek 75DI digital offset perfecting presses are available in a range of configurations from 4-color/1-color to 5-color/5-color. 75DI presses are also available in custom configurations incorporating perfecting and coating technologies.



Print Quality Management System

Presstek Virtuoso is an optional in-line color management and sheet inspection system for Presstek 75DI presses. Virtuoso enhances the innate quality of the Presstek 75DI by performing a complete inspection of each sheet as it passes through the press at full speed.

Virtuoso's Compact Imaging Sensor (VCIS) is integrated into the last unit of the press. The VCIS reads the color bar on each sheet and makes any necessary adjustments to ink density on the fly.

Enhancing the Presstek 75DI's precise first sheet registration, Virtuoso scans the registration marks on every sheet during a press run, automatically initiating any needed adjustments.

Virtuoso also checks each sheet for print defects including marking, toning, substrate defects, color variations, inking issues, and scratching. In addition, each sheet is scanned and compared to an approved PDF master, detecting production errors that may affect the content and integrity of the job. Sheets with defects are automatically marked as they are delivered to the stacker.



Virtuoso is integrated at manufacturing or can be easily installed as an upgrade at a customer's location.

Presstek 75DI Specifications

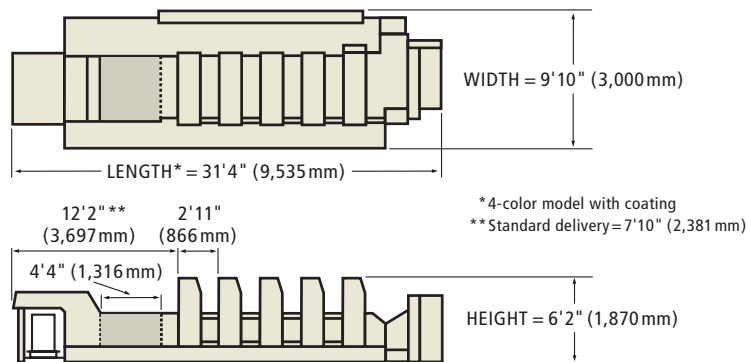
Printing Stock	
Sheet Size ¹	Maximum: 31.02" × 23.62" (788mm × 600mm) Minimum: 10.98" × 7.87" (279mm × 200mm)
Maximum Print Format	29.92" × 22.83" (760mm × 580mm)
Stock Thickness	0.0016"–0.024" (0.04mm–0.6mm); Optional 0.031" (0.8mm)
Orientation	andscape
Imaging System	
Laser	Multi diode, single lens / one per tower
Image Resolution	2540 dots/inch (100 dots/mm)
Spot Size	16 microns
Plate Media	
Plate Material	ProFire Digital Media
Plates Per Roll	23 full format
Screen Ruling	Up to 300 lpi AM and FM (stochastic)
Run Length ²	20,000 impressions
Printing	
Maximum Printing Speed ²	16,000 sheets per hour / Perfecting: 15,000 sheets per hour
Number of Colors (Towers)	4–10 color (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, wash-up device and temperature control
Blanket Cleaning	Automation optional
Impression Cylinder Cleaning	Automation optional
Feeder	
Feeding System	Rotary type stream feeder
Feeder Board	Suction
Feeder Pile Capacity	31.5" (800mm)
Infeed System	Underswing gripper and feed drum
Delivery Pile Capacity	36.42" (925mm)
Electromechanical	
Input Power	3-phase 200 VAC 50/60Hz or other voltages
Lubrication	Automatic centralized oiling system

Presstek 75DI-AC Specifications

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

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

Dimensions³



- 1 Limitations may apply depending on paper types.
- 2 Actual numbers will be affected by ink and paper conditions.
- 3 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.

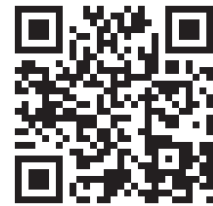
Every aspect of our service and support program is focused on maximizing the uptime and performance of your DI digital offset press.

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.

View a video demonstration
of the Presstek 75DI

www.presstek.com/75DIdemo



For more information about
Presstek products:

Presstek, Inc.

55 Executive Drive
Hudson, NH 03051 USA
Tel: 603-595-7000
www.presstek.com