Presstek 34DI®

Two-page Format Digital Offset Printing

- Highly automated four-color digital offset press
- On-press chemistry-free plate imaging
- High resolution printing
- Streamline workflow
- Affordable short-run and fast turnaround printing
- Compact footprint
- Environmental benefits

PRESSTEK
A SMARTER WAY TO PRINT

Highest Quality Offset Printing— Fast, Efficient, and Profitable

The Presstek 34DI press combines the highest quality offset printing with the ease-of-use, automation and efficiency of digital printing. Whether you aim to expand your business or produce existing color jobs more profitably, the Presstek 34DI is a smarter way to print.

The entire printing operation is automated—from plate advancing to imaging, printing and cleaning—in one compact, easy-to-use system. High quality results are easy to achieve, and you can print higher volume and more jobs every shift.

Choose the model and options that meet your price and performance requirements.

PRESSTEK 34DI

Presstek 34DI Press Design

- The Presstek 34DI is designed to deliver precise registration from the first sheet to the last. The design features a central impression cylinder and Presstek's Zero Transfer Printing (ZTP) process. All four colors are laid down without sheet transfer between grippers.
- The two-page portrait format has a small footprint, while being well suited for the majority of commercial print jobs.
- Waterless printing eliminates the need to control ink/water balance. It reproduces a larger range of color and sharper, better defined images than other processes, with minimal dot gain during printing.

On-press Imaging with Presstek ProFire Excel

- All four plates are simultaneously imaged on press in precise register.
- Thermal, chemistry-free imaging eliminates the variables of processing and exposure.
- 16-micron lasers produce sharp, well defined dots and easily support up to 300 lpi and FM screening.

Auto Print Mode

- The Presstek 34DI's Auto Print feature advances and images plates and begins printing at the push of a button. It automatically cleans blankets at the end of the run and prepares the press for the next job.
- Smart Inking automatically pre-sets ink keys, supplying the right amount of ink to the rollers to match the image. At the end of printing, the ink rollers automatically restore to an even state.
- With automation and user friendliness, the Presstek 34DI fits any printing business. Even operators with little offset experience can achieve high quality results.

Advanced Quality Control and Color Matching

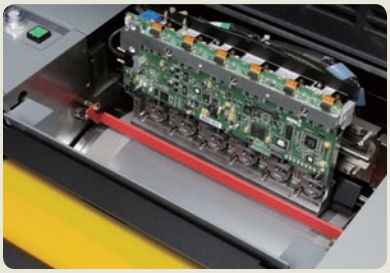
The optional Printing Density Control System (PDS-E) enables operators to easily match printed output and keep color consistent from run to run. The PDS-ProE spectrophotometer extends the benefits with a color profile setter, quickly and accurately producing ICC profiles by taking colorimetric measurements from printed sheets and proofs.

Key Features and Benefits of the Presstek 34DI

- **All-digital workflow efficiency**
- **Highest quality four-color offset printing**
- **300 lpi and stochastic (FM) screening**
- **Print on a wide range of stocks from heavy card stock to onion skin**
- **Automated set-up and printing with makeready as fast as 10 minutes, including imaging**
- **Waterless printing for superior color range and image definition**
- **Lowest cost per page for runs of 500 to 20,000**
- **Eliminates the equipment, labor, materials and costs of off-press platemaking**
- **Small footprint and streamlined, chemistry-free workflow fits any production workplace**
- **Environmentally friendly**

The Presstek 34DI is the Right Solution for:

- Printers that need to profitably bridge the gap between digital toner and conventional offset printing solutions
- Digital printers that need the capability to print on a wider range of stocks and compete on longer runs
- Printers who cannot easily schedule or profitably print fast turnaround, short-run jobs with their large four-color presses
- Printers who need to gain operational efficiencies and increase productivity by automating their offset printing
- Print shops that need to upgrade their offset equipment to compete in the four-color market
- In-plant printers who need to retain or bring four-color printing in-house
- Printers with limited operating space
- Any operation that wants a more environmentally friendly and cleaner printing method



High Resolution Printing

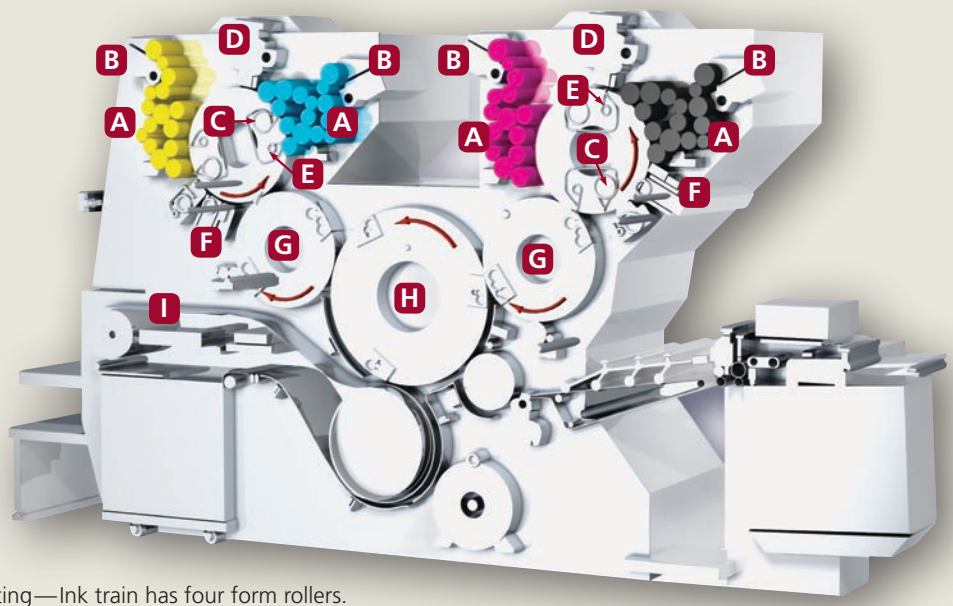
6 multibeam laser diodes on each of two ProFire modules produce consistent and high resolution imaging on Presstek ProFire Digital Media. Waterless offset printing yields a broader color gamut than conventional printing, with higher density, less dot gain, and sharper details.

Easy-to-achieve, High Quality Output

Sheets move through the printing process on the central impression cylinder without gripper changes, resulting in precise registration from first sheet to last. Go from file to sellable color in as few as 20 sheets.

Fast Turnaround

With makeready as fast as 10 minutes, automated print quality controls, and printing speed up to 7,000 full size sheets per hour (233 letter size pages per minute), the Presstek 34DI will increase the volume of output and the number of jobs you complete every shift.



A) Waterless offset printing—Ink train has four form rollers. Three chilled rollers significantly reduce toning.

B) Eleven ink keys per unit are preset based on color profiles and specific job color requirements. Auto start-up pre-inks plates.

C) Spooled ProFire Digital Media is automatically dispensed; press declutches to spin plate cylinders at 300 rpm during imaging.

D) Presstek ProFire Excel imaging unit simultaneously images all four plates at 2540 dpi in 4.5 minutes (34DI-X).

E) ProFire Digital Media spools contain enough material for 28 full size jobs; used plates are automatically transferred to take-up spools.

F) After imaging, plates are automatically cleaned, a vacuum removes any remaining debris, and plates are ready for inking.

G) DI press design features double-plate and double-blanket cylinders.

H) Central impression cylinder holds three sheets. A sheet picks up four colors in two revolutions without gripper changes, eliminating the potential for misregistration.

I) Infrared dryer (optional) expedites curing of inks. The autoclean cycle prepares ink rollers, blankets, and plate cylinders for the next form/job.

Presstek 34DI Specifications

Printing Speed	
Maximum Printing Speed*	7,000 full size sheets per hour; 233 letter size pages per minute
Printing Stock	
Thickness	0.0024"–0.02" (0.06–0.5 mm)
Sheet Size	Max. 13.39" × 18.11" (340 mm × 460 mm); Min. 3.54" × 3.94" (90 mm × 100 mm)
Maximum Print Format	12.99" × 17.72" (330 mm × 450 mm) with 0.354" (9 mm) gripper margin
Imaging System	
ProFire Excel	2 modules
Maximum Image	Width 17.72" (450 mm)
Image Resolution	2540 dots/in. (100 dots/mm)
Spot Size	16 microns
Inking Unit	
Inking Process	Waterless
Zones/Rollers	11 zones per unit; 15 rollers per unit
Form Rollers	4 per unit
Standard Features	Automatic pre-setting, wash-up device and temperature control
Blanket Cylinder	
Blanket Specs	Width 13.75" (350 mm); Thickness 0.077" (1.95 mm)
Automatic Wash-up Device	Standard
Feeder	
Universal Feeder	Standard
Feeder Board	Mechanical & electrical
Double Sheet Detector	Mechanical & electrical
Register	Push side guide, front lay
Infeed	Underswing gripper & feed drum
Pile Capacity	15.75" (400 mm)
Pre-pile Device	Standard
Delivery	
Pile Height Adjustment	Motorized
Pile Capacity	15.75" (400 mm)
Standard Features	Sheet decurler, powder device
Plate Media	
Plate Material	ProFire Digital Media
Plates Per Roll	28 full format
Screen Ruling	Up to 300 lpi AM and FM (stochastic)
Run Length	20,000 impressions*
Electro-Mechanical	
Input Power	200 VAC 10% in EU
Lubrication	Automatic centralized oiling system
Recommended Operating Environment	Temp. 68–77° F (20–25° C), relative humidity 50–60%
Physical Dimensions (L×W×H)	10'7" × 8'8" × 5'6" (3230 mm × 2635 mm × 1665 mm) including catwalk and console
Weight	9,950 lbs. (4513 kg) including console

*Actual numbers will be affected by ink and paper conditions

Choose from Two Configurations:	Presstek 34DI-X	Presstek 34DI-E
Imaging Time at 2540 dpi (all four plates)	4 minutes 30 seconds	9 minutes 30 seconds
Automated Makeready (time for both presses includes plate imaging and cleaning, ink presetting, and printing to sellable color)	10 minutes	14 minutes 30 seconds
Standard/Optional Features		
Plate Saver Version 2	Standard	Optional
Feeder Pre-Pile Device	Standard	Optional
Motorized Pile Height Adjustment	Standard	Optional
High Grade Powder Device	Standard	Optional
Infrared Dryer	Optional	Optional
Density Control PDS-E Colorimetric Control	Optional	Optional
PDS-ProE Spectrophotometer	Optional	Optional
GTI Viewing Station	Optional	Optional

Product specifications are subject to change.

Service and Support

Presstek provides an integrated support network of field engineers, customer care representatives, technical support engineers, and on-board monitoring of digital systems—all supported by advanced information technology systems. Expert installation, training and maintenance supports your investment so it will pay dividends quickly and reliably for years to come.

Environmental Advantages

Presstek DI is an environmentally superior process over other printing methods. Environmentally friendly features include chemistry-free imaging, reduced paper waste, and waterless printing—which eliminates waste water and significantly reduces VOC emissions.

For more information about Presstek Products:

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Printed on a Presstek DI digital offset press on Chorus Art 100 lb. Silk Cover. Chorus Art stock contains 50 percent recycled fiber, including 25 percent post-consumer waste, and is Forest Stewardship Council certified.

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