Presstek 34DI and 34DI ECO-UV

Automated 2-Page digital offset press available with UV curing technology

ECO-UV instantly dries sheets!
Accelerates Production
Easily print on plastics, vinyl, paper and board

PRESSTEK 34DI
ECO UV

PRESSTEK
A SMARTER WAY TO PRINT

DIGITAL Efficiency, Offset Quality

Key Features and Benefits of the Presstek 34DI and 34DI ECO-UV

■ All-in-one four-colour digital offset press with a two-page portrait format

■ All digital workflow efficiency and fully automated on-press imaging

■ Optional LED UV curing technology accelerates production

■ Inline ECO-UV option instantly dries sheets in delivery, producing richer, more vibrant colours on porous stocks

■ Print on a wide range of offset stocks

■ With ECO-UV, easily print on plastics, vinyl, paper and board

■ Low cost per page for print runs of 500 to 20,000

■ Fast job changeovers increases press utilization

■ Low heat LED UV system saves on energy costs compared to standard UV

■ Waterless DI press design offers superior colour range and definition

■ High resolution printing up to 300 lpi @ 2540 dpi

■ Optimal solution for short and medium run lengths

■ Certified Pre-Owned models maximize investment value

■ Set and forget plate media - insert digital media after 28 print jobs

■ Environmentally friendly ECO-UV produces no ozone

300 line screen

FM screening

Highly Versatile Print Engine

Designed to increase your overall production and product portfolio.

Presstek 34DI
Highly Automated, High Quality

A Presstek 34DI press combines high quality offset printing with the automation and efficiency of digital printing. The entire printing operation is automated—from plate advancing to imaging, printing and cleaning—in one compact, easy-to-use system. You don't need a separate plate production system. Instead, prepared digital files are electronically sent directly to the press where plates (enough for 28 jobs) are automatically advanced and simultaneously imaged in perfect register. High quality offset printing is easy to achieve, and you can print higher volume and more jobs every shift.

The 34DI's portrait sheetfed format delivers true four-color process printing with the quality, features and choices of stock you and your customers require.

Presstek 34DI ECO-UV
Instant Drying

A Presstek 34DI ECO-UV has all of the 34DI features in addition to an integrated UV curing system. Branded *ECO-UV*, the curing system incorporates low energy consumption LED UV technology. Substrates are instantly dried before exiting delivery and there's no longer a need for messy spray powder.

With speed being an an important component to your success, when you implement ECO-UV, you're accelerating your overall job production because sheets can move directly to finishing without delay. ECO-UV dries the ink instantly on the surface of the sheet rather than absorbing and spreading into the sheet. This results in higher a quality appearance, and sharper, brighter printing all with the added benefit of better rub resistance.

Easily print on plastics, vinyl, paper and board

Expand Your Range of Substrates

A Presstek 34DI ECO-UV can position you for capturing new business opportunities. It is ideal for short-run traditional printing, package printing, and enables you to easily print on plastics and vinyl. You can grow your print product portfolio and your business with the addition of non-traditional printing such as plastic membership and loyalty cards, door hangers, table tents, boxes, and more.

For customers who already own a 34DI the ECO-UV upgrade can be installed directly on-site.

Unique Automated Printing System

Unique Digital Offset Printing System

- 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 colour and sharper, better defined images than other processes, with minimal dot gain during printing.

On-press Digital Imaging

- All four plates are simultaneously imaged on press in 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 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.

- Ink keys are automatically pre-set, 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, even operators with little offset experience can achieve high quality results.

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.

ProFire Excel imaging and ProFire Digital Media provide an optimized system for fast, accurate, high resolution imaging.

On the central impression cylinder, sheets are inked with all four colors without gripper changes. Precise registration, from the first sheet to the last, is an inherent feature of the Presstek 34DI and Presstek 34DI ECO-UV press design.
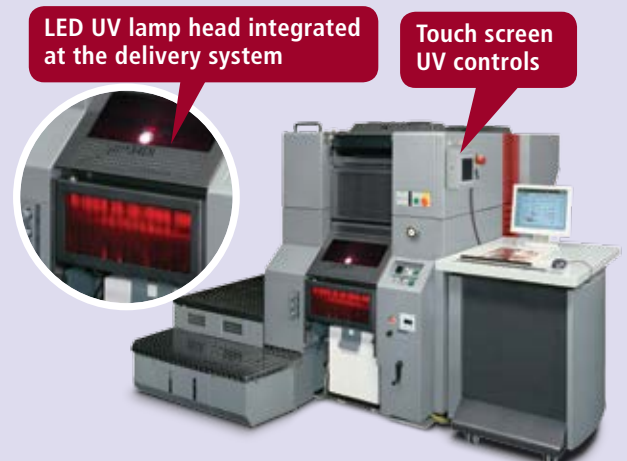

Print any offset stock from 0.06mm to 0.5mm thick, including foils and plastics.

DI ECO-UV FEATURES

ECO-UV is field upgradeable!

- LED UV lamp head positioned in the delivery system
- Very little heat produced, lower power consumption and operating cost than standard UV systems
- Long lasting LED system operates up to 20,000 hours
- Easily print on board, plastic, vinyl and paper
- Instant drying turns jobs around faster
- Vibrant colors, durable, scuff resistant printing
- Eliminates the need for spray powder
- Convenient touch screen controls

LED UV lamp head integrated at the delivery system

Touch screen UV controls

Precision Imaging
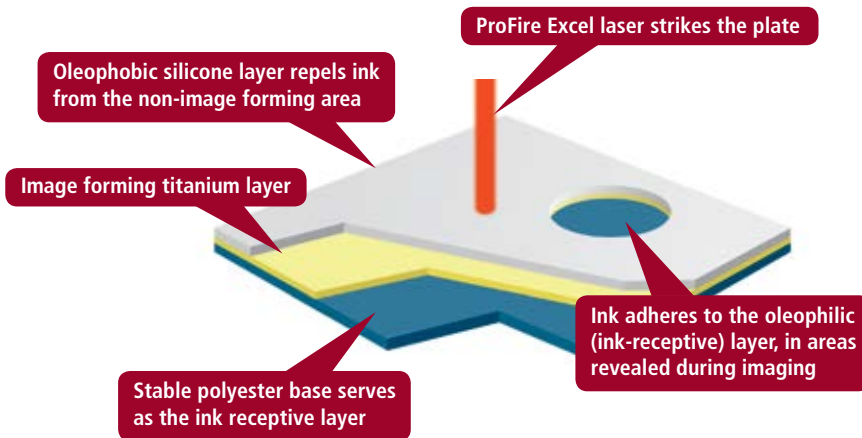
Presstek DI Press Design

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 an easy-to-use, highly automated system that produces outstanding results.

Presstek 34DI and 34DI ECO-UV features Zero Transfer Printing (ZTP), in which all four colours are printed on a sheet without transfer between cylinders. Each sheet is held firmly in place on a central impression cylinder for unsurpassed accuracy. The results are:

- ■ First sheet register
- ■ Precise registration, sheet to sheet and job to job
- ■ Sellable color within 20 sheets
- ■ Excellent ink coverage and reduced waste

ProFire Excel Imaging Components

Presstek ProFire Excel imaging combines infrared laser diodes, laser drivers, data electronics, and motion control in one compact module. The multiple laser diodes each contain four uniquely addressable 16-micron beams. ProFire Excel imaging produces high resolution images of exceptional quality. Fine details, color fidelity, minimum screen values, and large solids are all produced with results that meet the most demanding offset printing needs.

ProFire Excel laser strikes the plate

Oleophobic silicone layer repels ink from the non-image forming area

Image forming titanium layer

Ink adheres to the oleophilic (ink-receptive) layer, in areas revealed during imaging

**Stable polyester base serves as the ink receptive layer**

ProFire Digital Media

Presstek ProFire digital plate media is supplied on spools that hold enough media for 28 full-size jobs on the Presstek 34DI and Presstek 34DI ECO-UV. Manufactured in the United States, the plate media is composed of an ink-accepting polyester base layer, an image forming middle layer of titanium, and an ink-repelling top layer of silicone. Because the imaging process is a thermal reaction, there are no variables of exposure and chemistry. The result is sharper and better defined details and halftone dots.
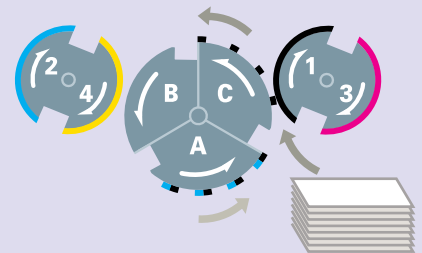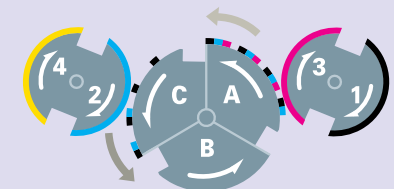
ZTP: Zero Transfer Printing
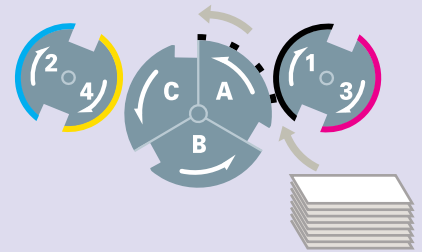
Sheets are fed one per revolution of the plate and blanket cylinders. Blanket 1 prints the first color.
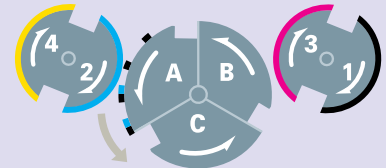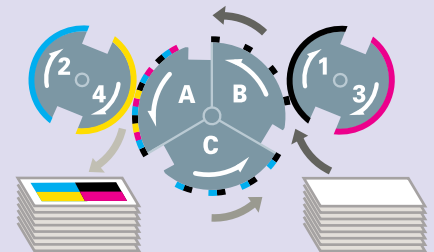
Blanket 2 prints the second color.

The next sheet enters the rotation, while the first sheet begins its second rotation.

Blanket 3 prints the third color on the first sheet during its second rotation of the impression cylinder, while blanket 2 prints the second color on the following sheet.

Blanket 4 prints the final color on the first sheet, which is then sent to the dryer and pile. The following sheet begins its second rotation, while another sheet enters.
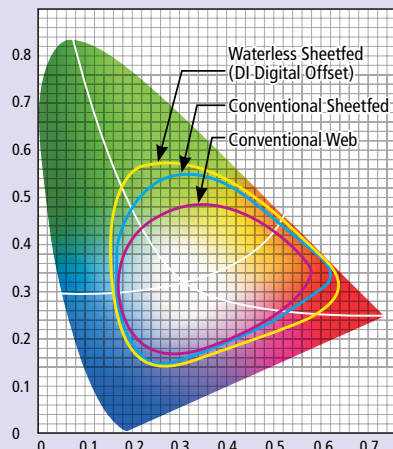
High Quality Waterless Printing
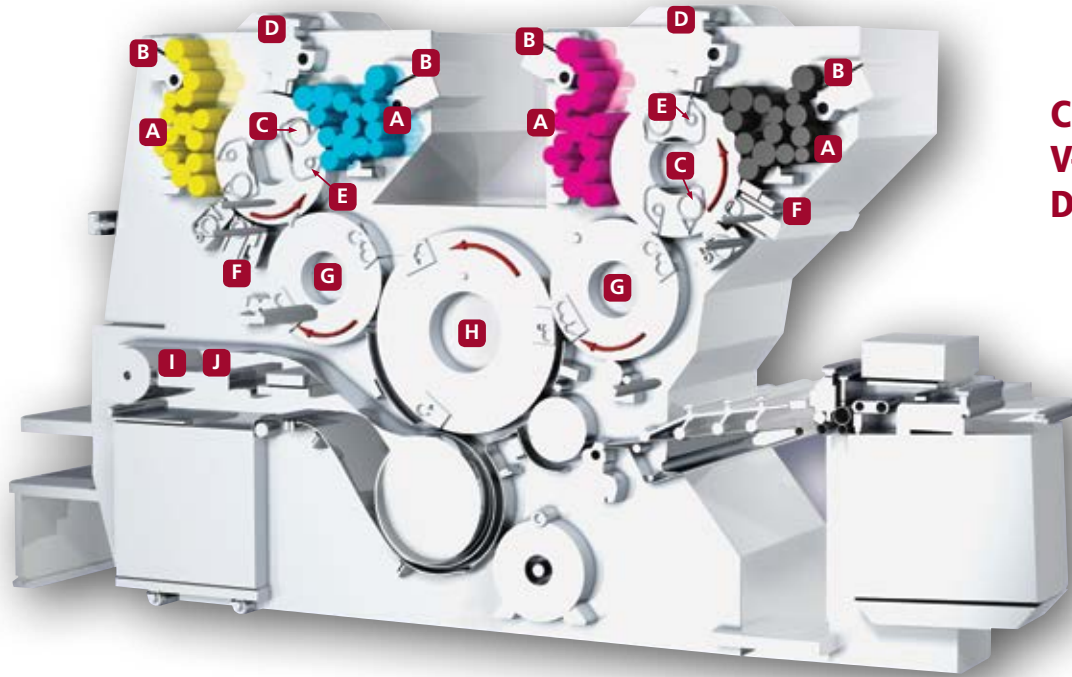
Compact, 4-Color V-Shaped Press Design

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

B) Eleven ink keys per unit are preset. 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 model).

E) ProFire Digital Media spools contain 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) Press design features double-plate and double-blanket cylinders.

H) Impression cylinder holds two sheets, printing four colours in two revolutions without gripper changes, eliminating misregistration.

I) 34DI model without UV: Infrared dryer expedites curing of inks. Autoclean cycle prepares ink rollers, blankets, and plate cylinders for next form/job.

J) 34DI ECO-UV model: UV curing system dries ink instantly.

Higher Quality, More Accurate Color

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

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.

Waterless Sheetfed (DI Digital Offset)

Conventional Sheetfed

Conventional Web

SOURCE: WATERLESS PRINTING ASSOCIATION

DI waterless printing provides a 20% larger color gamut than conventional printing.

Ink — Silicone rubber layer provides supportive walls for ink

Waterless Plate

Ink — Unsupported ink is in direct contact with water and chemical dampening solution

Conventional Wet Offset Plate
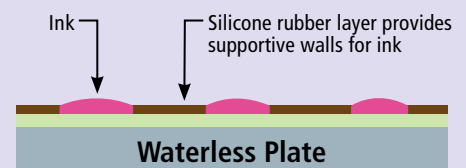
A Smart Business Choice

Certified Pre-Owned Presstek DI Presses - Maximum Value, Performance Ready

Certified Pre-Owned Advantages

Presstek's Certified Pre-Owned DI® program makes acquisition affordable and ensures that your 34DI press has been inspected and serviced by DI experts for maximum performance, ROI, and peace of mind. A refurbished DI press is a smart choice for printers looking to expand service offerings and meet demands for short runs, fast turnaround, and offset-quality color printing. Presstek's Certified Pre-Owned DI program offers an easy and affordable solution for printers wishing to:

- Add or upgrade offset printing capabilities without additional investments in platemaking or physical plant
- Meet market demand for fast turnaround color printing
- Supplement larger presses with a short run solution
- Replace an older generation DI press with the higher levels of printing performance and automation of newer models

Certified by the DI Experts

Only qualified DI presses enter our program after inspection and performance evaluation. Our technicians are the experts in DI presses, so you can be assured that a pre-owned DI press purchased from Presstek has been well maintained by its previous operators, will operate at its peak performance levels, and meets your expectations when we install it at your site. In addition, Presstek will train your operators to achieve quick results for your business and support you throughout your ownership.

Turnkey Systems

A Presstek Certified Pre-Owned DI purchase price is all-inclusive:
- Latest RIP software version and new RIP computer
- Order your CPO DI with or without ECO-UV[1]
- Standard installation and delivery
- Operator training by expert DI field technicians
- Start-up kit including a box of plates and start-up supplies
- Discount for service contracts purchased at point of sale

Presstek offers two levels of certification to match your business needs.

Maximum Value Certification

Because we are committed to DI, the highest possible performance of your pre-owned DI press is in the interest of our company, as well as yours. **Maximum Value** certified presses operate at all their original performance levels and are in like-new condition. A rigorous and thorough inspection is performed, followed by heavy-duty cleaning that includes dry-icing all the interior components and surfaces. Testing and refurbishment involves all electrical and mechanical systems, hundreds of parts, laser system recalibration, lubrication, and even exterior finishes. Refurbishment concludes with extensive testing to verify peak performance and reliability.[2]

We are so confident in our **Maximum Value Certification** that it includes a full one-year warranty, the same as new presses.

Performance Ready Certification

A **Performance Ready** certified press is in excellent working condition upon installation and delivers all of its original performance. It receives a cleaning by air and by hand, inside and out. All maintenance steps scheduled for its impression count are performed, and parts are replaced wherever necessary. Production level testing is conducted to assure performance at original factory specifications.[2] **Performance Ready Certification** presses include a 90-day warranty.

1 *All Certified Pre-Owned DI presses can be ordered without ECO-UV.*
2 *All final test sheets are preserved and are available for customer inspection.*

Touch screen UV controls are housed in a magnetic box for repositioning on side or front of press

The UV control cabinet fits inside the 34DI's compact footprint

Presstek 34DI Specifications

Printing Speed

Maximum Printing Speed*	7,000 full size sheets per hour; 233 letter-size pages per minute

Printing Stock

Thickness	0.06−0.5 mm (0.0024"−0.02")
Sheet Size	Max. 340 mm × 460 mm (13.39" × 18.11") ; Min. 90 mm × 100 mm (3.54" × 3.94")
Maximum Print Format	330 mm × 450 mm (12.99" × 17.72") portrait orientation with 9 mm (0.354") gripper margin

Imaging System

ProFire Excel	2 modules
Maximum Image	Width 450 mm (17.72")
Image Resolution	100 dots/mm (2540 dots/in.)
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 350 mm (13.75"); 1.95 mm (0.077") Thickness
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	400 mm (15.75")
Pre-pile Device	Standard

Delivery

Pile Height Adjustment	Motorized
Pile Capacity	400 mm (15.75")
Standard Features	Sheet decurler

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. 20−25° C (68−77° F), relative humidity 50−60%
Physical Dimensions (L×W×H)	3230 mm × 2635 mm × 1665 mm (10'7" × 8'8" × 5'6") including catwalk and console
Weight	4513 kg (9,950 lbs.) 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
Density Control PDS-E Colourimetric Control	Optional	Optional
PDS-ProE Spectrophotometer	Optional	Optional
GTI Viewing Station	Optional	Optional

Product specifications are subject to change.

Already have a 34DI? We can add ECO-UV to your press!

Presstek Certified Pre-Owned 34DI presses are available with or without integrated ECO-UV curing technology. High-grade powder systems and infrared dryers are supplied on presses without ECO-UV.

ECO-FRIENDLY PRINTING SOLUTIONS

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

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