SCREEN

PlateRite FX Series

Flexo/Letterpress CtP

Creating a Future in Print

The PlateRite FX series are high-quality, easy to use, reliable CtP recorders that offer optimal flexo/letterpress plate output for printing and prepress companies. They can image the black mask layer of resin plates directly, thereby eliminating the need for film and other intermediate processing. This results in more efficient operations, as well as more consistent output quality. What's more, the PlateRite FX series units' superior halftone dot reproduction ensures consistently high-quality printing even in the highlight and shadow areas.

The PlateRite FX1524/FX1200 is designed for a wide range of uses, including the production of labels, flexible packaging, cartons, and corrugated packaging.

The PlateRite FX870II/FX870IIE is the ideal flexo/letterpress CtP recorder for printing companies that already possess letterpress printing presses but want higher quality output, as well as for companies looking to improve the quality of the labels output from their intermittent letterpress printing presses, offset label printing presses, or flexo combination printing presses. The PlateRite FX870II-EL is also now available as an entry-level model for companies searching for a flexo/letterpress CtP recorder with low initial costs.

* In their standard configuration, all PlateRite FX series models support a maximum output resolution of 4,800 dpi.
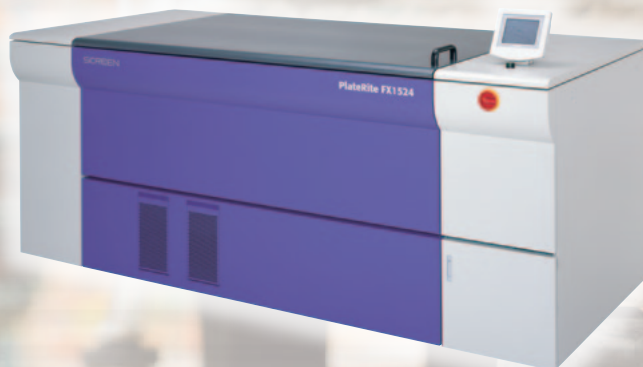
PlateRite FX870II/FX870IIE

High Quality
Easy Operation
Superior Workflow
High-end Screening

PlateRite FX870II-EL NEW

PlateRite FX1200
PlateRite FX1524

Superior Workflow

Advanced, fully digital processing for higher efficiency
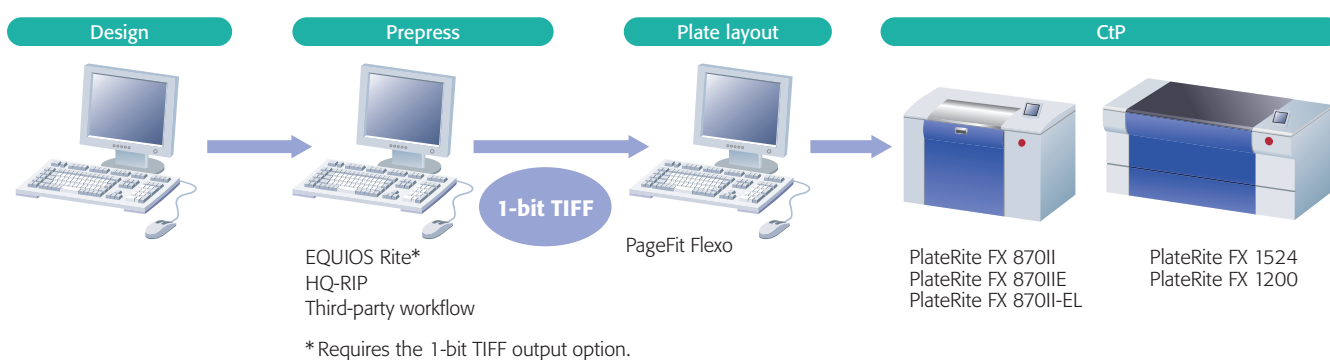
EQUIOS Rite

EQUIOS Rite is an entry-level workflow RIP that features Adobe System's latest RIP engine. It includes all the key functions required for top-quality flexo/letterpress CtP output.
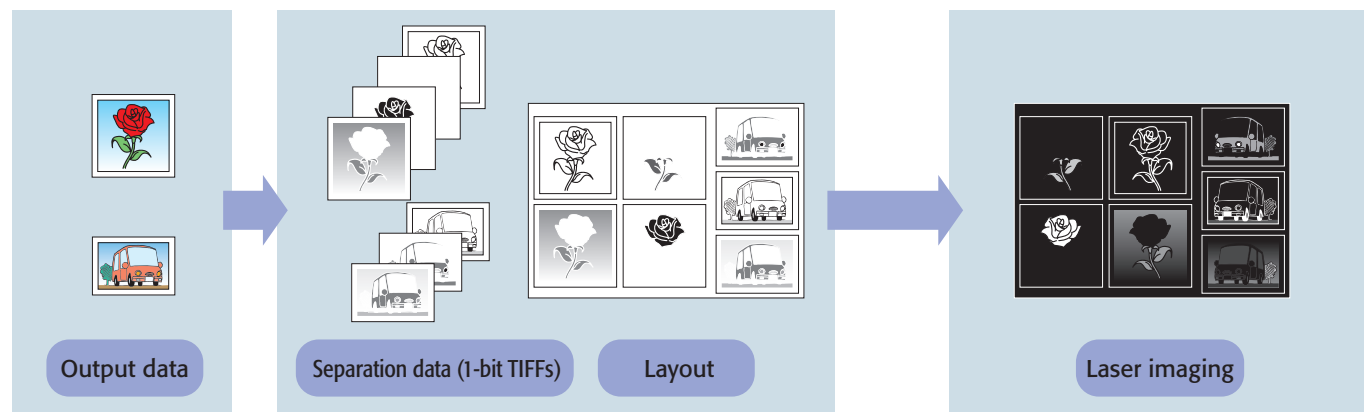
PageFit Flexo

PageFit Flexo software provides the ability to receive and automatically impose RIP'ed 1-bit TIFF data to maximize plate usage.

Workflow

Design	Prepress	Plate layout	CtP

1-bit TIFF

EQUIOS Rite*
HQ-RIP
Third-party workflow

PageFit Flexo

PlateRite FX 870II
PlateRite FX 870IIE
PlateRite FX 870II-EL

PlateRite FX 1524
PlateRite FX 1200

*Requires the 1-bit TIFF output option.

Output data is split into separations, and multiple jobs can be output on a single plate.

Output data → Separation data (1-bit TIFFs)　Layout → Laser imaging

High-end Screening

AM screening
For flexo and letterpress printing

AM screening, which is the form of screening used most commonly in the printing industry today, involves creating halftone dots separated by a fixed distance and arranged in a regular pattern. Varying the size of the halftone dots used creates areas of higher and lower color density. AM screening results in a highly consistent color appearance, and is easy to print.

Flexo Dot
Flexo printing

Flexo Dot, which is designed for flexo printing, increases the minimum dot size and applies a reinforcing pattern to the base halftone dot shape. This results in the creation of more consistent relief patterns in the highlight areas. The minimum halftone dot shape can be selected from a lineup of shapes for each screen ruling, depending on the plate thickness, platemaking and printing environments, to ensure optimal highlight printing.

Letterpress printing

With traditional AM halftone dots, the reproduction of extreme highlights is inconsistent. In traditional halftone dots, the minimum halftone dot size is one dot, but with Flexo Dot, highlight areas feature a somewhat larger minimum halftone dot size consisting of several dots, which makes it possible to create consistent dots in the extreme highlight areas. The minimum halftone dot shape can be selected from a lineup of shapes for each screen ruling, depending on the platemaking and printing environments, to ensure optimal highlight printing.

Spekta 2
Offset and letterpress printing

Spekta 2 is a next-generation form of hybrid AM/FM screening that is designed to make printing easier. Not only does it solve the problems of moiré and broken lines that sometimes occur when AM screening is used, it also increases the vibrancy of the colors being printed. Spekta 2 makes added-value label printing a reality.

Multi-screening (option)

Multi-screening makes it possible to use the optimal type of screening for each object being printed, even if that means mixing different types of screening on a single page. This is particularly useful when printing pages that contain such disparate elements as images, text, keylines, patterned backgrounds, tints, decorative lines, outlined text, and gradations. Multi-screening prevents moiré and broken lines, and contributes to a significant increase in finished quality.

AM screening	

Flexo Dot	

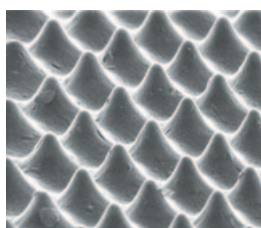| Spekta 2	
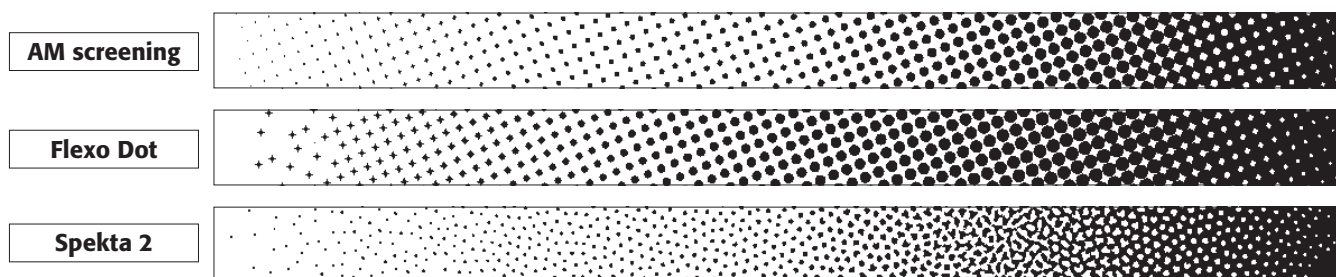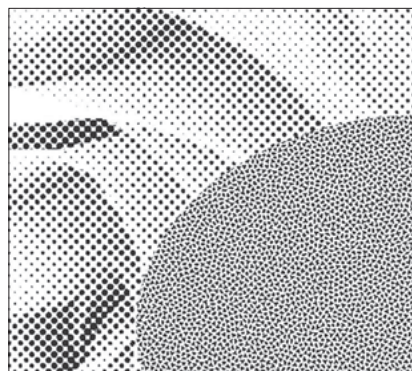
Flexo Dot 4800 dpi /210 lpi
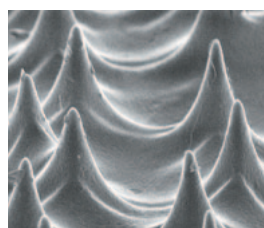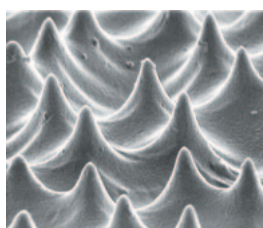
0.5%   1%   2%

The PlateRite FX series can handle a wide variety of plates, including flexo plates, letterpress plates, and more.

Thermal offset plate option
The PlateRite FX870II/E/-EL offers output of thermal offset plates as an option. Thermal offset plates are suitable for high-quality sticker and label printing.

High Quality

Consistent plate quality

The PlateRite FX series eliminate many of the problems associated with platemaking using film, including image unevenness, problems caused by dust, and UV scattering. They also eliminate the many problems inherent in going from film to plate, such as misalignment of the film during platemaking and registration errors arising from stretching of the film. This helps ensure consistent plate quality and reduces the waste inherent in repeating plate output due to errors.

Proven technology

The light source used by the PlateRite FX series, a multi-channel laser diode, is the same type of laser as those used in SCREEN's traditional offset CtP recorders. This proven, reliable, high-powered laser images the black mask layer of resin plates. In addition to enabling sharp imaging, the PlateRite FX series' light source is both long-lived and inexpensive to operate.

Superior reproduction of fine lines and white knockout text

With CtP plates, scattering of the UV light during plate imaging is eliminated, so sharp relief patterns can be created. This ensures superior reproduction of fine lines and white knockout text.

High-quality plate output

Unlike traditional printing plates, CtP plates can include both highlight relief patterns and shadow cutouts, which ensures that the minimum and maximum halftone dot sizes are reproduced accurately. This dramatically increases quality from the highlights to the shadows, across a wide range of image densities.

Enlarged view of a 1% relief pattern at 175 lpi
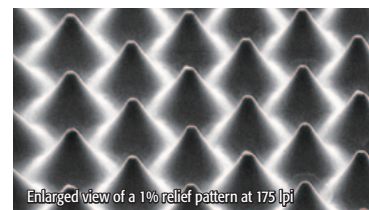
4,800 dpi resolution for high-quality output

The PlateRite FX series offer a maximum output resolution of 4,800 dpi. This high resolution significantly reduces the incidence of problems common in low-resolution output, such as jaggies in diagonal lines and curves, and dramatically improves the repeatability of fine line reproduction. 4,800 dpi output also delivers smooth gradations, and almost completely eliminates unevenness, even in the highlight areas.

Enlargement of the 1-point characters

4,800 dpi   2,400 dpi

Easy Operation

PlateRite FX870II / FX870IIE / FX870II-EL

Loading plates onto the drum is simple. The operator simply uses clamps to fix the leading edge of the resin plate in place and then attaches the trailing edge with tape. Leading edge clamps, paired with the design of the suction gutters on the face of the drum, make it possible for the PlateRite FX870II/E/-EL to handle a variety of plates ranging from a minimum of 100 x 100 mm (4.0" x 4.0") to a maximum of 870 × 762 mm (34.2" × 30.0"). This makes the PlateRite FX870II/E/-EL perfect for producing the A3 and A4 size plates that are standard in the label industry, while also providing the flexibility to produce larger, A1 size plates.
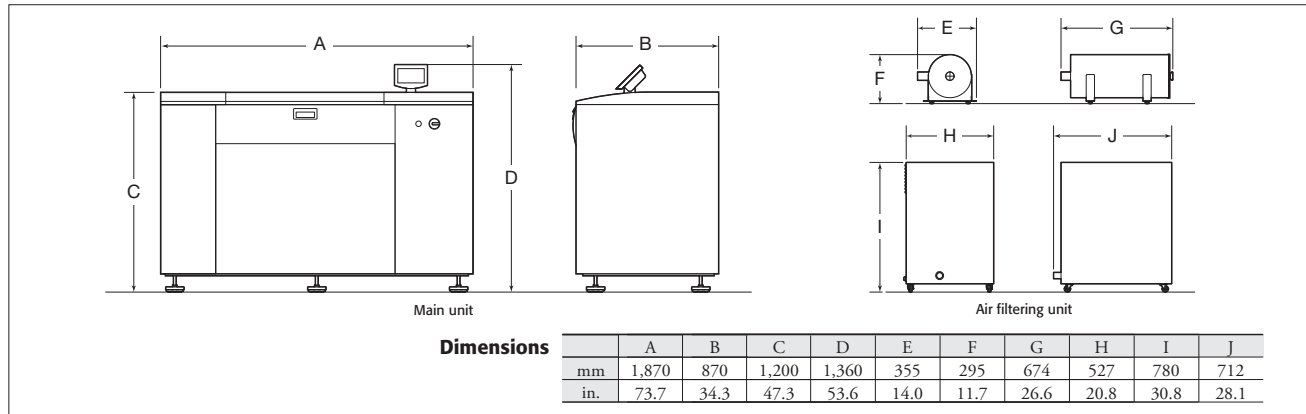

PlateRite FX1524 / FX1200

Leading and trailing edge clamps save the operator time and trouble when H1,067 mm (42.0") plates are used. The PlateRite FX1524/FX1200 features a button operated loading mechanism, which loads plates reliably. Manual plate loading is also available, and the operator can choose the optimal plate loading procedure depending on the size of plate being used.
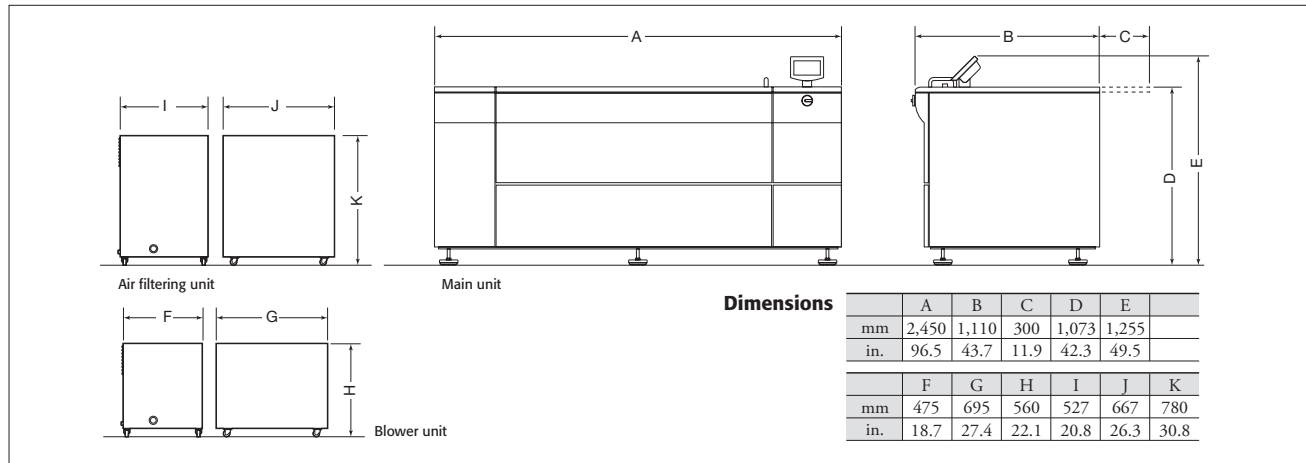
Note: The minimum supported plate size is 200 x 200 mm (7.9" x 7.9").

PlateRite FX870II and FX870IIE space requirements

Main unit

Air filtering unit

Dimensions

	A	B	C	D	E	F	G	H	I	J
mm	1,870	870	1,200	1,360	355	295	674	527	780	712
in.	73.7	34.3	47.3	53.6	14.0	11.7	26.6	20.8	30.8	28.1

PlateRite FX1524 and FX1200 space requirements

Air filtering unit

Main unit

Blower unit

Dimensions

	A	B	C	D	E
mm	2,450	1,110	300	1,073	1,255
in.	96.5	43.7	11.9	42.3	49.5

	F	G	H	I	J	K
mm	475	695	560	527	667	780
in.	18.7	27.4	22.1	20.8	26.3	30.8

PlateRite FX series specifications

Product name	PlateRite FX1524	PlateRite FX1200	PlateRite FX870II	PlateRite FX870IIE	PlateRite FX870II-EL
Media	Flexo digital plates, letterpress digital plates, thermal ablation film		Flexo digital plates, letterpress digital plates, thermal ablation film, thermal offset plate (option)		
Media sizes	Maximum 1,524 x 1,067 mm (60.0" x 42.0"); Minimum 200 x 200 mm (7.9" x 7.9")	Maximum 1,200 x 1,067 mm (47.2" x 42.0"); Minimum 200 x 200 mm (7.9" x 7.9")	Maximum 870 x 762 mm (34.2" x 30.0"); Minimum 100 x 100 mm (4.0" x 4.0")		
Media thickness	0.175 to 5.5 mm (6.9 to 216.5 mil) (Restrictions apply depending on the media type.)		0.175 to 2.84 mm (6.9 to 111.8 mil) (Restrictions apply depending on the media type.)		
Resolution	2,400 (2,540) dpi, 4,800 dpi [*1]				
Prouctivity	4 to 6 m²/h (6,200 to 9,300 insq/h) [*2]		2 to 3m²/h(3,100 to 4,650 insq/h) [*2]		1 to 1.5m²/h(1,550 to 2,325 insq/h) [*2]
Options	Signal tower unit		Thermal offset plate option[*3], signal tower unit		
Weight	Main unit: 1,120 kg (2,464 lb), air filtering unit 109 kg (239.8 lb) Blower unit: 85 kg (187 lb)		Main unit: 670 kg (1,474 lb) Air filtering unit: 109 kg (239.8 lb)	Main unit: 680 kg (1,496 lb) Air filtering unit: 109 kg (240 lb)	Main unit: 665 kg (1,463 lb) Air filtering unit: 109 kg (240 lb)
Power requirements	Main unit: Single phase 200 to 240 V, 16 A, 3.2 kW Air filtering unit: Single phase 200 to 240 V, 14 A, 1.8 kW Blower unit: Single phase 200 to 240 V, 10 A, 1.2 kW		Main unit: Single phase 200 to 240 V, 16 A, 3.2 kW Air filtering unit: Single phase 200 to 240 V, 14 A, 2.2 kW		
Environment	Temperature: 21 to 25 °C (69.8 to 77 °F) [recommended], Relative humidity: 30 to 71% (no condensation)				

*1 Note that 4,800 dpi screening is not possible for thermal offset plates.
*2 Productivity may vary depending on the media sensibility.
*3 Supported thermal offset plate sizes range from a maximum of 870 x 762 mm (34.2" x 30.0") to a minimum of 200 x 100 mm (7.9" x 4.0").

• This brochure was made using SPEKTA 2 screening.

We reserve the right to alter product design and specifications without prior notice.

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