Roll-to-roll Printers

Value-added Options

# Power tools to **boost** your capabilities and profits

Power up
your **versatility**

EFI™ superwide- and wide-format roll-to-roll LED printers feature a rich collection of value-added options and software that transform them into all-in-one, multi-purpose platforms – expanding your capabilities, application offerings and profit opportunities.

Inline finishing

EFI's unique roll-to-roll workflow automates the complete printing and finishing process on-the-fly and in a single system, and includes printing, vertical slitting and trimming, printing customer information on the back of the media, horizontal cutting, and automatic inspection of printed output.

Print → Inspect → Label → Y-slit & X-cut → Roll & Tape
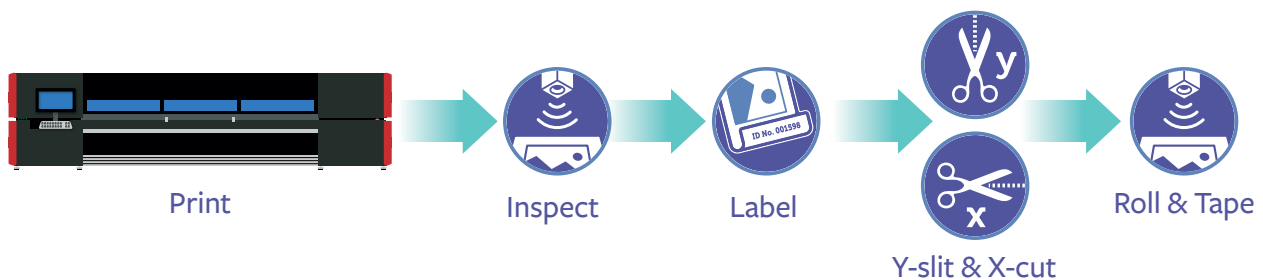
Inline finishing workflow benefits:

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- Saves valuable time and eliminates bottlenecks at finishing stations
- Replaces additional expensive finishing equipment and saves valuable floor space
- Ensures perfect print quality with minimal operator intervention
- Prevents finishing, shipping and installation errors
- Increases yield

Inline Finishing Options

Y-slitter

For vertical trimming of margins or slitting of a single media into multiple jobs, minimizing media waste and increasing the printing area.

- Simultaneous cutting of media on the Y-axis and printing
- Modifiable configuration:
  - Single-bladed for trimming margins
  - Double-bladed for slitting of single media into two jobs (blades are fixed 0.3 in/8 mm apart)
- Simple and easy installation with no tools required
- Easy manual adjustment of position along printing table
- Retractable blades for maximum safety
- Includes waste collectors to roll up the trimmed remnants to increase your overall productivity and eliminate the mess

X-cutter

Unique roll-to-sheet horizontal cutter incorporated in the printer.

- Automatically cuts media on the X axis between jobs, on-the-fly
- Controlled via the front-end software
- Does not affect productivity
- Saves valuable time at finishing station
- Replaces expensive cutting equipment and saves space
- Prevents finishing errors and increases yield

Notes:
- Maximum cutting width in 5 m printers: 197 in (500 cm)
- Maximum cutting width in 3 m printers: 126 in (320 cm)

Automatic Inline Quality Inspection

Vision system installed on the print carriage that performs automatic inline print quality monitoring for single and multi-roll printing. Includes a camera and light source as well as dedicated electronics and software. Designed to identify print imperfections in real time during the print process, fix them when possible, and alert the user.
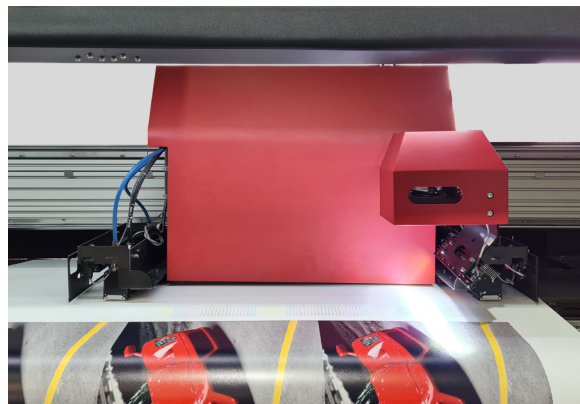
ID backprint

A device that prints file information on the back of the media, facilitating the identification of finished jobs for packing, shipping, and installation.

- Printed data includes:
  - File ID
  - Printing date and time
  - Print mode
  - Copy number and more
- Eliminates the need for manual labelling
- Helps prevent shipping errors
- Saves time during installation of printed job

Notes:

- Does not support barcodes or QR codes
- Applicable to jobs of 39 in (100 cm) in linear length and longer
- Supports white ink for dark backed media
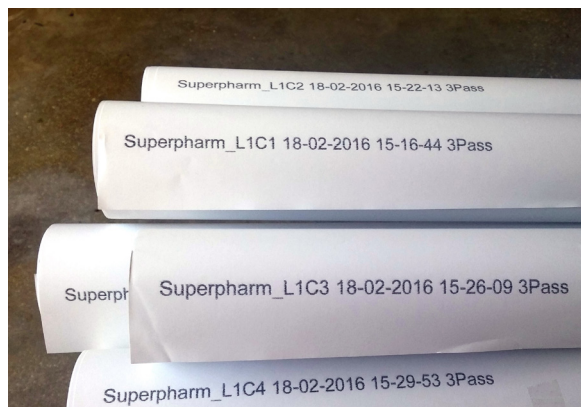
Roll & Tape

Automated device that takes printed cut sheets directly from the printer, rolls them into scrolls, and tapes their edge with labels that have job information printed on them.

- Synchronized with the inline finishing workflow
- Delivers labeled rolls immediately following printing
- Includes a removable container that collects multiple marked jobs ready for delivery to the customer

Specifications:

- Maximum media width: 5.25 ft (1.6 m)
- Minimum media width: 16 in (40 cm)
- Maximum total linear media length:
  - Single sheet: 13 ft (4 m)
  - Copies rolled together: 33 ft (10 m)
- Maximum roll diameter: 2.4 in (6 cm)
- Productivity: Supports all print modes (from 1 pass up)
- Media type support: A wide range of flexible display graphics media, such as vinyl, paper and PVC banner
- Multi-roll printing: Supports 5 ft (1.6 m) rolls; two units for 3-meter printer models, three units for 5-meter printer models

Double-sided printing

EFI roll-to-roll printers offer two automated solutions for double-sided printing:

- Automatic blockout printing
- Automatic backlit printing

All solutions combine proprietary software, dedicated electronics, and hardware to facilitate those challenging applications.

Automatic blockout printing

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An automatic system that enables printing on both sides of opaque blockout media, resulting in excellent registration between sides.

- Accuracy of ≤ 5 mm over 10 linear meters
- Includes an optical sensor system, dedicated electronics and software
- Simple, easy, and fully automatic system
- Eliminates the need for guesswork and manual manipulation
- Reduces required operator skill level
- Two available workflows, to be defined before printing:
  - **Head-to-head** printing for short jobs where media is rolled back, flipped over, and reinstalled with side B up
  - **Head-to-tail** printing for longer jobs where printed media is collected on a front core, flipped over, and reinstalled with side B up

Notes:

- Automatic blockout supports multi-roll printing on side A, and single-roll printing for side B
- Use of X-cutter and Y-slitters with automatic blockout is limited:
  - Slitters – possible according to built-in instructions
  - Cutter – can be used for side B

Automatic backlit printing

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Automatic, patented system for perfectly aligned double-sided backlit printing on backlit media.

- Accuracy of ≤ 0.08 in (2 mm) over 32 linear feet (10 linear meters)
- Camera-guided software automatically corrects registration on x, y, and tilt axes
- Includes two cameras, LED strip along printing table, and dedicated software
- Simple, easy, and fully automatic system
- Eliminates the need for guesswork and manual manipulation
- Reduces required operator skill level

Notes:

- Automatic backlit is not compatible with multi-roll printing
- Use of X-cutter and Y-slitters with automatic backlit is limited:
  - Slitter – not supported
  - Cutter – available on B side, according to built-in instructions
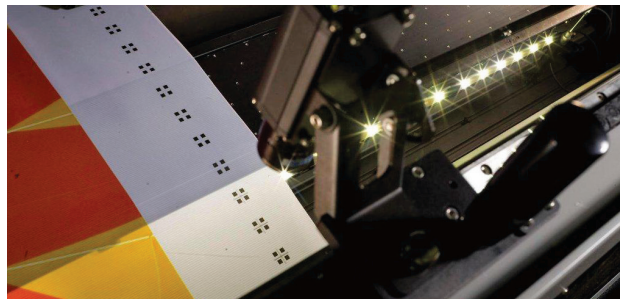
> "The white and multilayer option enables us to complete jobs with greater added value, such as double-sided printing on transparent materials. The low production costs have even given us access to a type of work that we had not done until now."

José Monteagudo, Managing Director, Mapubli, Spain

Color options

In addition to the standard CMYK colors, EFI roll-to-roll printers offer optional white and seven-color printing, adding a wide range of high-margin applications to your portfolio.

White printing

- Enables printing on colored and transparent media
- Opens up a myriad of creative possibilities
- Instant uptime of white printheads, thanks to advanced circulation system in the ink tanks and along the entire ink system
- Multiple white print modes for various challenging applications:
  - White only
  - White as background
  - White on top of color
  - White for backlit applications (C-W-C)
  - Five-layer printing (C-W-B-W-C) for blockout printing on clear
  - Various additional three- and five-layer print modes

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Seven-color printing

- Enables seven-color printing, by adding three light colors: light cyan, light magenta and light black
- Based on existing printhead configuration, without adding more heads

Benefits:

- Expanded color gamut
- Smooth gradient transitions
- Vivid and crisp colors
- Fine details
- Smooth skin tones

Note: Seven-color printing is not supported on the EFI Pro 32r+

Clear coat ink

- Printed inline, simultaneously with the image
- Printed on top of the color layer
- Enhances the output, adding extra pop to the colors and offering beautiful creative possibilities
- Full flood or selective
- Glossy or matte finish with the same ink
- Provides three years of outdoor protection against:
  - Abrasion and scratching
  - Chemicals such as detergents, gasoline, and IPA
  - Weather damage
  - Air pollution
  - UV fading/yellowing
- Saves time versus separate offline coating systems

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Media handling accessories

EFI roll-to-roll printers offer multiple media handling accessories to facilitate neat media feeding and collection, enable handling of media rolls at various weights, and to support continuous uninterrupted work.

Motorized winder

Integrated winder and unwinder solution with motorized pneumatic inflatable core shafts for precise and excellent media collection:

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- Improves media advance and print quality
- Allows using larger and heavier rolls
- Supports full printer width media as well as multi-roll
  - 6 ft x 5 ft (2 m x 1.6 m) units for 3 m printer models, front / back
  - 10 ft x 5 ft (3 m x 1.6 m) units for 5 m printer models, front / back

Specifications

- Basic unit – front / back: 5 ft (1.6 m) width / 3 in core
- Max media weight: 880 lbs (400 kg)
- Max media diameter: 20 in (50 cm)
- Additional airshaft cores - front / back:
  - 63 in width / 6 in core
  - 126 in width / 3 in core
- All flexible media types supported
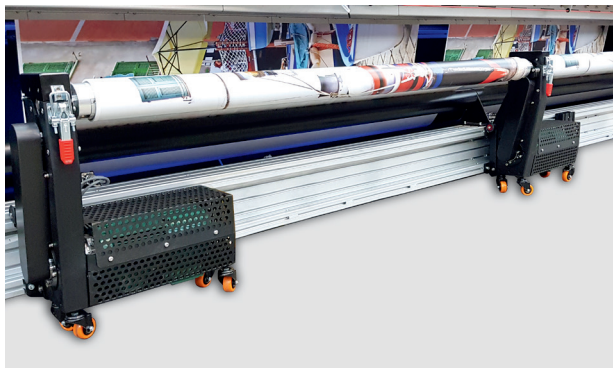
Media collection kit

A set of accessories that facilitate neat media feeding/collecting, holding in place media rolls positioned directly on the rear or front of the printer to prevent them from shifting sideways.

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- Delivered with EFI VUTEk roll-to-roll printers (excluding the EFI Pro 32r+), the standard kit for single-roll media collecting includes:
  - One pair of back media limiters
  - One pair of front media limiters
  - One pair of media disks for attaching to both ends of 3 in core (can be used for both front and back)
- Additional multi-roll media collection kits (front) can be ordered separately (one for 3 m, two for 5m)

Media Edge Guard

Optional Media Edge Guards (MEG) are used for speciality media types with uneven or wavy edges that tend to curl or unravel, such as textiles and wallpaper.

- Designed to protect the print carriage and printheads from crashing into the uneven media edges.
- Eliminates ruined jobs and prevent wasted media
- Can be attached quickly and easily with magnets anywhere along the printing table.
- Use as many units as needed and multiple units for multi-roll

Media spreaders

A pair of clamp-like devices that stretch the media sideways to enable neat media inlet to the printer.

- Helps prevent potential media wrinkles
- Improves media advance
- Facilitates printing on various types of challenging media
- Easy to install at both ends of the press beam on the rear of the printer
- Position and tilt angle are adaptable to the media type and width
- Two units are included as standard with VUTEk 5r+ and VUTEk Q5r printers

Three-meter super duty unwinder

Fully integrated unwinder or rewinder option for the EFI VUTEk roll-to-roll 3m and 5m printers.

- Enables working with heavy 10 ft (3 m) media rolls up to 1,748 lbs (793 kg)
- Enables continuous, uninterrupted work without stopping to change rolls
- Increases productivity in high volume runs due to less make ready
- Equipped with dancer and external motor
- Material width: 126 in (320 cm)
- Maximum media diameter: 28 in (70 cm)
- Standard 3 in core; optional 6 in core

General options

Wrinkle analyzer

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Helps avoid head strikes caused by media wrinkles, preventing ruined jobs and enabling use of low-cost media.

- Media height detector identifies a media wrinkle before the print head reaches it
- The front-end software prompts the user to raise the carriage just enough to avoid head strikes that may ruin the job and, then, to resume printing
- Saves time and money
- Protects printheads from head strikes

Mobile operator station

The mobile workstation can slide from its home position towards the middle of the printer.

- Saves the operator from moving back and forth between the station and the output
- Equipped with a touch screen for quick and easy operation
- Increases productivity and usability
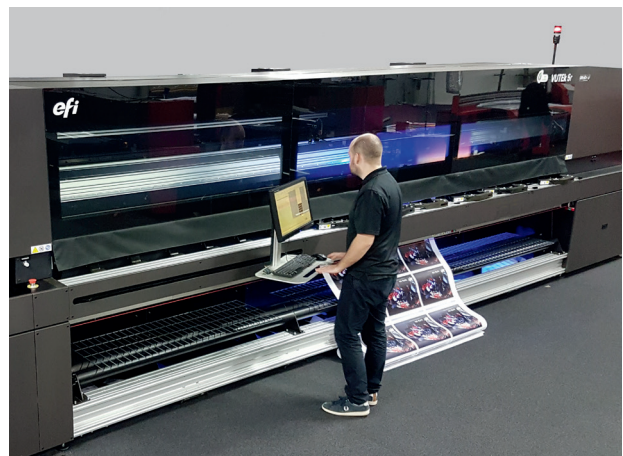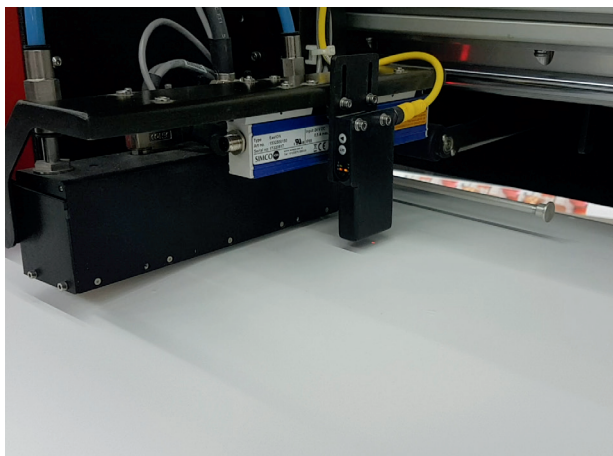
Software options

Quality maintenance kit

Enables printer operators to self-diagnose and fix print quality issues, including:

- Uncalibrated printer
- Missing or deficient nozzles

Advantages:

- Self-ownership and fast onsite reaction
- Minimizes service visits and increases up time
- Extends printhead lifespan up to 30% on average

The optional system includes software and a dedicated scanner.

Media saving wizard

- Designed to improve media stock management
- The user enters the length of the media each time a new or partially used roll is loaded into the software
- Before the media is removed from the printer, a label with the remaining media length is printed on the rim of the roll
- The software will alert the user before starting a job if the remaining media on the roll is insufficient for the job
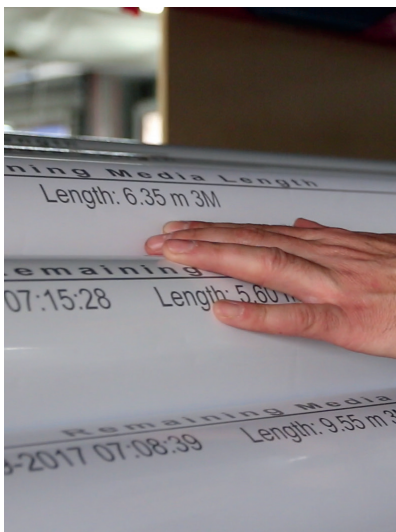
Fiery IQ cloud applications

The Fiery® IQ™ suite of cloud applications connects your people, processes, and print devices, so you can make better data-driven decisions.

- Go to the IQ Dashboard view to visualize key production data and the status of your printers in near real time
- Use IQ Insight to review historical trends and improve future performance, analyze ink cost for better pricing decisions, and compare performance between devices and shifts to increase shop floor productivity
- Receive alerts about production-blocking events and production reports with the IQ Notify service
- Stay connected with your print devices from your iOS or Android mobile devices with EFI Go
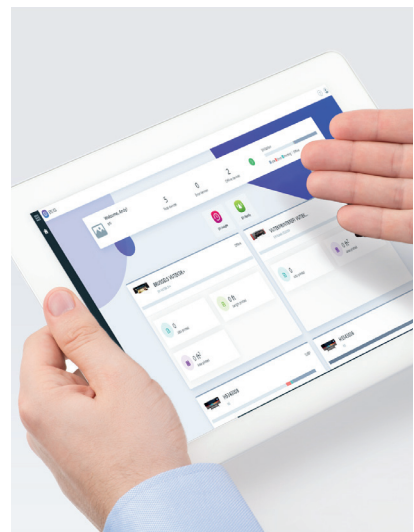
Options compatibility chart

S = Standard **O** = Optional

		VUTEk Q3r	VUTEk Q5r
Inline finishing	Y-slitters	O	O
	X-cutter	O	O
	ID backprint	O	O
	Roll & Tape	O	O
	InSpec	O	O
Colors	White printing	O	O
	7-color printing	O	O
	Clear coat	O	O
Double sided	Automatic blockout	O	O
	Automatic backlit	O	O
Media handling	Super duty winder 3m	O	O
	Motorized winder	O	O
	Media edge guards	O	O
	5m in metal bar	-	S
	Media spreaders	O	S
	Integrated mesh kit	S	S
General	Wrinkle analyzer	S	S
	Ionizer	S	S
	Chiller	S	S
	Mobile operator station	S	S
	Software productivity kit	S	S
Software	Fiery IQ	O	O
	Quality maintenance kit	O	O

* Choice between white OR clear coat

Upgradability: The roll-to-roll optional features are field upgradable for the relevant printer models according to the Options Compatibility Chart below and in accordance to EFI policy.

The functionality of the roll-to-roll optional features described herein may be affected by specific job properties, the combination of two or more options, or other conditions. Before ordering, please verify with an EFI representative that the options you have selected will work as intended.

VUTEk 3r+	VUTEk 5r+	VUTEk D3r	VUTEk D5r	Pro 32r+
O	O	O	O	O
O	O	O	O	-
O	O	O	O	-
O	O	-	-	-
-	-	-	-	-
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S	S	S	S	S
S	S	S	S	S
S	S	S	S	-
S	S	S	S	-
S	S	S	S	S
O	O	O	O	O
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