




# **FL3**

Label production technology

**EDALE ARE A LEADING MANUFACTURER OF HIGH TECHNOLOGY FLEXOGRAPHIC AND DIGITAL HYBRID PRINTING AND CONVERTING SOLUTIONS SERVING THE LABEL, CARTON AND PACKAGING INDUSTRIES.**



Edale's 60,000 ft<sup>2</sup> manufacturing facility in Hampshire, United Kingdom.

With more than 60 years in the packaging industry Edale has designed and engineered a range of high technology print and converting products to serve the production needs of today's packaging producers.

Edale's philosophy is to deliver high levels of process automation combined with exceptional print quality without over complicating functionality. Our aim is for the Edale product to be affordable yet to exceed performance expectations on every level.

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## INNOVATE NOT COMPLICATE



Technology



Integrity



Flexibility



Solution





### **EDALE WORLDWIDE**

Edale's headquarters and manufacturing facility is based on the South Coast of the UK. Our products are sold and supported across the globe via an extensive network of distributors and agents.

### **TO ENQUIRE**

To find out more, book a demo or to be contacted by one of our local representatives please lodge your initial enquiry via Edale's UK headquarters.

A member of our sales team will take care of your enquiry directly or put you in contact with the most relevant regional representative.

### **CONTACT**

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Units 1-3, Lavenham Business Park, Solent Way, Whiteley, Fareham, Hampshire, PO15 7FY United Kingdom

## **EDALE GLOBAL SERVICE AND SUPPORT**

Edale offers the latest printing technology and with it comes our experienced and dedicated service and support network. From initial consultation, to installation and beyond, our After Sales team ensure that our customer's investments are protected at all stages of life.

Every machine is installed by our own engineers and is supplied with a choice of training packages to suit your business needs. In addition to a comprehensive spare parts and consumables service, a wide range of maintenance and Print Protection Plans are available to offer that additional peace of mind.

Through our After Sales team and distributors, local and timely support is provided to our customers across the globe. Be it via remote diagnostics and rectification or on site technical assistance, our network of engineers guarantees a swift and thorough response to all enquiries.

## **EDALE AFTERCARE**

Our After Sales service and support ensures that your Edale press runs as it should, when it should.

- Print Protection Plans.
- Spare parts, consumables and tooling.
- Tailored training packages.
- Standard and bespoke upgrade solutions.
- Comprehensive technical support.
- Preventative maintenance and service visits.

# FL3 APPLICATIONS

The modular design and technologies included within the FL3 mean that it is the most versatile flexo press in its class and can be specified to produce a wide range of label, packaging and light carton products. Illustrated below are a few of our most popular configurations.



## FL3 LABEL

*See page 16 for more details*



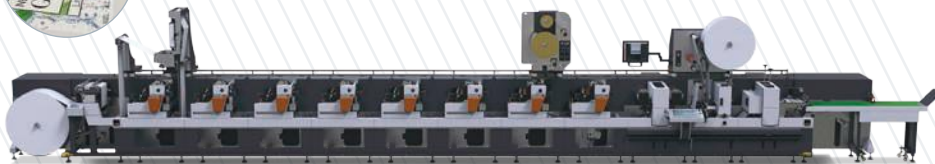
## FL3 FILM

*See page 18 for more details*



## FL3 ECO

*See page 20 for more details*



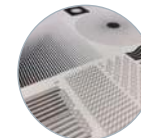
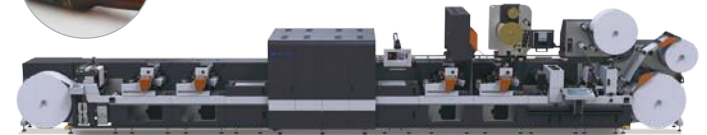
## FL3 HIGH EMBELLISHMENT

*See page 22 for more details*



## FL3 HYBRID

*See page 24 for more details*



## FL3 DIGITAL FOIL

*See page 26 for more details*





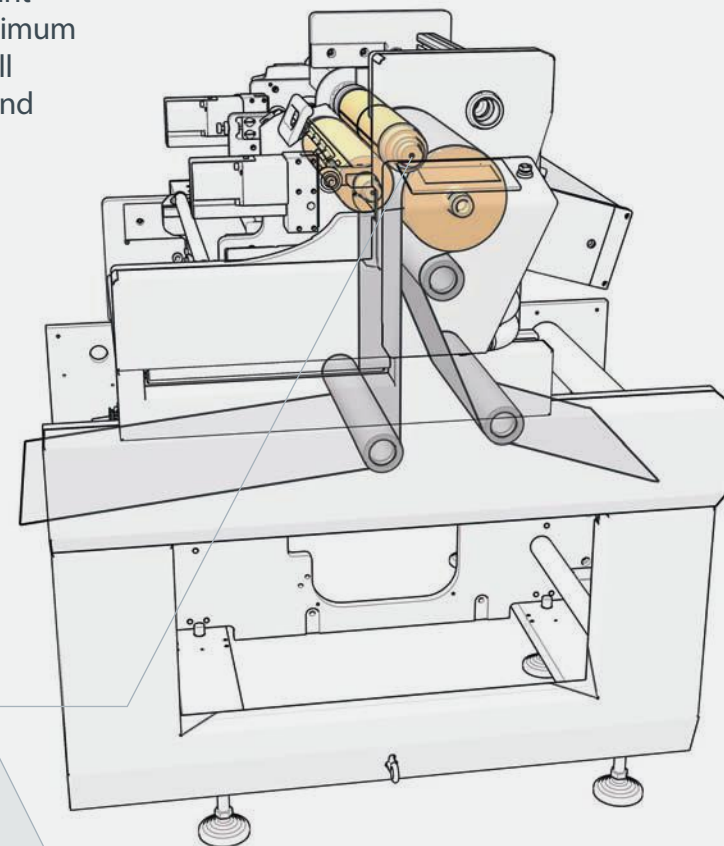
# UNiPRINT

## Higher quality flexo printing

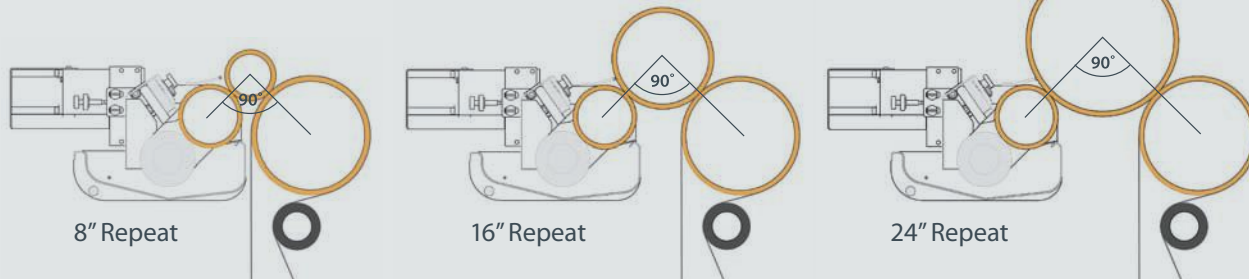
Edale's unique "UNiPRINT" technology ensures optimal print geometry whatever the repeat size. Maintaining the optimum contact angle between anilox, impression and plate roll means the machine delivers consistent high quality and uniform dot size whatever the repeat range.

### BENEFITS

- Consistent high quality print, whatever the print cylinder size.
- Repeatable print reproduction.
- Reduced impact of plate bounce.
- Consistent setting of inking and impression.



Contact angle remains optimised for every repeat size (unlike conventional flexo)



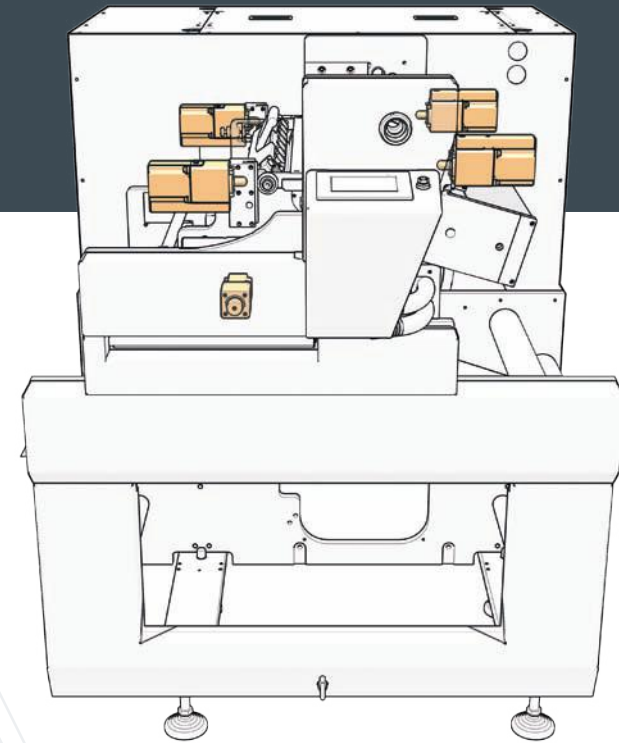
# AiiR

## Autonomous inking, impression & register

Edale's AiiR system is a series of technologies developed to automate the print process, reducing reliance on an operator to set and regulate the key press settings. The AiiR system recalls stored job data and automatically pre-sets the print pressure and register positions. The AiiR camera register systems then accurately regulate the correct register, monitoring and controlling it throughout the production run. The AiiR + AVT REG system can be further expanded to include autonomous pressure validation and 100% print inspection.

The FL3 comes standard with AiiR, which includes motorised inking and impression as well as motorised linear and lateral register control.

Additional AiiR functionality can be specified according to the following illustration.



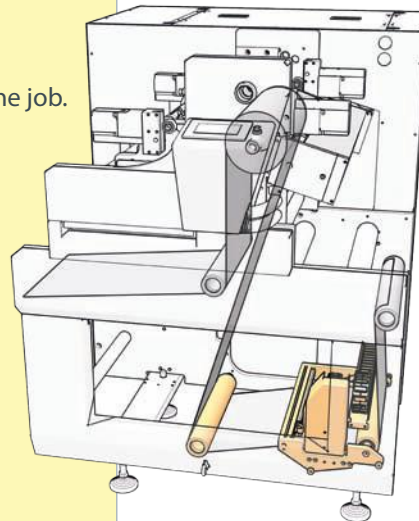
### AiiR + EZ REG

(Option)

- Autonomous register setting and control throughout the job.
- Not upgradable to AiiR Pressure Validation and 100% inspection.

### BENEFITS

- Eliminates operator intervention whilst setting register.
- Guarantees precision throughout the run.
- Delivers consistency every time.
- Simplifies printing "troublesome" substrates.
- Improves quality and reduces waste.
- Space saving design requires no additional module.



### AiiR

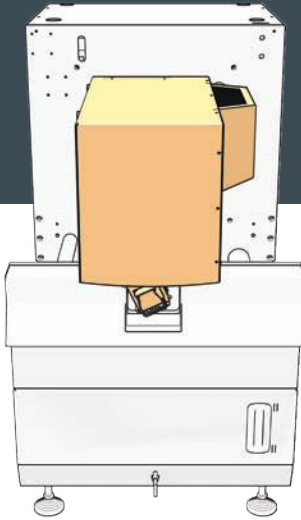
(Included as standard)

- Motorised inking.
- Motorised impression.
- Motorised cross register.
- Print to mark register.
- Digital job sheet stores and recalls all job setting parameters.
- Job sheet productivity tools.

### BENEFITS

- Increase productivity and consistency.
- Improve quality.
- Reduced set-up time and waste.
- Reduced operator dependency.





### AiiR + AVT REG

(Option)

- Autonomous register setting and control throughout the job.
- Upgradable to AiiR Pressure Validation and 100% inspection.

AiiR + EZ Reg & AVT Reg systems use camera technology to autonomously set both linear and lateral print register and monitors it throughout the run. Edale's unique software tracks each correction through the press ensuring register is set in the quickest time with minimal material waste.

#### BENEFITS

- Eliminates operator intervention whilst setting register.
- Guarantees precision throughout the run.
- Simplifies printing "troublesome" substrates.
- System does not 'over correct'.
- Improves quality, delivers consistency and reduces waste.

### AiiR + PRESSURE VALIDATION

(Option)

- Autonomous validation of print pressure settings.

AiiR + Pressure Validation system is used to validate that the inking and impression parameters are set to a consistent standard every time regardless of the machine operator.

The AiiR system runs an automatic routine adjusting inking and impression on each print station. The images are analysed and the system derives the optimum setting. The operator can then choose to accept or reject the proposed settings.

#### BENEFITS

- Consistent print pressure on every job.
- Reduces inconsistencies between operators.
- Improved print quality and reduced waste.

### AiiR + 100% INSPECTION

(Option)

- 100% Inspection and quality control.

AiiR + 100% Inspection is an upgrade to the register system, providing total closed loop 100% inspection throughout the production run.

The 100% Inspection system can keep a record of all images printed, provide feedback on any deviation from a master template and can be upgraded to a number of advanced colour control tools offered by AVT.

#### BENEFITS

- Alarms or halts production if quality falls out of the defined standard.
- Significantly reduces waste.
- Provides traceability of production.
- Links to finishing equipment.

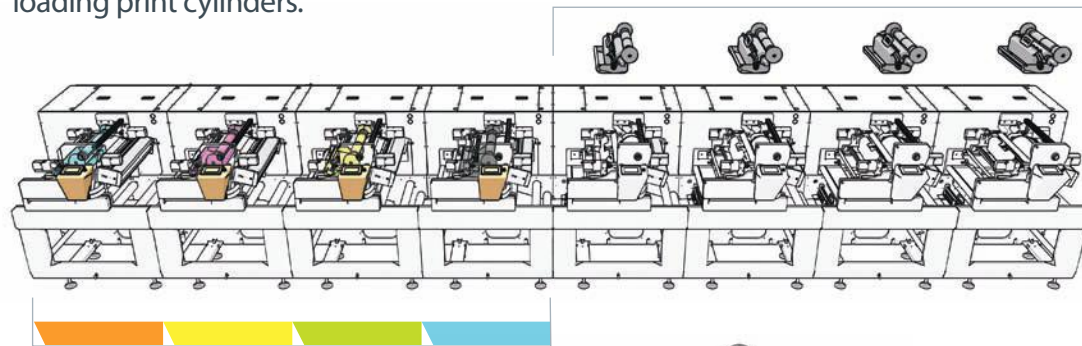
# ON THE FLY

Quick and easy setup

Edale's "ON THE FLY" technology enables colour changes to be made on unused print stations whilst the machine is in production. The technology increases productivity and eliminates wasted time when setting up the next job.

This can be achieved because the FL series inking system retracts from the print position when not in use or when loading print cylinders.

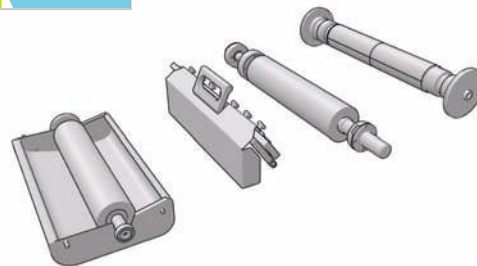
DECK 5-8 CAN BE CHANGED  
WHILST JOB IS RUNNING IN 1-4



DECK 1-4 RUNNING

## BENEFITS

- Save time by setting up whilst still in production.
- Achieve more job changes per shift.
- Improve productivity of equipment and personnel.



Print components can all be changed independently.

# PRE REGISTER

Reduced setup time

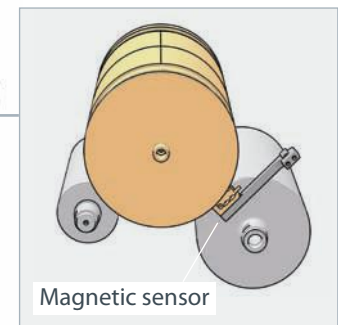
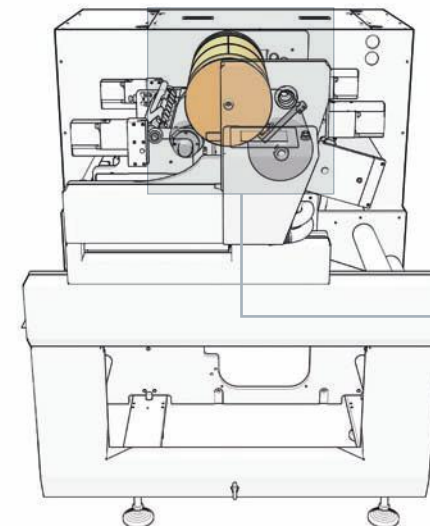
PRE REGISTER automatically positions the print cylinders extremely close to the position recalled from the digital job sheet. This means that even before material is run the register is close to being set. The PRE REGISTER system sets register in 1 web length of the machine.

Edale's unique magnetic sensor technology means that the system remains accurate whatever the condition of the print cylinder.

Combining PRE REGISTER with the Edale AiiR register controller enables the print job to be brought fully into register with no further operator intervention other than loading the cylinders.

## BENEFITS

- Set register in a single web length.
- Reduced operator workload.
- Reduce material waste.
- Increase productivity.



Magnetic sensor

# "SHAFTLESS" DUAL SERVO

Independently servo driven

# GEARLESS IMPRESSION

12 – 450 $\mu$ m (0.5 – 18pt) Substrate range

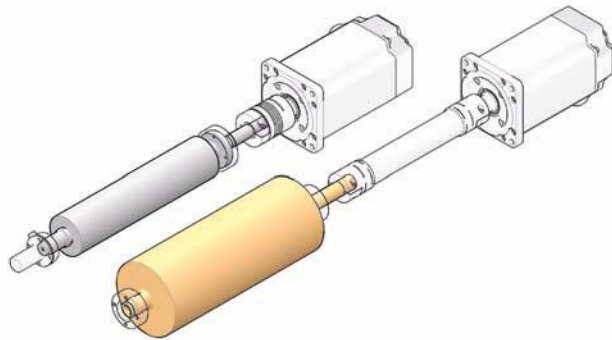
All Edale presses are "SHAFTLESS" with the FL series employing two independent servo motors per print station, one for web transport and the other driving the print.

An independent web transport drive on each print station enables the FL3 control system to deliver precise and stable tension control over a wide range of substrates.

The independent drive of the print station delivers smooth and accurate control of the print process and is a key component in ensuring precision register is maintained.

## BENEFITS

- Accurate and stable tension control across a wide range of substrates.
- Electronically tune out all mechanical tolerances.
- Excellent print quality.
- Flexibility to expand the press for future upgrades.

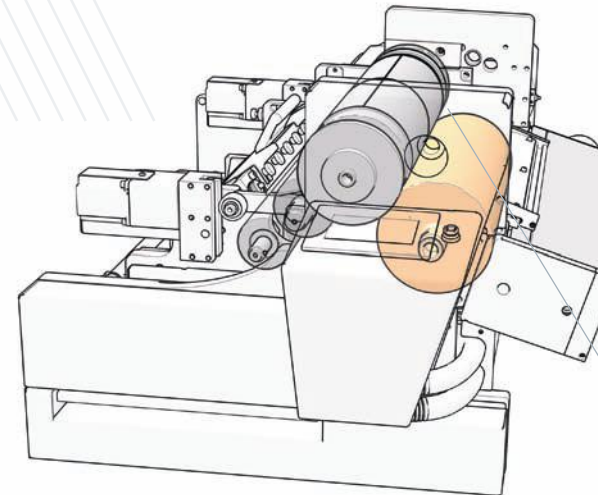


Edale's "GEARLESS IMPRESSION" technology means that there is no gear mesh between the print cylinder and impression roll. Reducing gears in this area further guarantees the exceptional print quality achievable from an FL3.

This unique configuration in combination with the "SHAFTLESS" technology means that the FL3 has a class leading substrate range capability without the need for any mechanical adjustment.

## BENEFITS

- Wide substrate range without the need for adjustment.
- Eliminates typical print artefacts found in geared system.
- Ensures consistent print quality, whatever the substrate thickness.
- Eliminates any deterioration in print quality that would be prevalent in a gear driven system.



No gear mesh



### PC BASED HMI

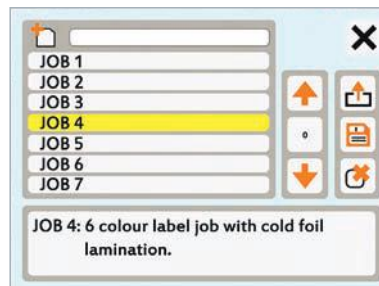
- Easy to navigate icon-based interface.
- Controls entire press from a single position.
- Multi-language support.
- Flexible and upgradeable.



## MACHINE CONTROL CENTRE

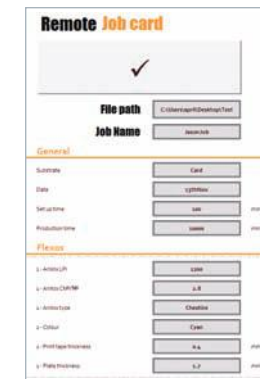
### DIGITAL JOBSHEET STORAGE

- Unlimited job storage.
- Saves and recalls all job specific machine settings and job production data.
- Stored locally on HMI improving screen response speed.
- Can be backed up externally from the Edale press, by USB.



### OFFLINE JOBSHEET

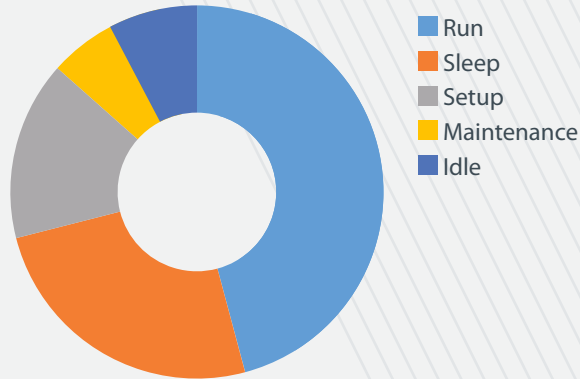
- Office based creation and editing of digital jobsheet.
- Ability to import and export to and from the machine.





## PRODUCTIVITY MONITOR

- Automatically collects and reports on daily productivity (time in Run, Sleep, Setup, Maintenance & Idle).
- Compares and reports on forecast to actual production performance.



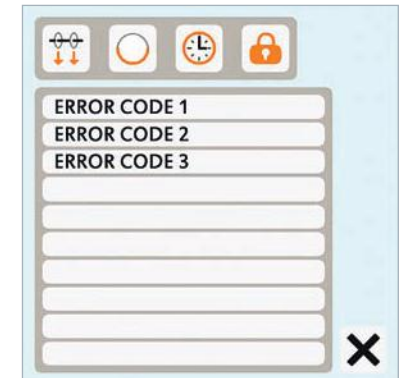
## REMOTE SERVICE

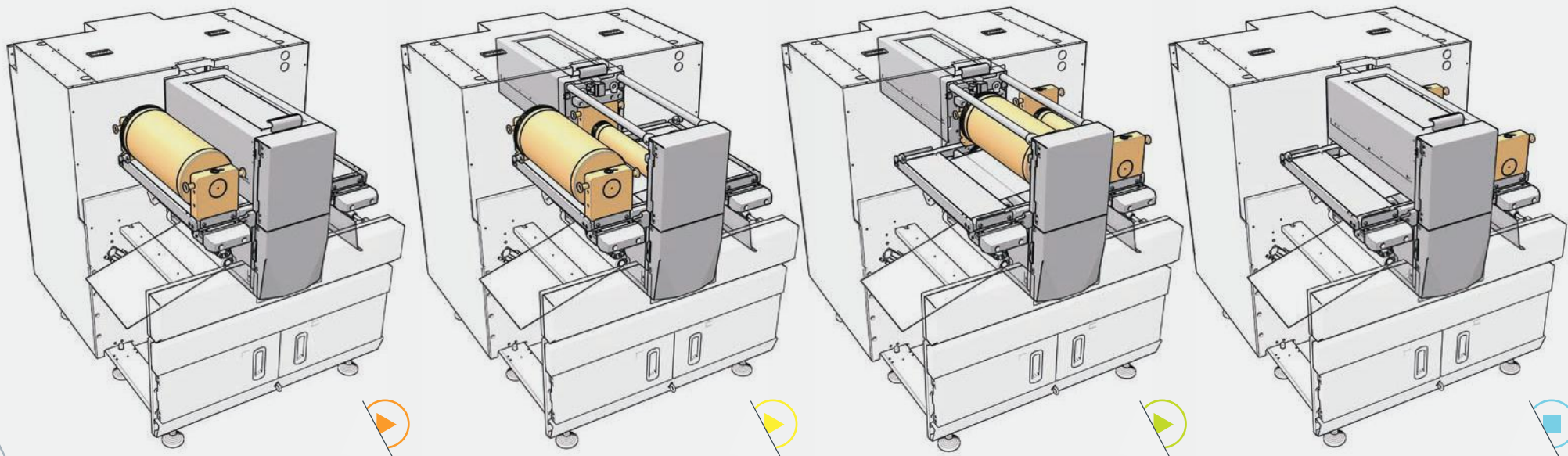
- Internet based remote diagnostics and live support reduces the need for on-site intervention.
- Our remote support team are able to replicate the machine's HMI which enables a rapid resolution of machine or operator faults.



## SERVICE DIAGNOSTICS

- Error reporting with time stamp promotes ability to self-diagnose faults before the need for Edale intervention.
- "Flexo Parking" allows the operator to park a flexo station that has a fault and to continue production.





Tool pre loaded onto loading shelf

Press 'unlock' button to release previous tool

Slide new tool into loading position

Close guard to 'ready' station

# EZ-DIE TECHNOLOGY

## Quick change converting system

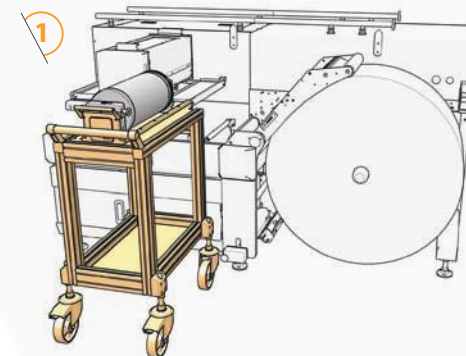
### SUMMARY

A quick change converting system capable of tool change in less than 60 seconds.

### BENEFITS

- Complete tool change in under 60 seconds.
- Safer working environment, reduces the requirement for lifting equipment.
- Automatic linear and lateral pre-register to print.
- Automatic die pressure.
- Automatic waste matrix pickup.

- 1 Improve safety by eliminating tool lifts with the **EZ Load** quick change storage cart (see page 31).







The Edale EFX Print Bar is a UV based inkjet system designed to digitise print finishing and embellishment. Available in a number of configuration options, the EFX Print Bar can be integrated with the FL3 or retrofitted to an existing web press.

#### APPLICATIONS

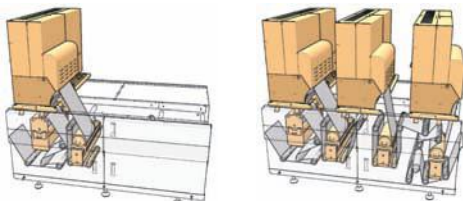
- Digital cold foiling.
- High build tactile varnish effects.
- High opacity white / screen alternative.
- Single colour variable data / barcode printing.

## EFX DIGITAL EMBELLISHMENT



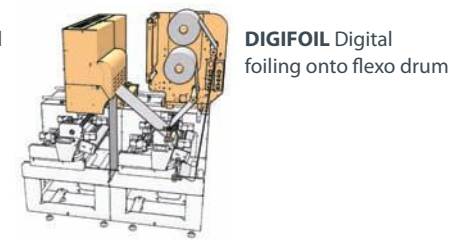
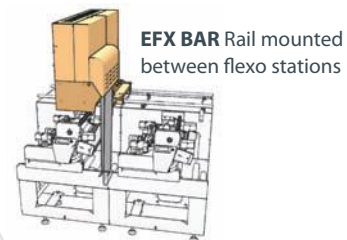
#### DIGITAL EMBELLISHMENT MODULE OPTIONS

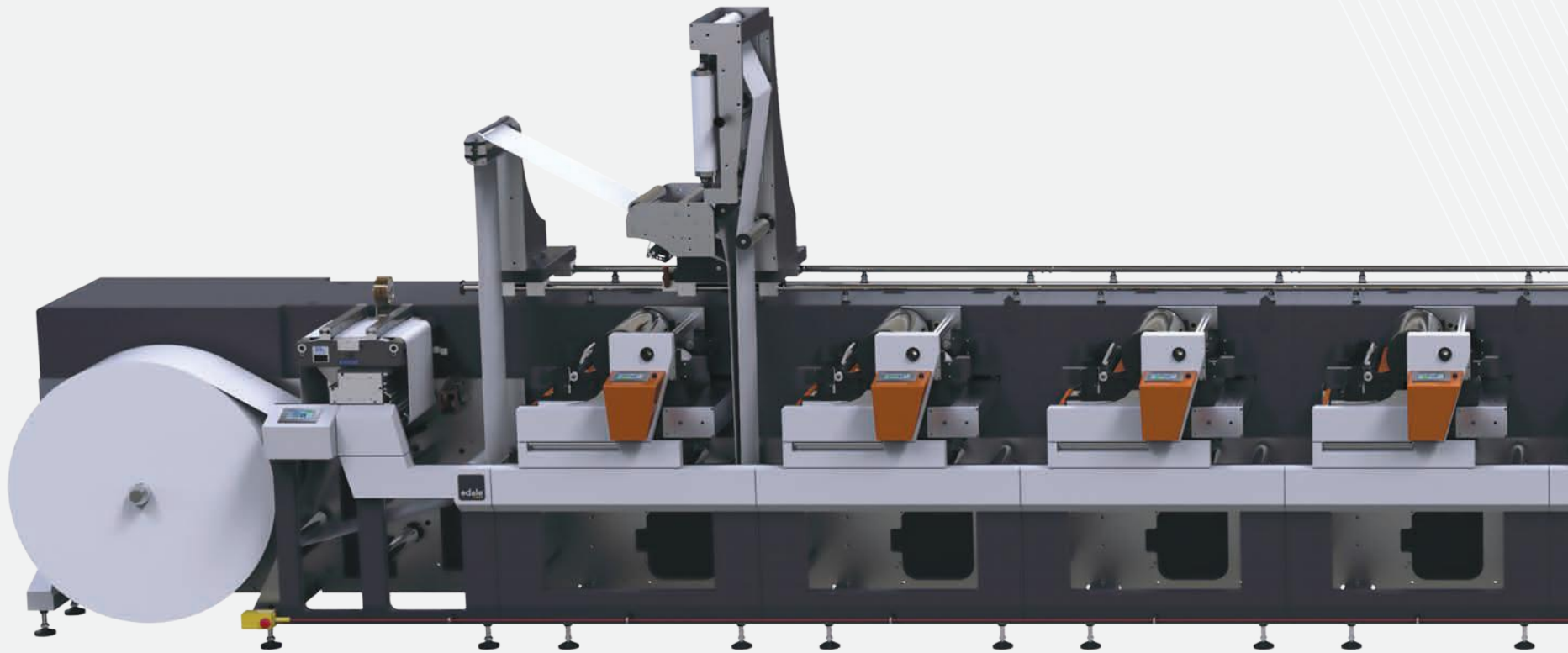
- Up to 3 bars mounted in sequence with independent curing.
- Pre-conditioning and treatment options.
- Configurable with all FL3 converting options to make a complete digital finishing solution.



#### RAIL MOUNT OPTIONS

- Moveable position of print bar on machine rail.
- Digital cold foil and tactile varnish in one combined solution.
- Digital high opacity white provides an alternative to traditional screen.





1000mm | 40" unwind with roll lift and substrate preparation  
(see page 27)

Rail mounted turnbar and delam/relam  
(see page 29)

Flexo stations with non-chilled UV  
(see page 28)

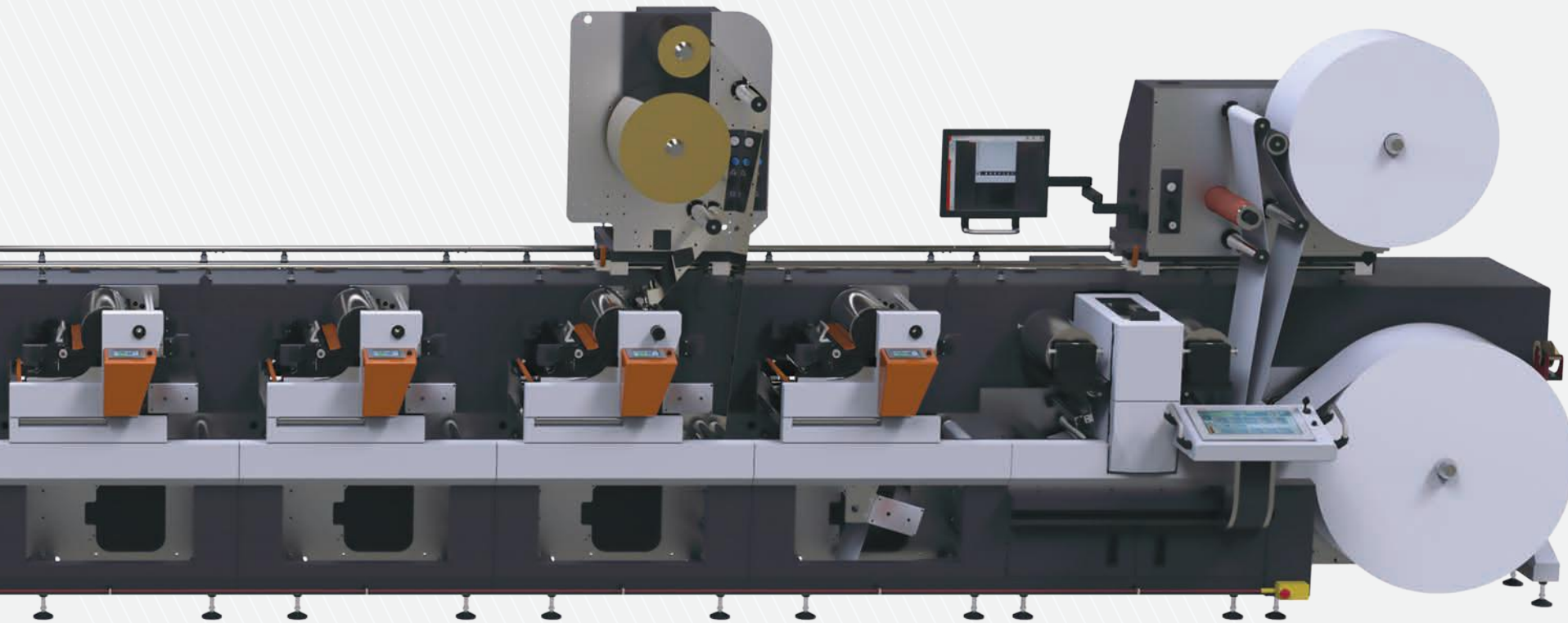
Rail system for movable options

UNI-PRINT on all flexo stations as standard  
(see page 7)

## FL3 LABEL



A conventional configuration specified for the production of self-adhesive paper and film labels, papers, sachets, and tickets.



AiiR on all flexo stations as standard  
*(see page 8)*

"SHAFTLESS" DUAL SERVO as standard  
*(see page 11)*

Rail mounted lamination / cold foil  
*(see page 29)*

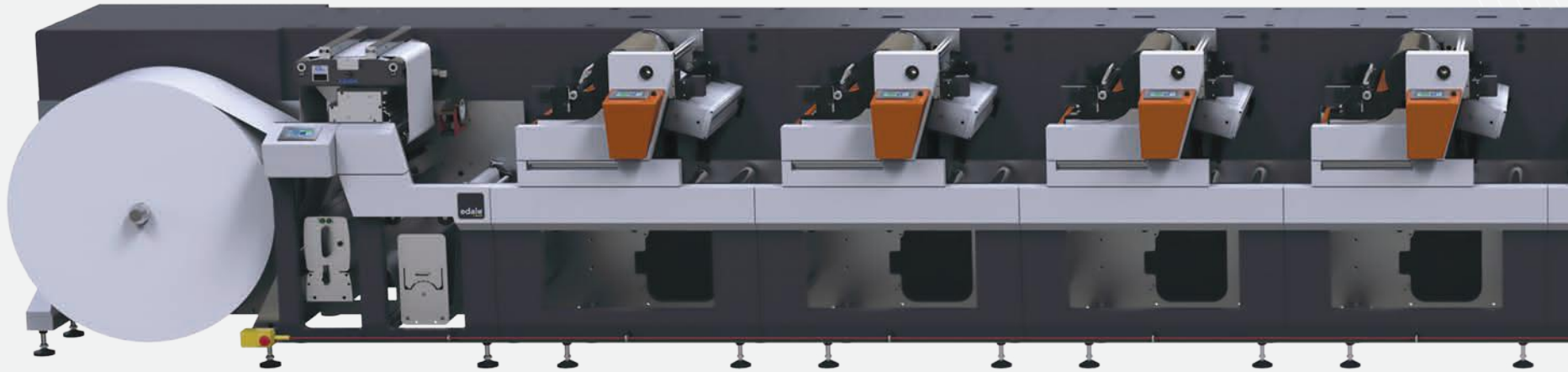
Extended UV drying  
*(see page 28)*  
AiiR + EZ-REG control  
*(see page 8)*

EZ-DIE converting station  
*(see page 31)*  
Break free waste matrix rewind  
*(see page 35)*

1000mm | 40" rewind with soft tension control  
*(see page 37)*







1000mm | 40" unwind with roll lift, contact cleaning and corona treatment  
*(see page 27)*

Flexo stations with chilled UV  
*(see page 28)*

Anti-static system

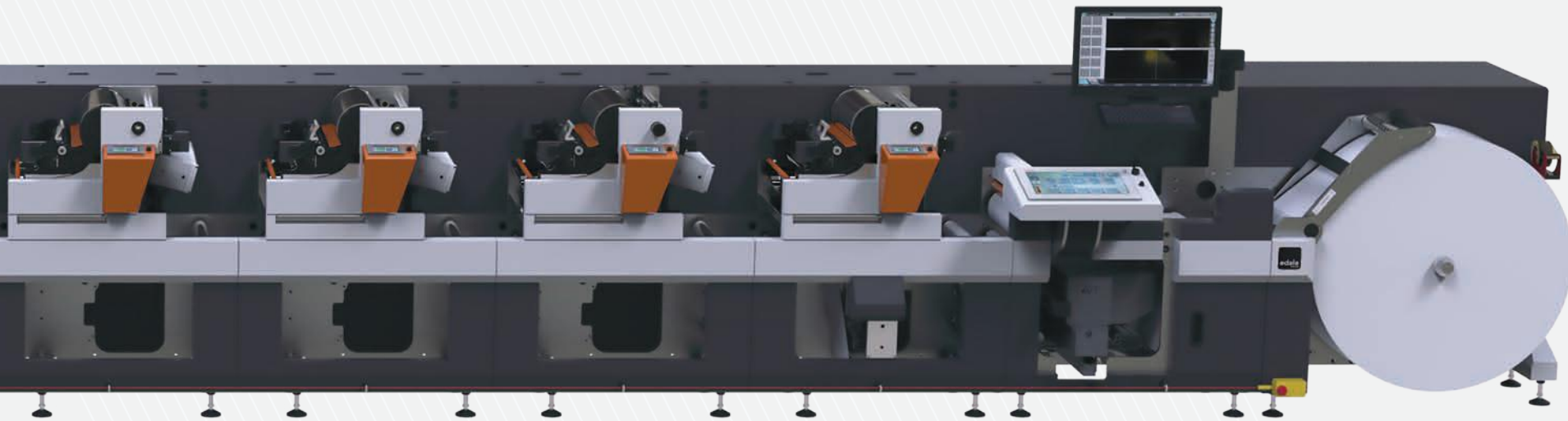
UNiPRINT on all flexo stations as standard  
*(see page 7)*

AiiR on all flexo stations as standard  
*(see page 8)*

## FL3 FILM



Configured for the roll to roll production of unsupported filmic or temperature sensitive products such as wrap around labels, shrink sleeves, in mould labels and aluminium foils.



“SHAFTLESS”  
DUAL SERVO  
as standard  
(see page 11)

GEARLESS IMPRESSION  
as standard  
(see page 11)

“ON THE FLY” technology  
as standard  
(see page 10)

Extended UV  
drying with chill roller  
(see page 28)

AiiR + AVT REG  
with 100% inspection  
(see page 8)

1000mm | 40” single rewind with  
soft tension & roll follower  
(see page 37)





1000mm | 40" unwind with roll lift and substrate preparation  
*(see page 27)*

Rail mounted turnbar and delam/relam  
*(see page 29)*

Flexo stations with non-chilled illumina LED  
*(see page 28)*

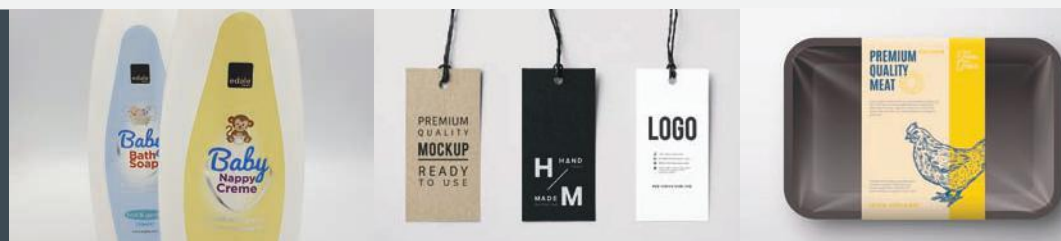
Rail system for movable options

UNiPRINT on all flexo stations as standard  
*(see page 7)*

AiiR on all flexo stations as standard  
*(see page 8)*

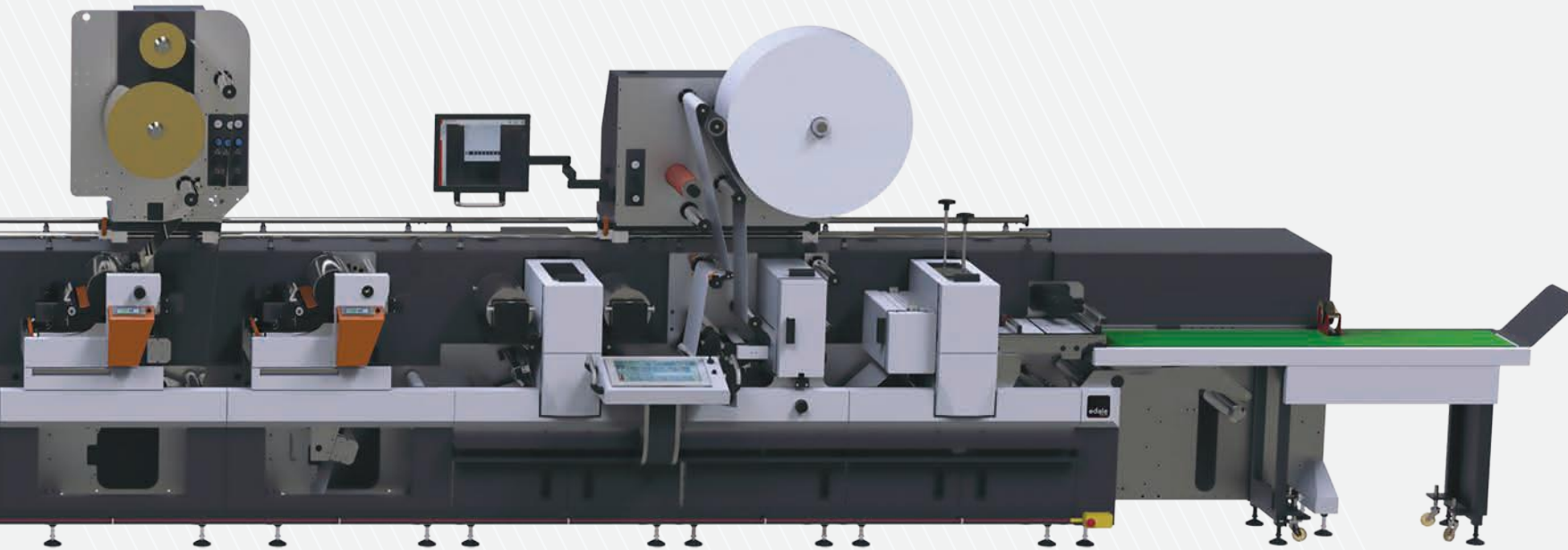
"SHAFTLESS" DUAL SERVO as standard  
*(see page 11)*

## FL3 ECO + ROLL TO SHEET



An energy efficient configuration equipped with low energy LED UV curing and automated finishing, specified for the production of self-adhesive paper and film labels, papers, sachets, and tickets as well as light cartons.





- Rail mounted lamination / cold foil (see page 29)
- Flexo station with extended illumina LED drying (see page 28)
- EZ-DIE converting station (see page 31)
- Autoslit and i-score slitting (see page 35)
- Sheeting station with variable length sheet control (see page 33)  
Break free waste matrix rewind (see page 35)
- 1000mm | 40" single rewind with soft tension & roll follower (see page 37)
- Delivery table with motorised take-off and batch counting (see page 33)





1000mm | 40" unwind with roll lift and web cleaning  
(see page 27)

EFX DIGITAL EMBELLISHMENT high opacity white  
(see page 15)

Flexo stations with non-chilled UV  
(see page 28)

UNiPRINT on all flexo stations as standard  
(see page 7)

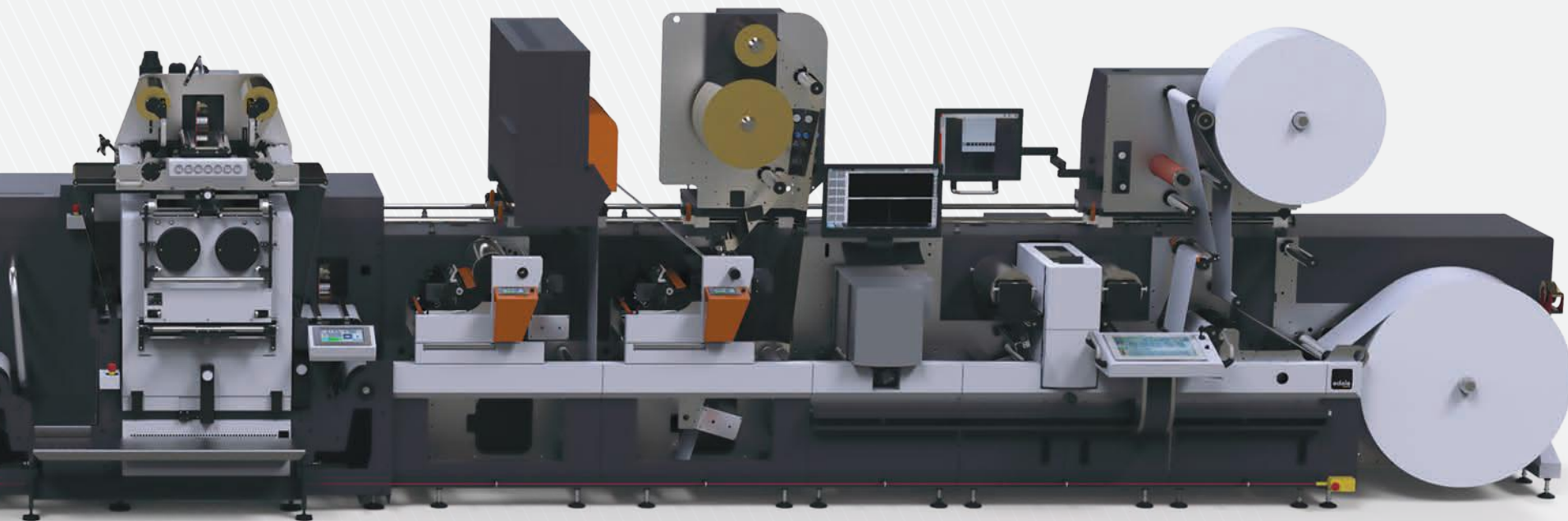
AiiR on all flexo stations as standard  
(see page 8)

Rail system for movable options

## FL3 WINE, SPIRIT AND COSMETIC



Labels for wines, spirits and cosmetics require a higher level of embellishment than your typical configuration. The FL3 can be configured to deliver the technical demands and flexibility required to excel in this market.



**BIG FOOT Hot foil & embossing station**  
Multiple foil feeding across and along the web – to create new effects and finishes that will give you a competitive advantage

**EFX DIGITAL EMBELLISHMENT**  
high build varnish & digital cold foil  
*(see page 15)*

**Flexo station with extended UV drying**  
*(see page 28)*  
Rail mounted lamination / cold foil  
*(see page 29)*

**AiiR + AVT REG and 100% inspection**  
*(see page 8)*

**EZ-DIE converting station**  
*(see page 31)*

**Slitting & waste stripping station**  
*(see page 35)*  
Break free waste matrix rewind  
*(see page 35)*

**1000 mm | 40" single rewind with soft tension control**  
*(see page 37)*







1000mm | 40" Unwind with roll lift, contact cleaning & corona treatment  
(see page 27)

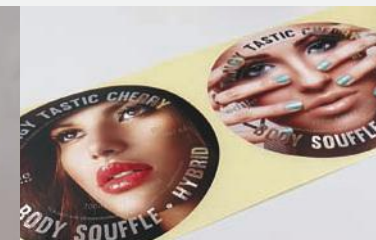
Flexo stations with non chilled UV  
(see page 28)

UNiPRINT on all flexo stations as standard  
(see page 7)

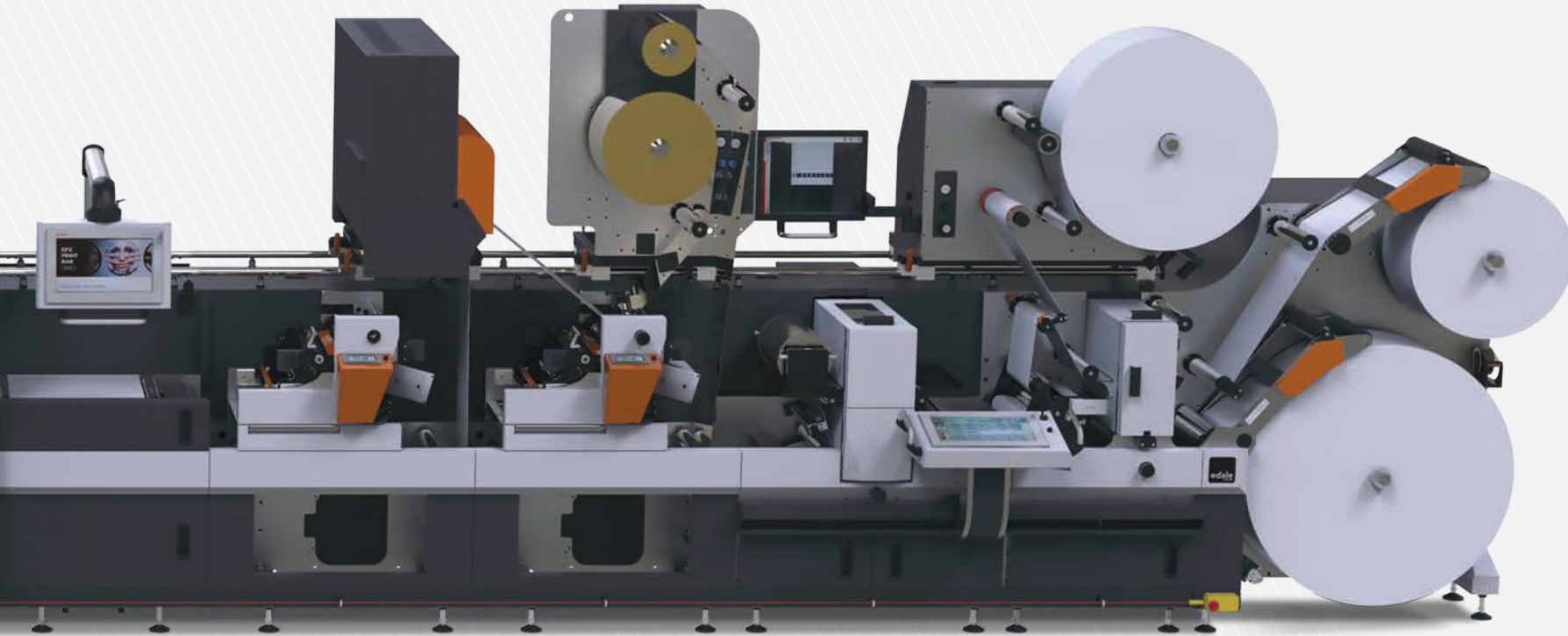
Pre-conditioning and substrate treatment

**N610i 333mm Digital Print Module**  
High impact UV curable inks. CMYK standard, OV + W available as options. 333mm | 13.11" maximum print width. Highest quality at 50 m/min, up to 70 m/min in productivity mode. Esko Digital Front End V2, Domino Screen Pro.

## FL3 DOMINO HYBRID



The FL3 Domino Hybrid is a fully integrated hybrid solution that combines workflow, digital and flexographic print with automated finishing to deliver a highly productive solution for the manufacture of short, medium and long run labels, packaging and cartons.



Outfeed and inspection module

EFX DIGITAL EMBELLISHMENT high build varnish & digital cold foil (see page 15)

Extended UV drying (see page 28)  
Rail mounted lamination / cold foil (see page 29)

EZ-DIE converting station (see page 31)

Autoslit and i-score slitting (see page 35)  
Break free waste matrix rewind (see page 35)

Second rewind with roll followers, soft tension and web advance system (see page 37)





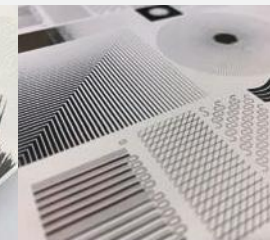
1000mm | 40" unwind with roll lift,  
contact cleaning & corona treatment  
*(see page 27)*

DIGITAL EMBELLISHMENT MODULE 3 x EFX bars,  
Corona treatment, 3 x chilled UV dryers  
*(see page 15)*

Semi rotary converting station  
*(see page 24)*

1000 mm | 40" Single rewind  
with soft tension control  
*(see page 37)*

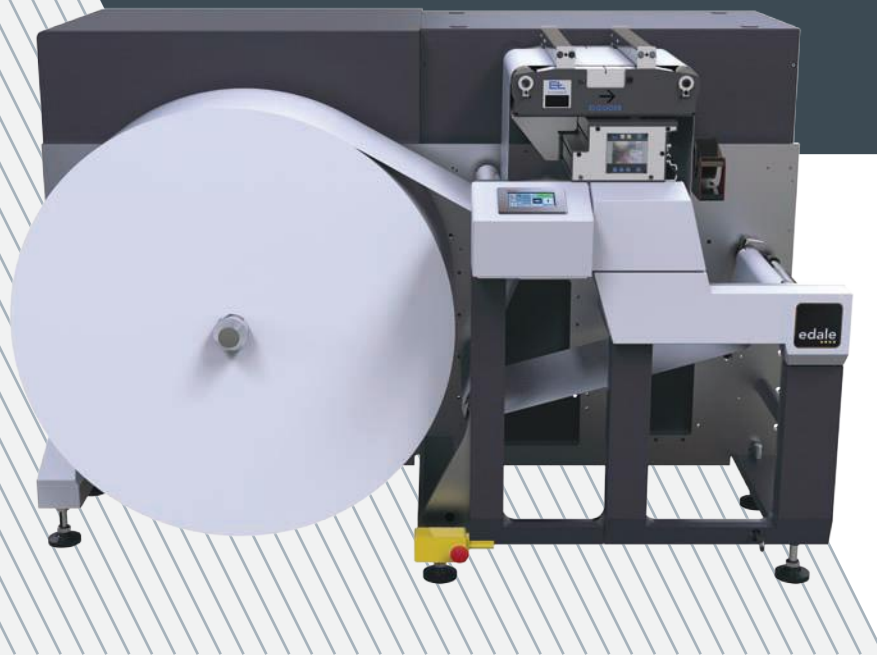
## FL3 DIGITAL FINISH



The FL3 DIGITAL FINISH can be configured for over printing or embellishing pre-printed media with single colour digital images, graphics or effects such as high build varnish and digital cold foil. The digital element can be combined with any of the in-line finishing options available on the FL3.

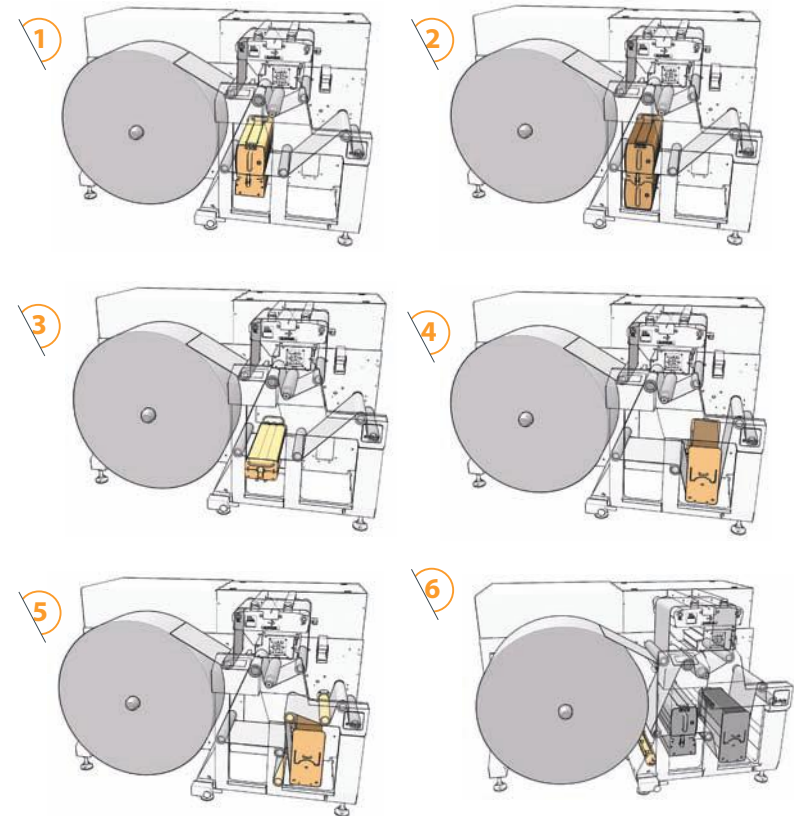


# UNWIND AND SUBSTRATE PREPARATION STATION



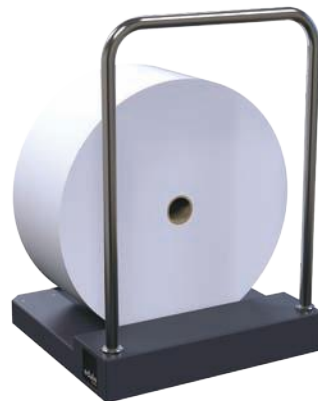
## OPTIONS

- 1 Single sided contact web cleaning.
- 2 Double sided contact web cleaning.
- 3 Single sided non-contact web cleaning.
- 4 Front side corona treatment.
- 5 Reverse side corona treatment.
- 6 Anti-static system: Pulsed DC ionising bars.



## STANDARD FEATURES

- Servo driven with closed loop taper tension control.
- Web guide with integrated splice table.
- Plasma coated, servo driven infeed drive roller with closed loop tension control.
- Insetting control to enable re-register of pre-printed rolls.
- Roll loading cart.



Roll loading cart

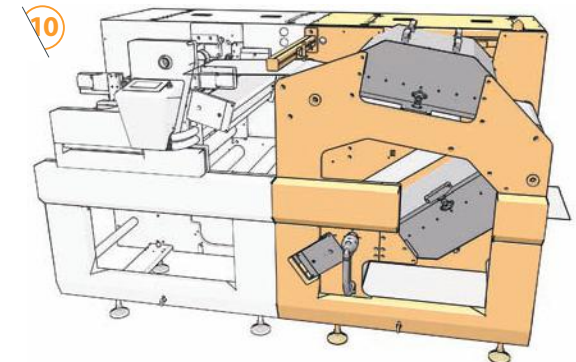
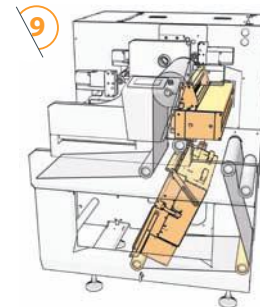
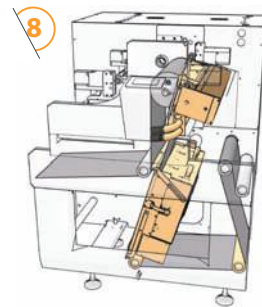
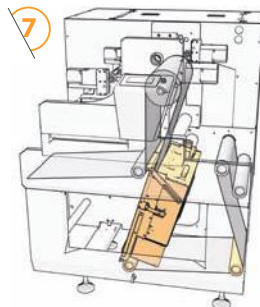
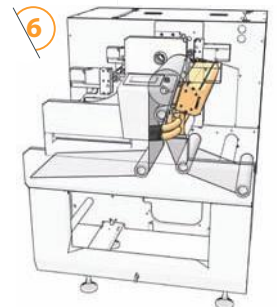
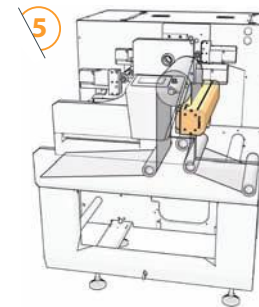
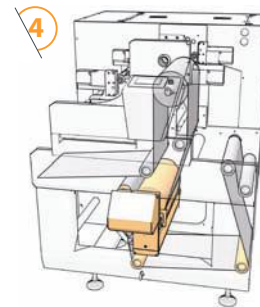
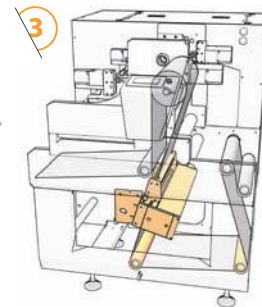
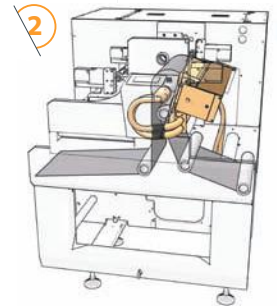
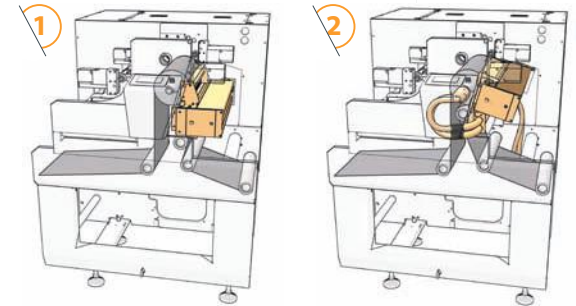


# FLEXPRESS

Single flexographic printing station

## DRYING OPTIONS

- |                                   |  |
|-----------------------------------|--|
| 1 Non-chilled UV drying.          | 7 IR or Hot Air drying.                  |
| 2 Chilled UV drying.              | 8 Chilled UV & IR or Hot Air drying.     |
| 3 Extended non-chilled UV drying. | 9 Non-chilled UV & IR or Hot Air drying. |
| 4 Extended chilled UV drying.     | 10 IR or Hot Air extended drying module. |
| 5 Non-chilled LED drying.         |  |
| 6 Chilled LED drying.             |  |



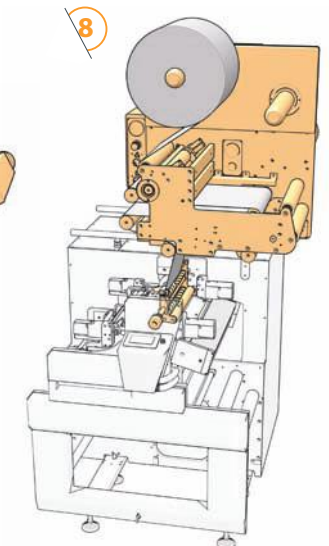
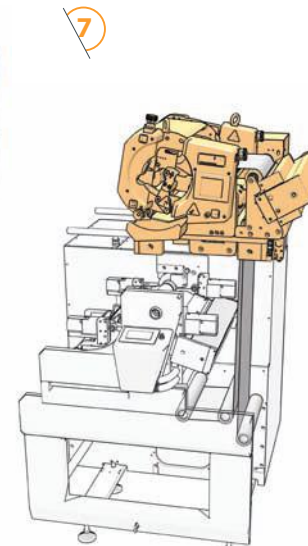
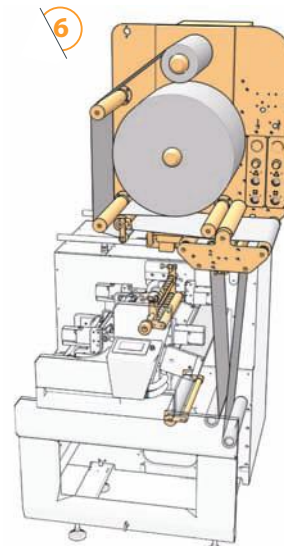
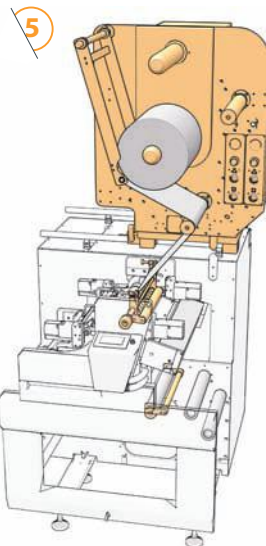
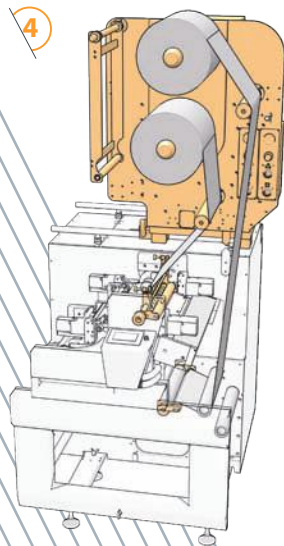
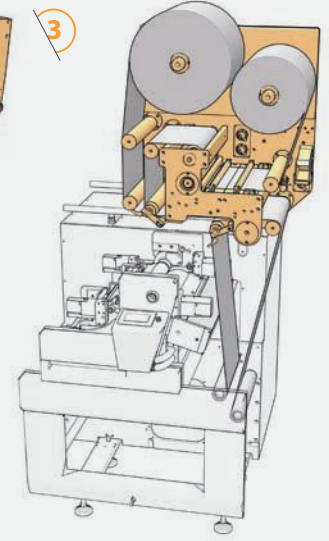
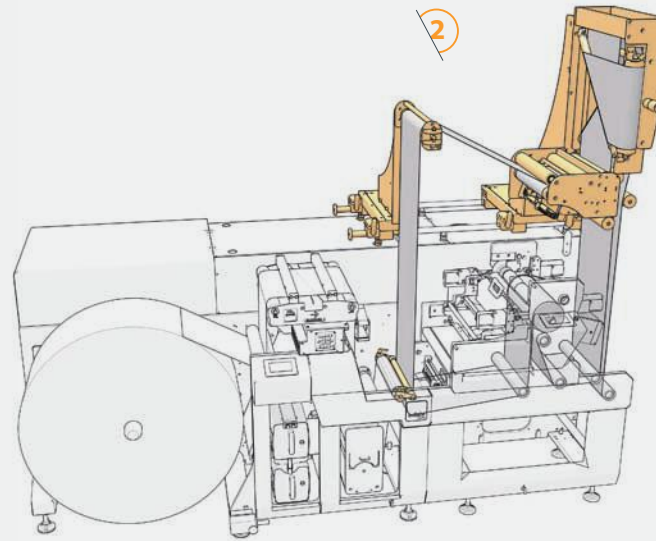
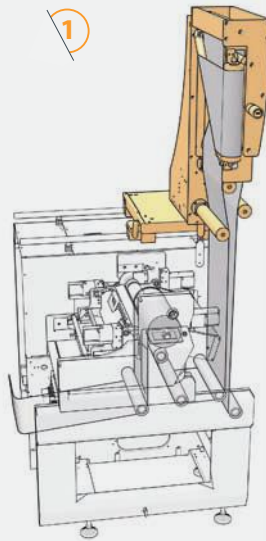
## STANDARD FEATURES

- UniPrint.
- AiiR motorised inking, impression & cross register.
- Job storage & automatic pressure +inking setting recall.
- Gearless impression.
- Set-up on the fly.
- Pre-register.
- Short web path.
- Dual axis servo drive.
- Quick change ink system.
- Print to mark register.



## RAIL MOUNTED OPTIONS

- 1 Rail mounted turnbar
- 2 Rail mounted delam / relam
- 3 Rail mounted re-register lamination
- 4 Cold foil / cast & cure / UV lamination
- 5 Self wound lamination
- 6 Self adhesive lamination with nip
- 7 Rail mounted SPG RSI compact screen
- 8 Soft tension film on film. Lamination and cold foil

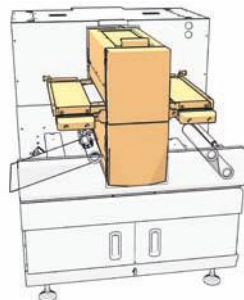


# MODULAR CONVERTING SYSTEM

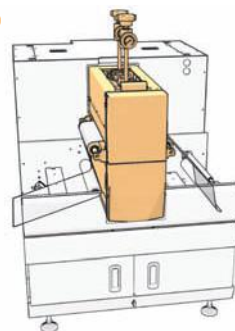
Converting station with multiple cutting options



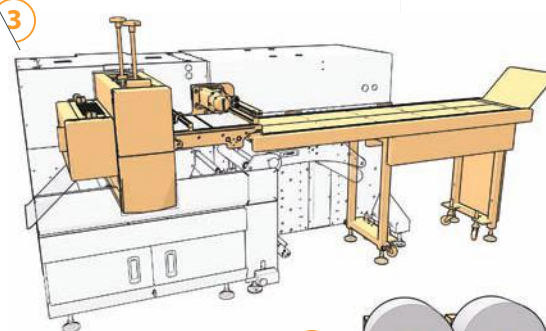
1



2



3

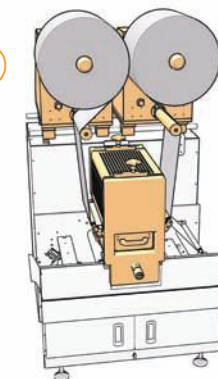


## DIE CUT STATION OPTIONS

Die converting base designed to receive any of the following die cassettes.

- 1 EZ Die. (see page 31)
- 2 Full Rotary. (see page 32)
- 3 VLS - Variable Length Sheet cutting. (see page 33)
- 4 Hot Foil. (see page 32)

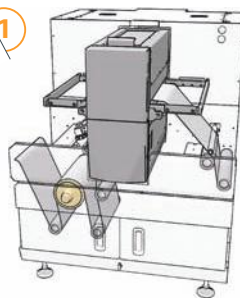
4



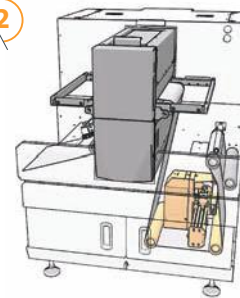
## CONVERTING BASE OPTIONS

- 1 Servo driven outfeed drive roller.
- 2 Inspection camera post die cutting (not available with hot foiling).
- 3 Back scoring pre die cutting.
- 4 Inspection camera pre die cutting (not available with hot foiling).

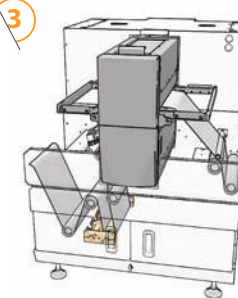
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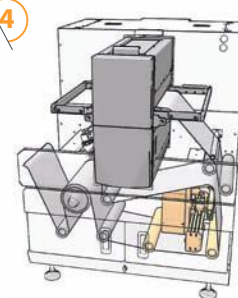
2



3



4







### KEY FEATURES

- ⦿ 60 second tool change.
- ⦿ Pre-registration of tool.
- ⦿ Motorised cross register and pre-setting.
- ⦿ Automatic linear cut to mark register.
- ⦿ Automatic die pressure throw-off.
- ⦿ Automatic waste matrix pickup.
- ⦿ Ergonomic working height.



## EZ DIE CONVERTING STATION

Converting station with multiple cutting options



### EZ Load quick change storage cart

- ⦿ Lightweight aluminium cart with castors for easy manoeuvring.
- ⦿ Autonomous docking mechanism allows single operator to load largest tool quickly, safely and with no additional lifting equipment.
- ⦿ Store a single EZ Die tool safely, ready for the next job.

## FULL ROTARY DIE CUTTING

Heavy duty servo driven rotary die cut station

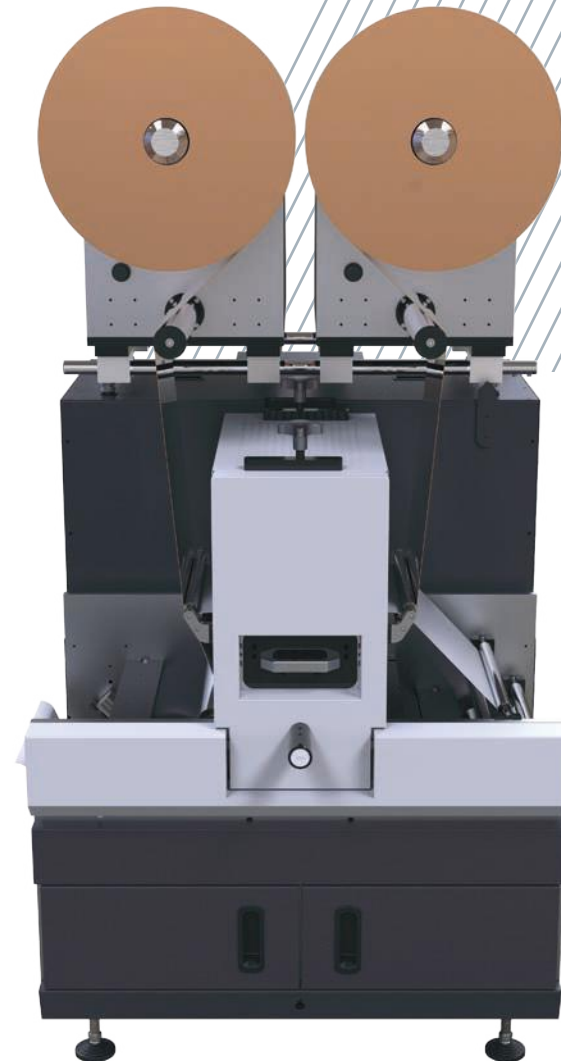
## HOT FOIL STATION

Rotary hot foiling station



### KEY FEATURES

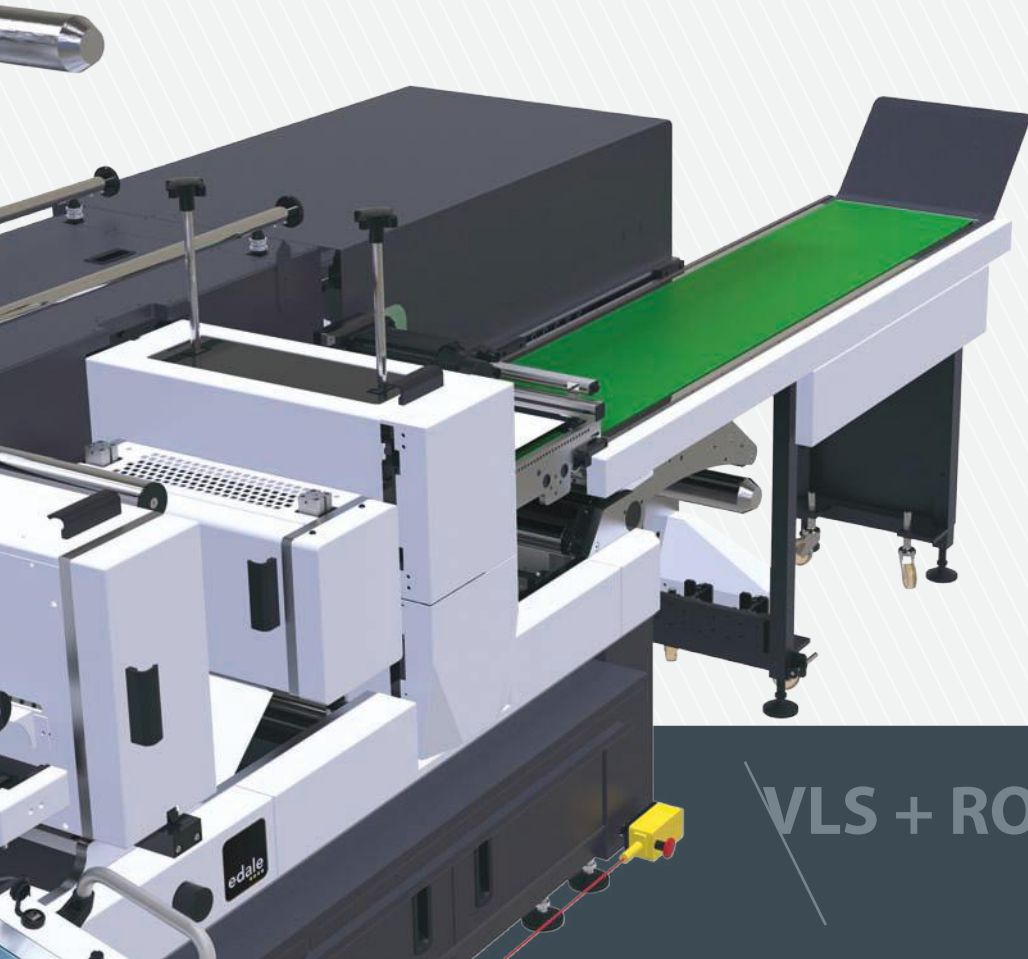
- Heavy duty steel frame construction.
- Removable anvil roller for top and bottom cutting.
- Die pressure beam assy.
- 360° motorised linear register.
- Manual cross register control.



### KEY FEATURES

- Pressure bridge with automatic throw-off.
- Electrical heating shaft for mounting engraved brass dies.
- Rubber covered anvil roller.
- Control module with digital touch screen display.
- Die base rail system.
- ø450mm / 18" foil winders with 76mm / 3" mandrels.

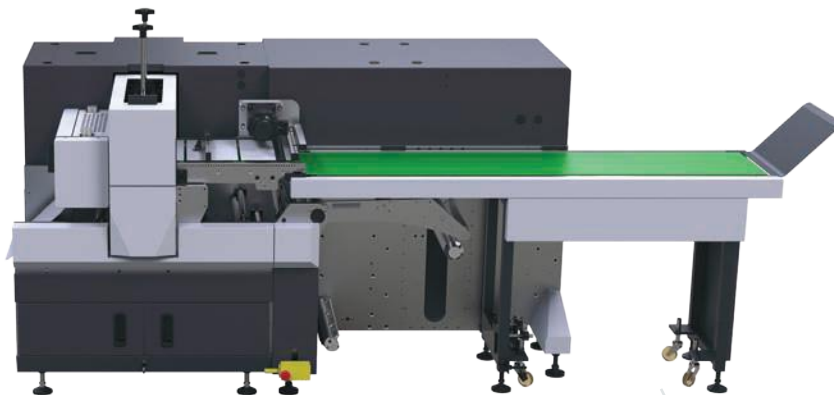




### CUTTING FEATURES

- Variable length sheeting & perforation using a cam profile eliminates need for multiple tools.
- Die mounted servo driven outfeed drive assists sheet and product delivery to conveyor.
- Heavy duty steel frame construction.
- Removable anvil roller for top and bottom cutting.
- Die pressure beam assy.
- 360° motorised linear register.
- Manual cross register control.

## VLS + ROTARY SHEET CUTTING

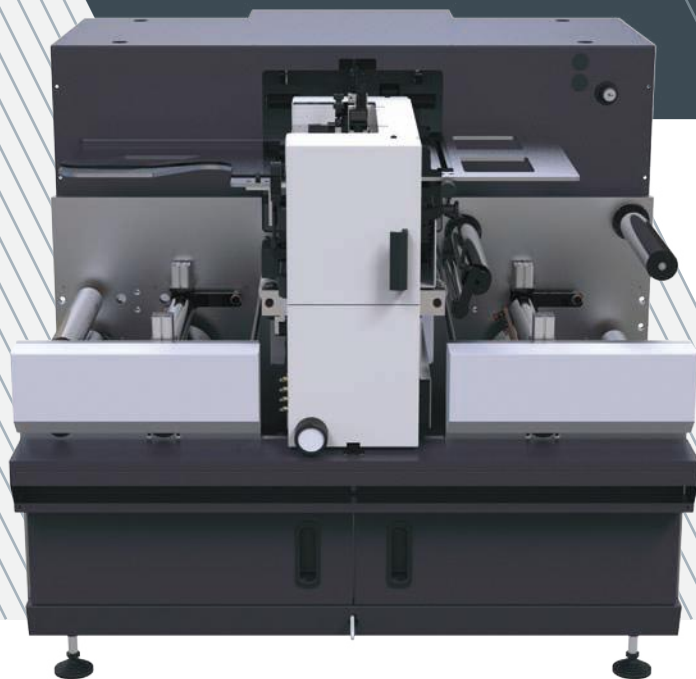


### SHINGLING DELIVERY CONVEYOR FEATURES

- Independently driven take-off conveyor with variable speed control.
- Accelerates and separates products after cutting.
- Minimum product length in web direction 100mm / 4".
- Suitable for paper, self-adhesive and card.
- 1800mm / 6' conveyor with variable speed.
- Digital batch counting with shingle gap to identify batch, controlled via HMI.
- Delivery and conveyor settings stored within the Job Sheet.
- Wheel mounted to aid removal and storage.

# SEMI ROTARY CONVERTING STATION

Dual mode semi & full-rotary automated die cutting system



## KEY FEATURES

In semi-rotary mode, the magnetic die does not need to change when moving from one format size to another. It can operate like this at speeds up to 65m/min.

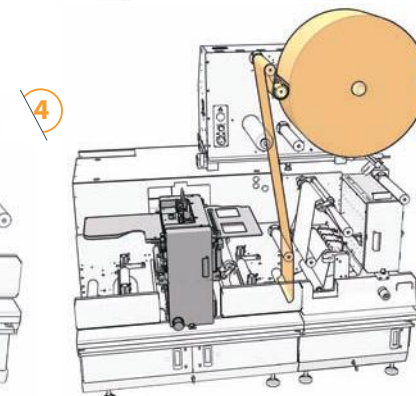
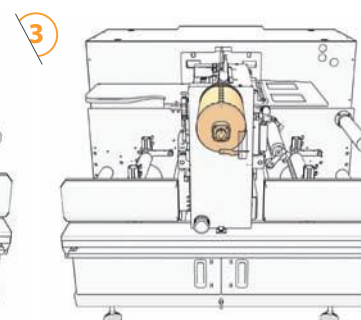
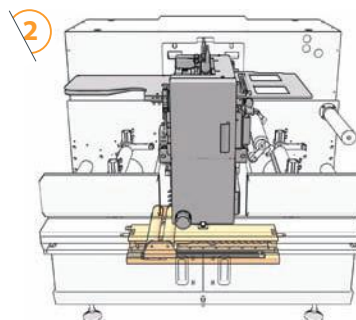
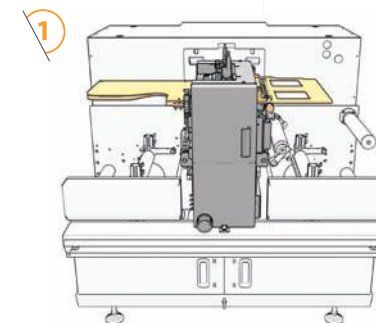
This reduces the downtime between each job and increases safety in the workplace by negating cylinder changes. Its ease of use and setup is pioneered by an Automatic Die Unload/Reload system for flexible dies which will automatically strip the unit of its old flexi-die and apply a new one in seconds, reducing inter-operator inconsistencies.

## BENEFITS

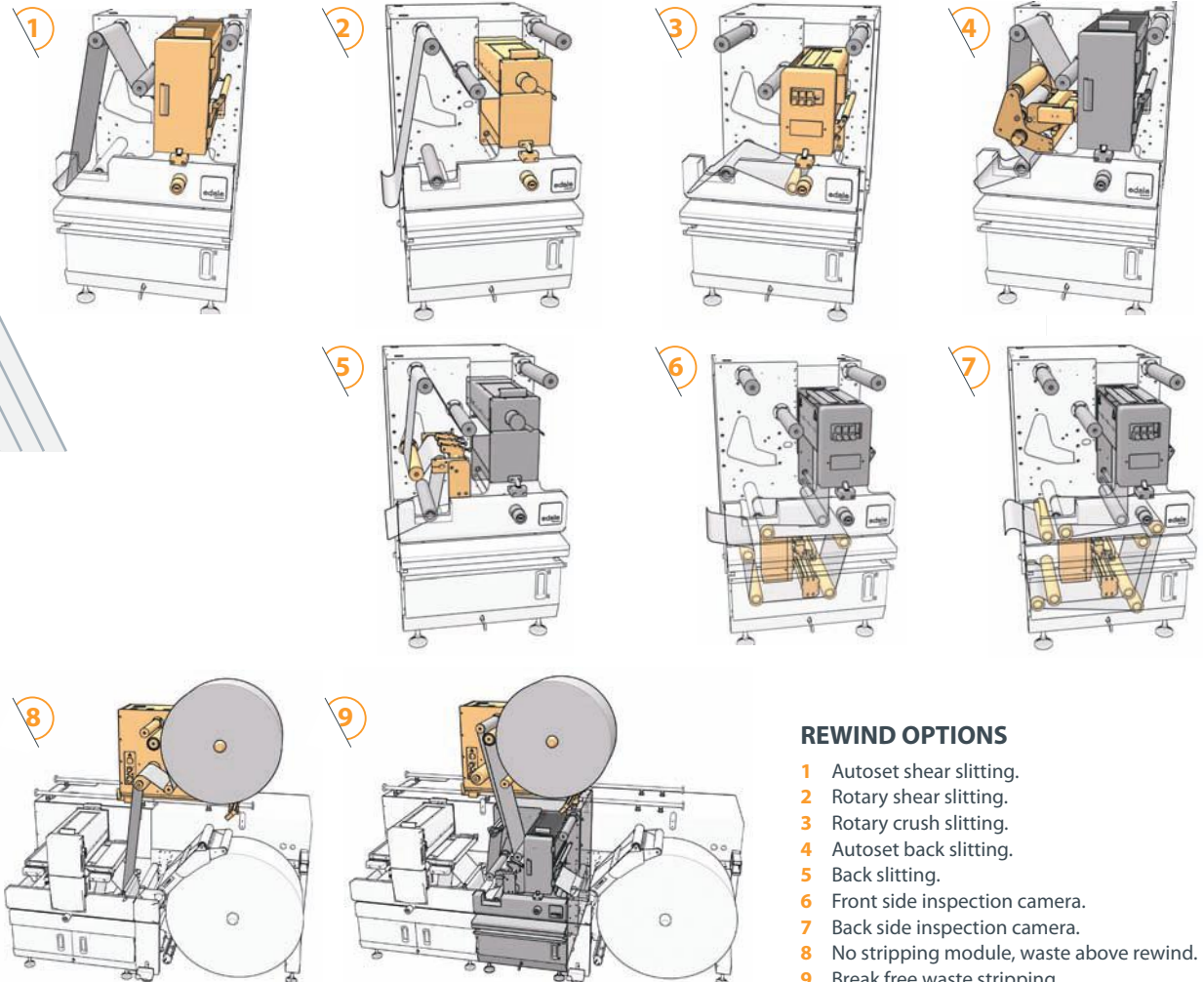
- Drastic reduction of set up time.
- No need for heavy die moving equipment.
- Allows different sized die plate sizes to be mounted on the magnetic cylinder.
- Re-registers to the print repeat to ensure correct cut every time.
- Automatically unloads the previous die plate and loads the next die.
- Automatically syncs to mark.
- Able to run full rotary in the same station.

## SEMI-ROTARY FEATURES

- 1 Auto die load.
- 2 Semi-rotary.
- 3 Pre-register.
- 4 Auto matrix pickup.



# SLITTING & WASTE STRIPPING STATION



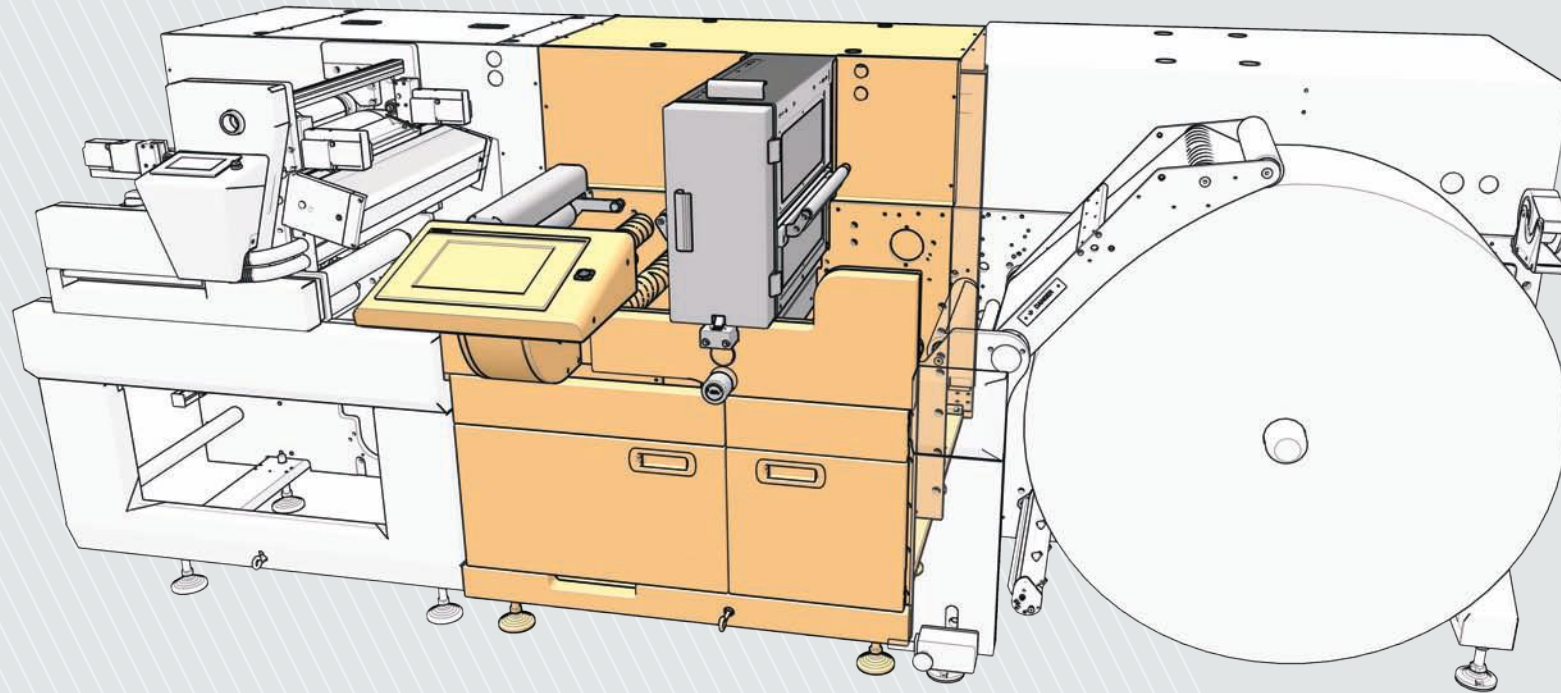
## STANDARD FEATURES

- Adjustable peel roller for waste stripping.
- Mounting position for multiple slitting/back slitting options.
- Rail mounted position for waste matrix rewind.

## REWIND OPTIONS

- 1 Autoset shear slitting.
- 2 Rotary shear slitting.
- 3 Rotary crush slitting.
- 4 Autoset back slitting.
- 5 Back slitting.
- 6 Front side inspection camera.
- 7 Back side inspection camera.
- 8 No stripping module, waste above rewind.
- 9 Break free waste stripping.



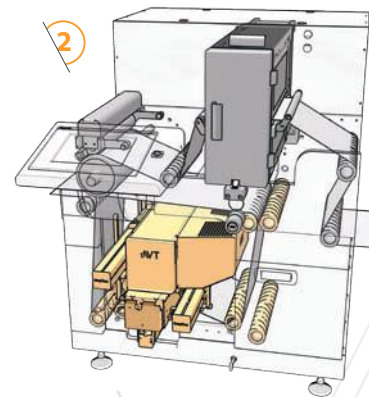
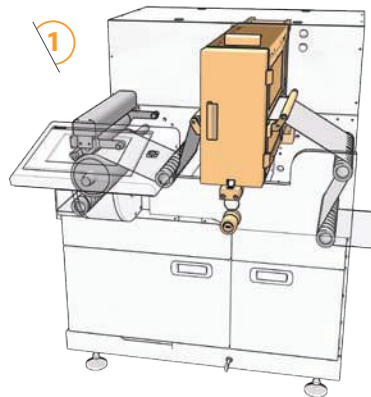


## ROLL TO ROLL DRIVE STATION

Space saving outfeed drive module when die cutting is not required

### STANDARD FEATURES

- Servo driven outfeed nip with variable tension control.
- Machine control centre.

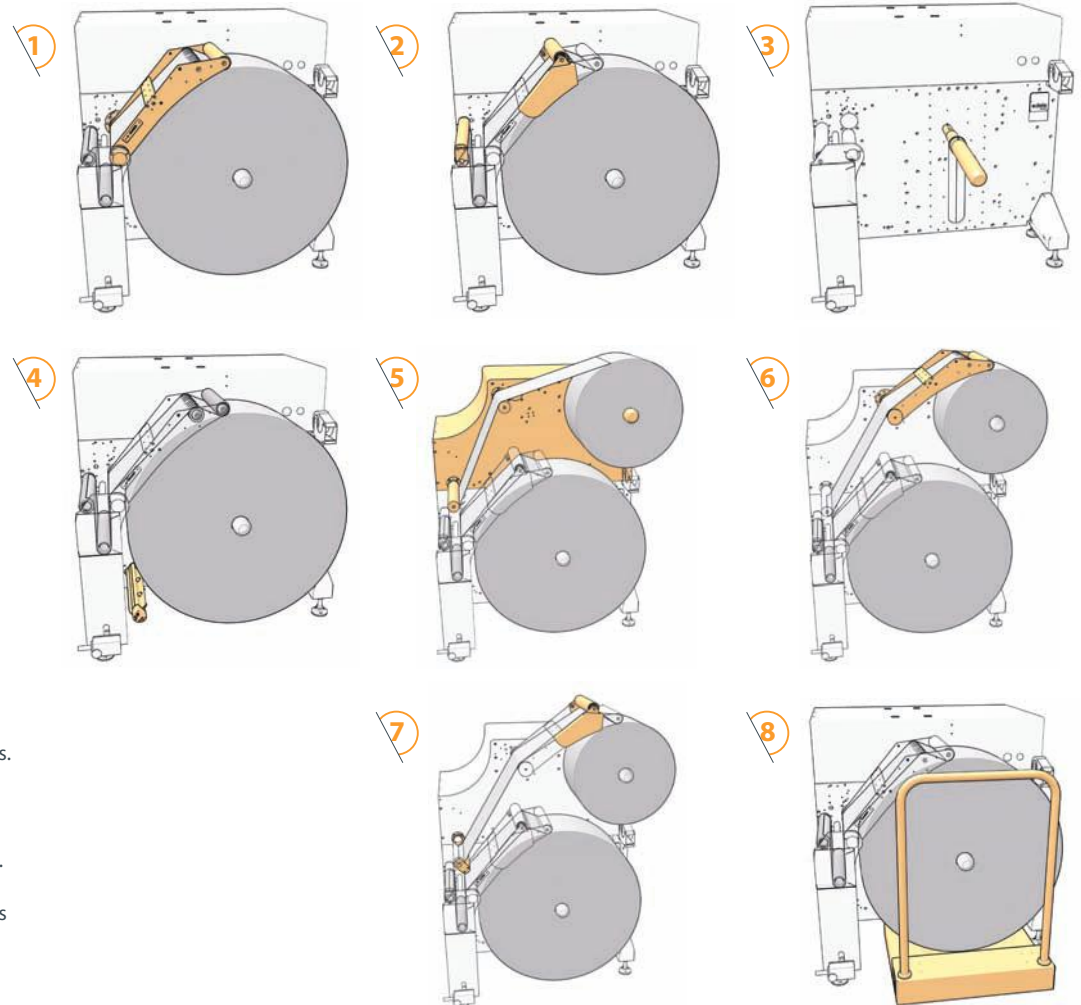
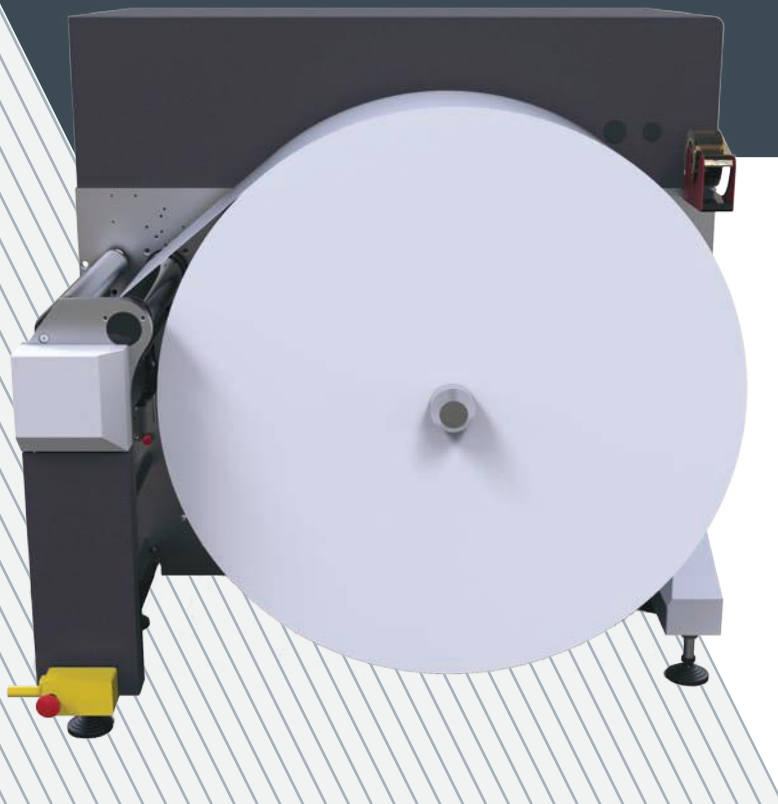


### OPTIONS

- 1 Mounting position for optional slitting and laminating technologies.
- 2 Mounting position for optional AVT Reg and EZ Reg cameras.



# REWIND STATION

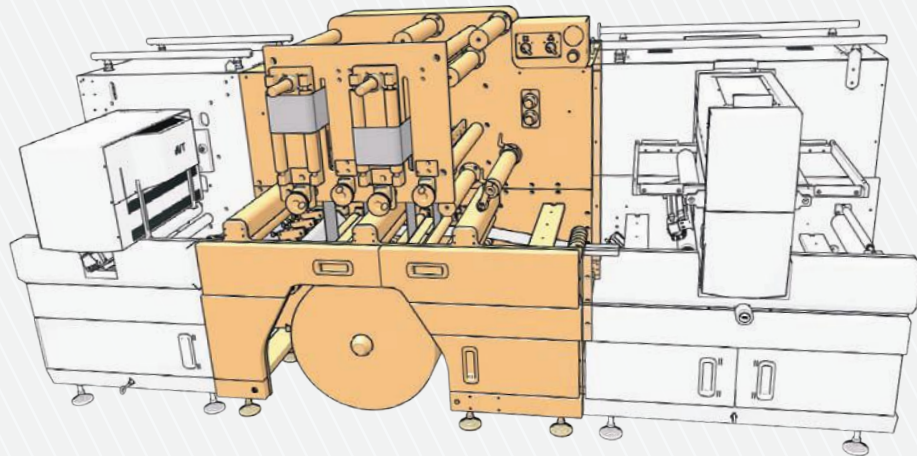


## STANDARD FEATURES

- Fixed position air mandrel for 76mm | 3" internal diameter cores.
- Servo driven with closed loop taper tension control.
- Air balanced dancer roll for soft tension control.

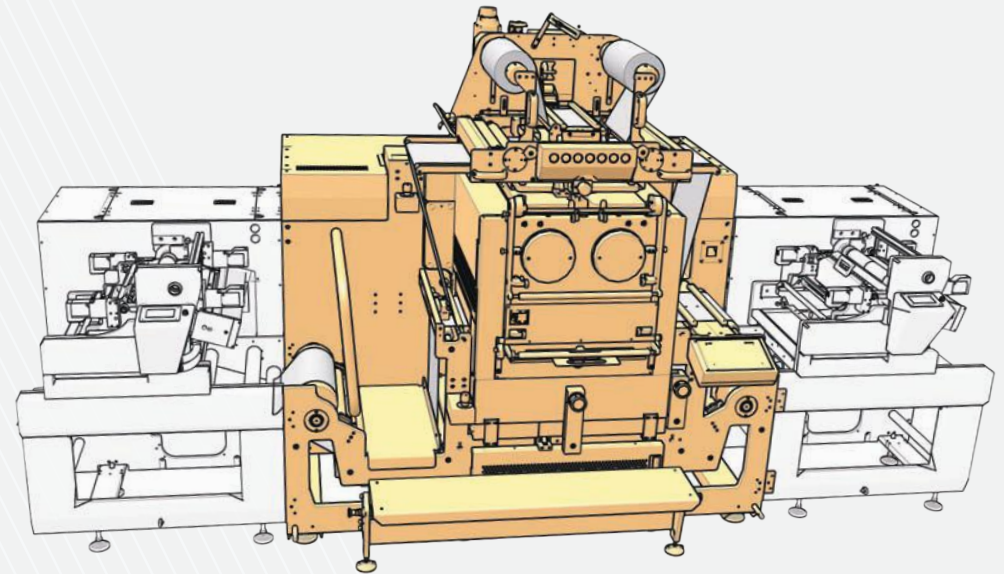
## REWIND OPTIONS

- 1 Roll follower for main rewind with variable pressure control.
- 2 Automatic web advance clamps.
- 3 Motorised roll lift.
- 4 Anti-static system.
- 5 Second rewind.
- 6 Roll follower for second rewind. with variable pressure control.
- 7 Automatic web advance clamps for second rewind.
- 8 Roll trolley.



### CROSSOVER MODULE

Single pass, two and three ply peel and read label production.



### BIG FOOT

50 ton hot foil and embossing module.

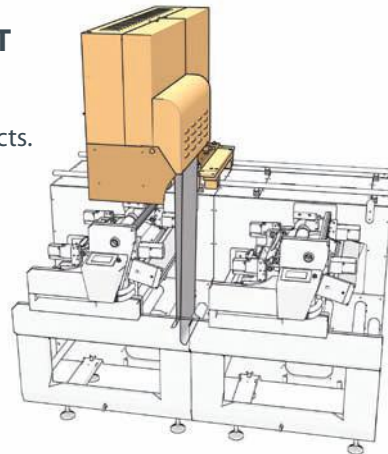
## EMBELLISHMENT OPTIONS

Additional modules to extend your machine capabilities

### DIGITAL EMBELLISHMENT

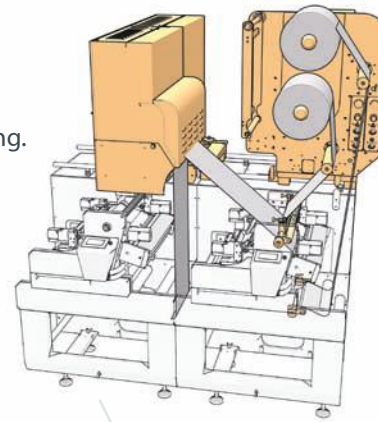
#### EFX BAR

- ⦿ High build tactile varnish effects.
- ⦿ High opacity white.
- ⦿ Black or grey (peel & reveal).



#### DIGIFOIL

- ⦿ Digital foiling.



# FL3 specification

Web Width:	430mm   16.9"	510mm   20.1"
Printing width flexo:	420mm   16.5"	500mm   19.7"
Anilox face width:	430mm   16.9"	510mm   20.1"
Repeat length flexo:	8 – 24" (203.2 – 609.6mm) 1/8" increments	8 – 24" (203.2 – 609.6mm) 1/8" increments
Repeat length standard rotary die cutting:	8 – 24" (203.2 – 609.6mm) 1/8" increments	8 – 24" (203.2 – 609.6mm) 1/8" increments
Repeat length EZ Die:	10 – 24" (254 – 609.6mm) 1/8" increments	14 – 24" (254 – 609.6mm) 1/8" increments
Repeat length automated finishing system in full rotary mode:	12 – 24" (304.8 – 609.6mm) 1/8" increments	N/A
Repeat length automated finishing system in semi-rotary mode:	2 – 24" (50.8 – 609.6mm) 1/8" increments	N/A
Mechanical speed flexo: NB: Actual run speeds are subject to application, performance of substrate, inks and consumables.	5-200 m/min	5-200 m/min
Substrate thickness: NB: Thin and heat sensitive substrate require specification of chill rolls and soft rewind tension.	12 - 450 microns 0.5 - 18 pt	12 - 450 microns 0.5 - 18 pt
Tension range:	10 - 500N	10 - 500N
Print register - Maximum deviation colour to colour for print stations in sequence:	+/- 0.1mm	+/- 0.1mm
Print register - Mode deviation colour to colour for print stations in sequence: NB: Accuracy subject to the use of good quality materials and automatic register system at steady speed.	+/- 0.05mm	+/- 0.05mm
Max roll capacity unwind / rewind:	1000mm   40" 430kg   950lb	1000mm   40" 430kg   950lb
Max roll capacity waste matrix:	800mm   31"	800mm   31"
Standard unwind / rewind core diameters:	76mm   3"	76mm   3"
Recommended plate thickness:	1.14mm   45 thou	1.14mm   45 thou
Recommended tape thickness: NB: Other plate and tape combinations available on request.	0.51mm   20 thou	0.51mm   20 thou
Electrical Supply:	400V 3 Phase + N + E	400V 3 Phase + N + E
Voltage & frequency stability: NB: In regions with unstable power supply it is highly recommended to install a voltage stabiliser.	-6%/+10%	-6%/+10%
Air Supply:	5.5 bar	5.5 bar
Typical current demand for an 8 colour UV FL3:	153 Amps	173 Amps
Expected power for an 8 colour UV FL-3: NB: Electrical and air loading is subject to configuration and Edale MUST be consulted for confirmation of actual loading.	106 KVA	120 KVA
Recommended press room temperature:	Max 25°C	Max 25°C
Thermal fluctuation:	Max +/- 5°C	Max +/- 5°C
Relative humidity:	25% / 60%	25% / 60%

These values are based on an 8 colour UV press and are a guideline only. Actual values to be confirmed on sales quotation. Not all options available at 510mm web width.



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