

# 07

reasons for choosing

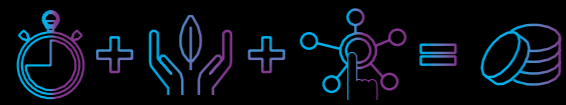
DIE CREASING AND LASER CUT  
**eclipse**

No-stop digital die-cutter  
Platen reticular creasing  
Laser cutter



○FFSET DIGITAL POST PRESS  
MACHINES

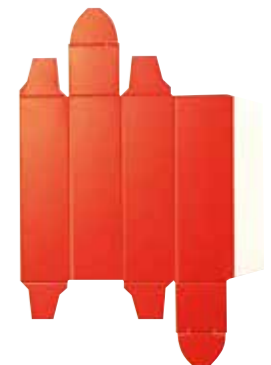
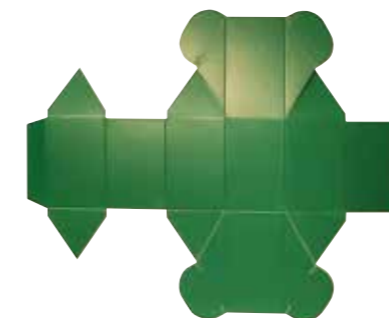
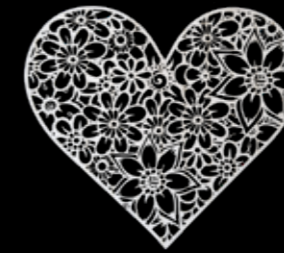
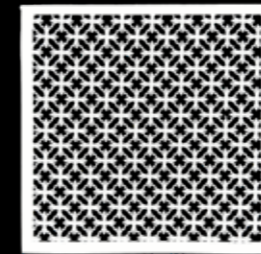
# 07



New Horizons.  
New challenges.

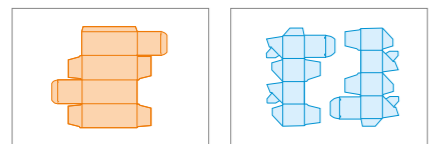


## Jobs examples

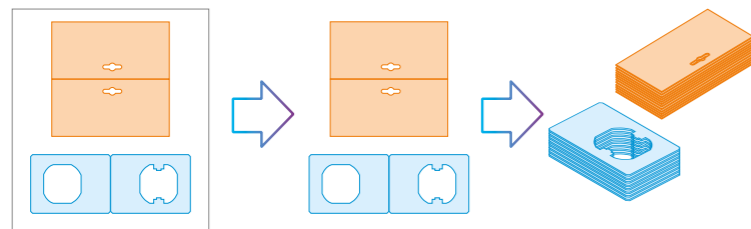


### Rapid return on investment for:

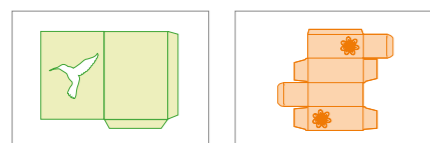
+ **PRINT & PACKAGING ON-DEMAND:** All types of processing



+ **LARGE BATCHES:** simple jobs, provided as stacked forms.



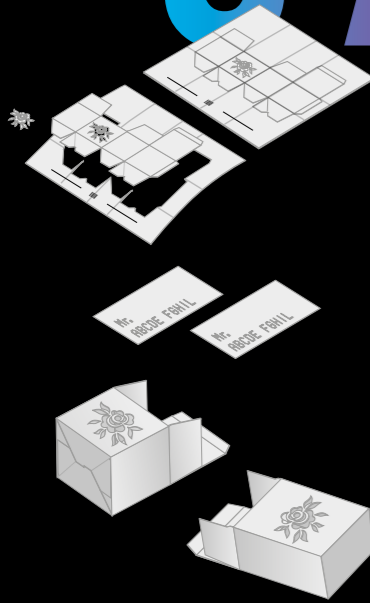
+ **SMALL/MEDIUM BATCHES:** commercial jobs, artistic jobs, complex/difficult jobs



### Products:

- Packaging
- Beverage holders
- Dividers / inserts
- Counter displays
- Secondary packaging
- POS - display components (corrugated)
- Customized products
- E-commerce packaging
- Blister cards / hanging cards
- Luxury packaging
- Folding carton packaging
- Greeting cards
- Pocket folders
- Pos tags
- Other.... (Brochures, flyers, invitations, business cards)

# 07



## What's Eclipse?

Digital die-cutting machine, automatic reticular creasing and laser cutting, modular in B3, B2, B1 sizes.

Equipped with a pallet feeder with barcode recognition system, which starts the continuous and non-stop programming of the entire subsequent working process.

The "soft wash" system allows the sheet to be cleaned from any traces of smoke left by laser cutting and reduces the burning sensation.

Various devices allow blanking and stripping operations to be performed.

Multi-output delivery allows stacking of the whole or partially cleaned sheet from the outer frame or delivery of individual stacks of finished jobs.

# Why choose Eclipse?

01. To automate the die-cutting process and make it dynamic, fluid, flexible and smart without any stops among different jobs.
02. The new working model eliminates the number of processing steps and costs, making micro-runs (1 sheet), medium-runs and, in some cases, even large runs, profitable.
03. Limitless possibility of graphic solutions that allow offering new, unique and high quality products with a wide choice of materials and thicknesses.
04. Flexibility in orders handling. Able to handle requests ranging from sampling to quantity production with the same machine.
05. Reduction in processing steps and costs (dies, settings, etc.).
06. Machine and process management do not require paper converting skills. Qualified personnel (graphic designers, typesetters, etc. ....) work from the office.
07. Four standard machines available and possibility of tailor-made configurations.



Graphic arts

Packaging and luxury packaging

Packaging on-demand

Commercial printing

Laser decoration

Variable data cutting

FUSTELLA TAGLIO LASER  
**eclipse**



## The "unique" advantages of Eclipse

The "intelligent management" is done remotely. The operator does not need special skills as he/she is only required to loading/unloading the machine.

**Real-time correction** of cutting paths or creasing positions.

**Total elimination of wooden, plastic or iron dies** with consequent savings in terms of time, materials, storage, and handling.

**Continuous workflow management** with **automatic** and **immediate** job changeover. Eclipse never ever stops.

**The same machine handles prototypes**, samples and final production of micro, medium and large runs.

**From PDF to finished product without any software** (proprietary CAD) and/or operator.

**The graphic design features a parametric system** that allows rapid execution of dimensional adjustments according to requirements.

**The highest quality of products**, which are delivered perfectly clean thanks to the "soft wash" system which gently removes any eventual smoke trace.

**Extremely rapid return on investment**, not only in the management of micro/small runs but also in medium and large productions.

**Various patents**, which are the result of innovation and knowledge of practical needs, **allow unique processes and works**.

- ① Automatic register with print mark reading
- ② Programming of number and position of parallel creases
- ③ Continuous checking and calibration of crease position and parallelism
- ④ Die-creasing

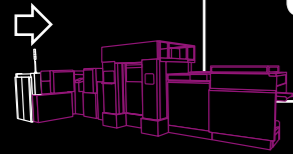


Speed, versatility, sustainability, digitalization, and process integration

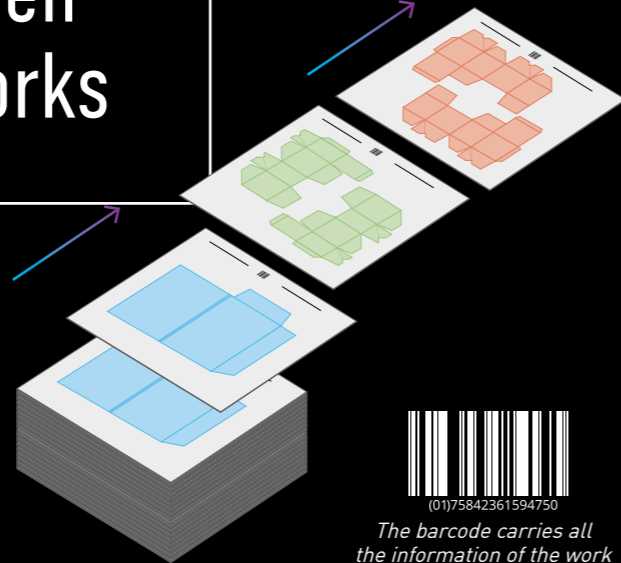
# 01



## No stops when changing works

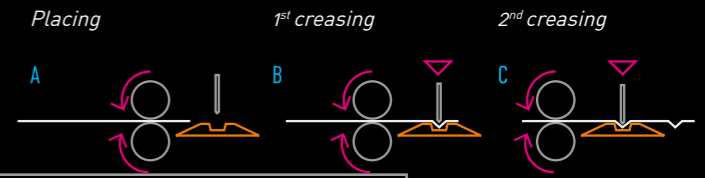


Automatic job setup by barcode reading



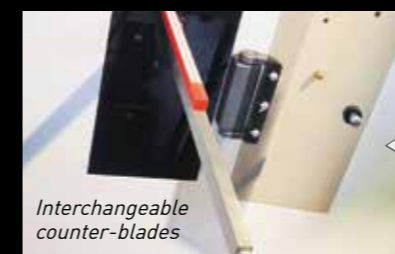
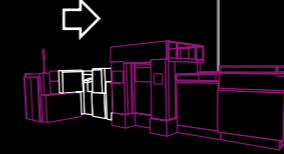
The barcode carries all the information of the work

# 02

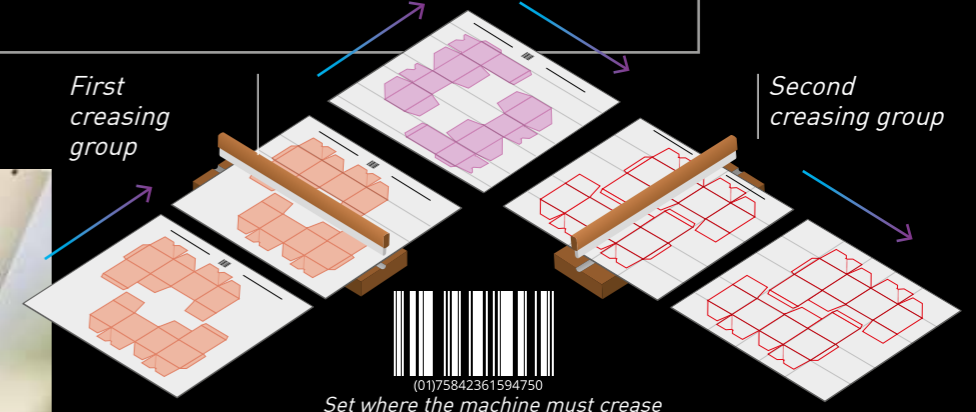


PATENT PENDING

## In-line platen with programmed creasing



Interchangeable counter-blades



Set where the machine must crease



Pallet feeder



### Dynamic set-up - continuous workflow

The automatic job set-up through barcode reading allows an easy handling of the machine (no specialized operator) and a constant workflow even in case of continuous changes.

- + **CONTINUOUS BAR CODE READING** detecting production data, creasing grid, cutting areas, washing, cleaning and stacking information.
- + **AUTOMATIC REGISTER** based on printing, not on the sheet (ideal for digital printing).
- + **AUTOMATIC RUNNING** (no operator intervention): for sheet squaring, cross creasing, cutting, stripping & blanking and stacking operations.
- + **IDEAL FOR HANDLING SHORT RUNS.** It allows job changes without stop.
- + **ALSO PERFECT FOR HANDLING MEDIUM TO LONG RUNS.**
- + **LAST BARCODE READING** at output for control and collection of the effective production data



First and second creasing groups



90° sheet direction change



### Mechanical creasing blade



Carried out in line; first on the long side and then on the short side using a steel blade and interchangeable counter-blades.

It offers the following advantages:

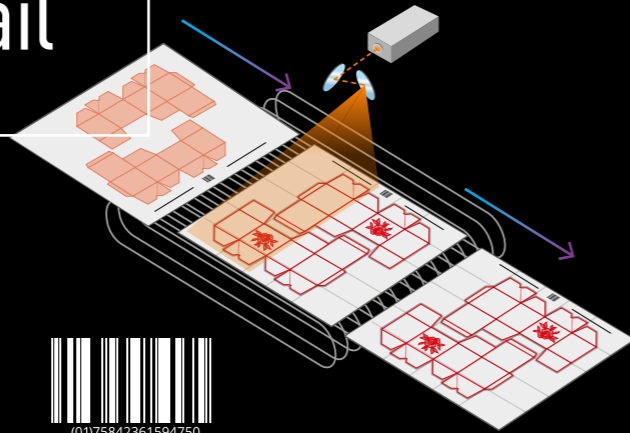
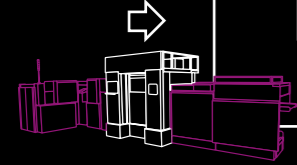
- + **TOOLS SETTING:** no cost; no wooden, iron or plastic moulds/frames needed.
- + **SUSTAINABILITY:** no disposal of die-cutting materials, no storage and handling of dies.
- + **SET-UP TIME:** no machine downtime for preparing the shapes/die-cuts, no downtime between one job and the following one.
- + **POSITIONING:** each crease is programmable and changeable.
- + **DISTORTION:** parallel reticulated creasing does not distort the sheet; the knowledge of the sheet shortening at each crease generates a perfect layout and overlapping of the crease. perfect paging and overlapping between crease and cut.
- + **QUALITY:** perfect crease (platen type) both in fibre and counter-fibre with any material and weight.

# 03



PATENT PENDING

## Perfect cut in every detail



Provides the laser information about cutting and perforation positions, etc.

# 04



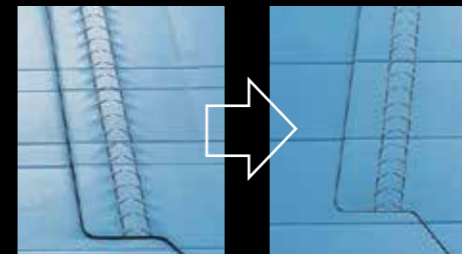
PATENT PENDING

## Sheet surface cleaning

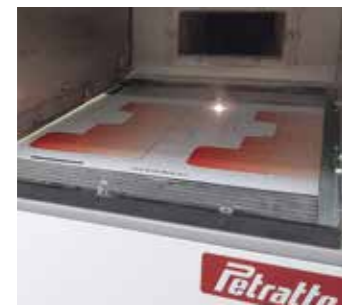


Before

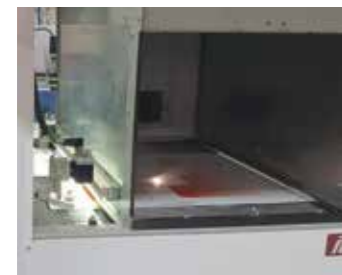
After



The machine knows exactly where to operate



Feeding system by means of steel cables and lower suction



Auto-register with 2 cameras



## Laser cutting, perforation and secondary creasing (NEP Thecnology – Never Ending Power)



The laser cutting system guarantees a definition and detail that no traditional die-cut can achieve.

- + **LASER CUTTING PRECISION**, thanks to the steel cable paper transport and the lower suction that guarantees a perfect flatness of the sheet during cutting and feeding.
- + **CUT AREA REGISTER** with 2 cameras which detect the print marks and the sheet edges.
- + **FULL USE OF THE CUTTING AREA**; operates on 100% of the sheet surface.
- + **LOW MAINTENANCE COSTS**: NEP (Never Ending Power) system with periodic replacement of a small CO2 cylinder only. IT maintains laser power constant over time and avoids the need the laser source replacement (not like sealed laser systems).



Soft wash system



## SOFT WASH" treatment

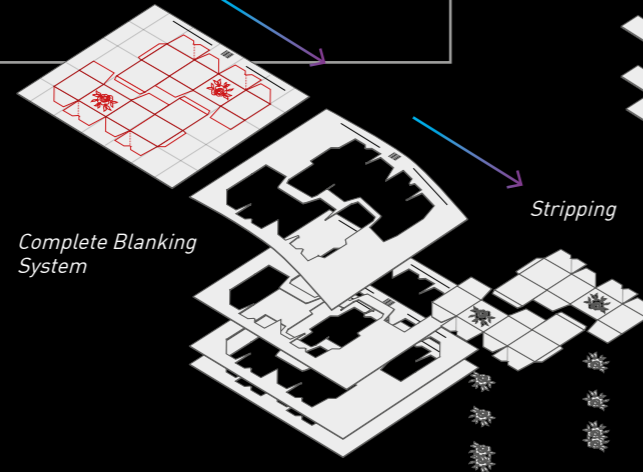
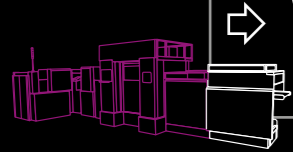
A cleaning system removes any smudges that can be caused by the laser cutting process. A first pad wets and removes impurities, a second pad stabilizes the cleaned surface.

- + **HIGHEST QUALITY**. Perfectly clean products.
- + **REMOVAL** of possible smudges, typical of laser cutting, that may occur with certain types of paper or print.
- + **OPTIONAL USE**. The washing operation can be bypassed when working on materials that do not require it.

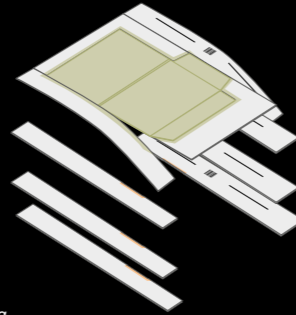
# 05



## Choice of waste cleaning



Semi-blanking



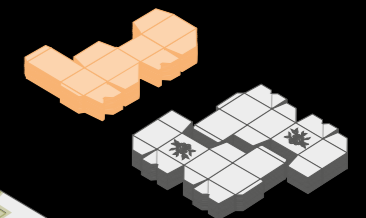
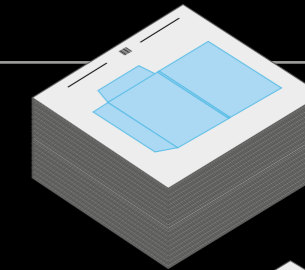
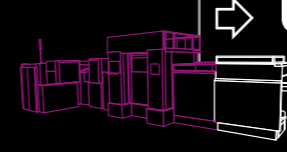
Stripping



# 06



## Choice of collection type



Stripping



Semi blanking



Blanking

### Automatic waste cleaning: Stripping / Blanking



It allows to obtain partially or totally cleaned products from the processing waste.

Various operations allow to:

- + REMOVE THE INTERNAL WASTE FROM WORKED FORMS (stripping).
- + REMOVE THE SIDE STRIPS FROM THE WHOLE SHEET (semi-blanking).
- + REMOVE THE SIDE STRIPS + THE INSIDE SCRAPS FROM THE WHOLE SHEET (blanking).



Stacking



Delivery



### Collection and stacking of shapes

Only Eclipse offers a choice of 4 stacking options.

- + THE POSSIBILITY OF CHOOSING THE MOST APPROPRIATE STACKING SYSTEM according to the type of work to be carried out and print runs.
- + MAXIMUM FLEXIBILITY TO HANDLING QUANTITIES PROCESSED per batch.
- + MAXIMUM FLEXIBILITY in the processing of micro, small, medium and large batches.
- + OFFERS THE FOLLOWING POSSIBILITIES
  - full sheet stacking with internal stripping
  - sheet stacking with semi side blanking
  - stacking with total blanking
  - individually stacked shapes.

# 07

## Standard and taylor made solutions thanks to the modular design of the system

unique functionalities PEclipse program Machine composition and works

	ECLIPSE B3	ECLIPSE B2	ECLIPSE B2 PLUS	ECLIPSE B1
<b>GENERAL FEATURES</b>				
Size max	B3	B2	B2	B1
Size min	A4	520 x 520mm		
workable board thickness	0,11 / 0,6 mm.			
microwave	N+F+g up to 2,5 mm.			
speed (depends on shapes) - sheets/hour	1000	1500	3000	2000
laser cutting - commercial processing	✓	✓	✓	✓
mechanical creasing + laser cut: brochures greeting cards	✓	✓	✓	✓
mechanical cross creasing + laser cut: brochures, greeting cards, boxes		✓	✓	✓
changeover time	1-10 minutes	10 seconds - 5 minutes		
<b>FEEDING / SHEET FEEDER</b>				
stack feeder + register	✓			
pallets		✓	✓	✓
✓ barcode reading change work parameters: creasing, laser cutting, stacking		✓	✓	✓
<b>CREASING</b>				
auto-register creasing	1	2	4	4
✓ self-programmable parallel creases	manual	✓	✓	✓
auto-programmable cross creases (1 step)			✓	✓
auto-programmable cross creases (2 steps)		✓		
<b>LASER CUTTING</b>				
self-registering laser cutting	2	2	2	2
suction table for sheet transport with calibrated steel cables	✓	✓	✓	✓
laser	CO2 - galvanic movement			
registering print	marks/sheet edges			
net cutting area:	100%			
Laser power (W)	350 - 550 - 750 - 1100			
simplified maintenance	constant power, NEP technology, (no sealed laser)			
<b>BLANKING STRIPPING</b>				
frame removal	✓	✓	✓	✓
blanking / stripping			✓	✓
<b>STACKING</b>				
✓ shingle/batches	✓	✓	✓	✓
pile			✓	✓
✓ pile + criss cross			✓	✓
✓ single separate forms			opz.	opz.
<b>DIMENSIONS</b>				
Machine dimensions	5,70 x 1,70 x 2,10 m	4,70 x 1,70 x 2,10 m	7,50 x 3,00 x 2,10 m	9,80 x 3,00 x 2,10 m
Machine weight	3500 kg	4000 kg	5800 kg	7200 kg



**Eclipse B3**  
Commercial printing



**Eclipse B2**  
Commercial printing + folding carton + packaging



**Eclipse B2 plus**  
**Eclipse B1**  
Commercial printing + folding carton + packaging

### SOFTWARE

- It is possible to import files: PDF, EPS, PLT, DWG, DXF.
- Integrated CAD drawing software to modify the working layouts.
- Automatic positioning of sealing notches
- Adding, removing, moving, and modifying sealing notches.
- Automatic optimization of the cutting patterns, with reference to shrinkage due to creasing and paper dimensions.
- Association of the pen file to the job (set speed and power)
- Preview of creases and cuts
- Graphic visualization of job list
- Possibility to process files remotely or on the machine. (networked machine)
- Customized integration of production and downtime data with external management software (optional)
- Automatic file processing without operator input



## SUSTAINABILITY

Eclipse is an integral part of the production process. It provides extraordinary support for corporate sustainability projects which, increasingly, are leading to the review of processes, with the common goal of meeting the needs of the present, without compromising the future of the new generations.

Many aspects where Eclipse contributes to Production Sustainability have been indicated within the description of the individual steps. Below is a summary of the areas of impact:

### ELIMINATION OF THE WOODEN DIES AND THE PLASTIC SHAPES FOR THE CREASING

Elimination of the storage space

Elimination of the cost

No need for disposal of dies and the materials of which they are composed (plastic, wood...)

Increased flexibility no longer related to the individual single die

### GREATER PRODUCTION FLEXIBILITY AND CONSEQUENT REDUCTION OF QUANTITIES OF PRODUCT TO BE PROCESSED.

Lower quantities stored at the user's premises with consequent reduction of the obsolescence resulting in disposal of unused products

### LASER CUTTING WITH NEP TECHNOLOGY (NEVER ENDING POWER)

The laser source does not lose power and does not require replacement with consequent disposal.

The power is maintained by replacement of the (recyclable) CO2 cylinder.

Very low maintenance service.

### REMOTE TECHNICAL SUPPORT

Fast troubleshooting

Limited downtime

Travel and trips minimized resulting in reduced use of means of transportation.

### PRE-SERIES WASTE ELIMINATION



## DIGITALIZATION

Automatic management from after printing to finished product with automatic data acquisition for each processing step.

Complete work traceability with data exchange between the machine and the company's management system.

Automatic file processing without any operator input (Printing/packaging on-demand).

Industry 4.0.

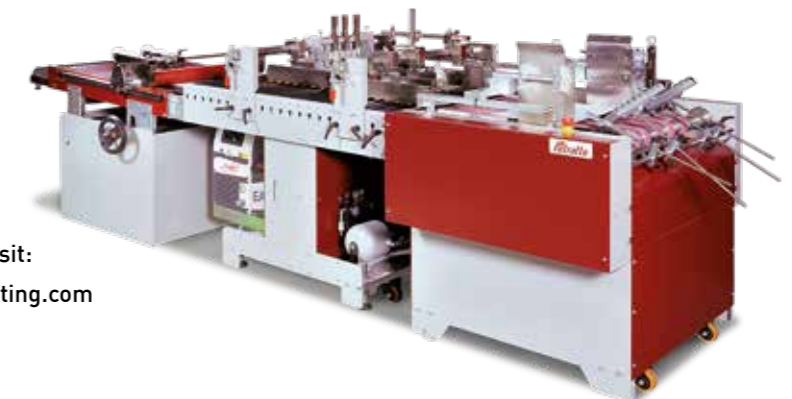


## FINISHING

Folding & gluing

More information, visit:

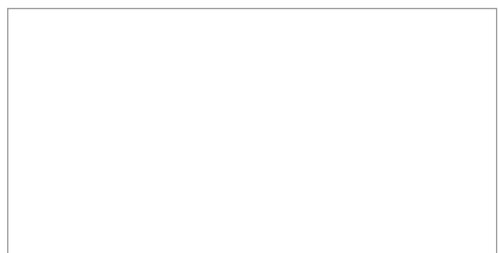
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