# **SPF** Foil stamping

#### FOIL STAMPING SOLUTIONS FOR HIGH-TECH DEMANDING APPLICATIONS

THE SPF1000 Foil Stamping line combines full flexibility and simplicity with the most advanced technology, integrated in a non-stop reel-to-reel, high-precision foil stamping solution. This line can work stamping foil to register with the highest precision.

It can integrate in a single platform the most advanced technologies, such as register control of banknote paper, iridescent printing, individual foil and stamping tension control, laser notching, ELU optical web inspection, etc.



### **ADVANTAGES**

- Non-stop concept. Online processes up to 200m/min.
- > Designed under a regenerative global concept to miminize power consumption
- Able to stamp foil to register proven with 5, 10, 20 and 50 Euro notes (series 2)
- > Able to integrate online printing processes with security ink
- > Individual control to register of the foil security strands
- > Able to integrate laser notching technology with flexible configuration according to customer requirements, incorporating a revolutionary solution preventing mechanical notching and expensive maintenance. Laser notching shapes according to customer requirements
- Automatic adjustment of foil stamping control in each security channel/strand
- > Possibility of having one or two foil stamping units according to banknote production requirements
- > Automatic searching of optimum position even under physical operation aspects that can affect the stamping precision, such as precision adjustments and other adjustments required at any time.
- > Open control architecture configurable according to customer requirements
- > Allows locking to external peripherals of the customer (factory PC...)
- > Full integration of devices with advanced technology and possible integration with other specific processes that may be required
- > The foil stamping line has been designed for a simple and convenient use by the operator and to provide maximum flexibility in all cases.



## **AVAILABLE OPTIONS**

- Different web widths can be considered depending on the customer's requirements
- A different number of foil reel stations can be considered according to the production specifications of banknotes for each customer
- A laser system can be integrated online when the full process requires making orifices at specific positions. The number of laser units depends on the number of foil reels required. This system can be applied in the production of 20 and 50 Euro notes (series 2)
- Open architecture configuration allowing simple integration of any other device required in the process to provide a full solution to the customer.





### **CHARACTERISTICS**

Non-stop reel-to-reel process

Stamping on both faces in a single process

Automatic mother reel splicer at 100m/min able to synchronise the watermark

Line speed up to 200m/min limited by the drying need of the iridescent ink printer

Line width 100mm

Longitudinal: ±0.5mm, Precision of foil stamping to register position

Transverse: ±0.4mm

Feedback based on dancing roll and load cells for high precision of web tension control

Regenerative brake generators to optimize power consumption and provide perfect control of the web during the unwinding process

Local printing presses along the process have individual control



High-precision web guide system able to operate with reference to a guide line or lines or an edge.

Integration of iridescent or electroluminescent ink (security ink) printer with drying tunnel to ensure that the special printing band is in the exact position on the security paper

Web rotation station

Master foil stamping unit with up to 6 foil reel stations with individual control to register of the reels to ensure correct stamping

Individual adaptive control or foil reels to ensure correct position of foil mark with respect to the security paper reference

Stamping position inspection system that checks the correct position of the foil stamping and sends a fault signal to mark an error in the final reel if the foil is not in the correct position

Integration of ELU (electroluminescent) system to check ink security properties for Euro production

Integration of Humidifier System to restore in the final reels the humidity lost in the drying process of the printing and stamping process

Integration of dust suction system to ensure that the web surface is clean in the final reels

Integration of an advanced optical web inspection system that provides real-time display on a monitor of the stamping and any errors detected if the foil position is out of tolerance. Locked with a defect printer that marks the error in the final reels

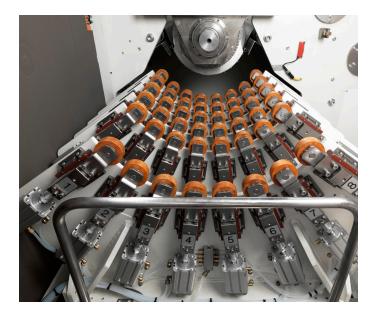
Ink fault printer that marks the corresponding error code in the final reel to identify the type, defect and position in the reel. This fault code will be identified and processed subsequently in the sheeter

Rotary unwind with automatic non-stop splicer at maximum line speed

Non-stop reel-to-reel process

Global regenerative system to optimize power consumption

User-friendly





More information (videos, photos): <a href="http://pasaban.com/UK-en/file/36/SPF">http://pasaban.com/UK-en/file/36/SPF</a>





