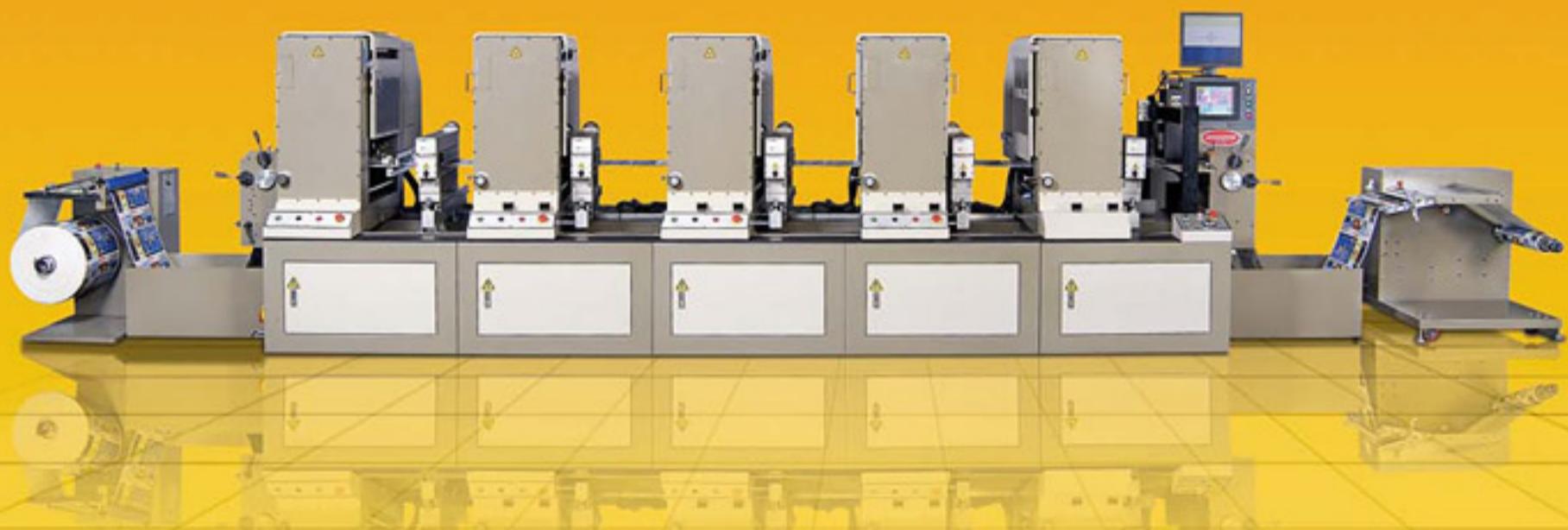




SPM-4500R

無軸間歇式平板印刷機

Shaftless Offset Intermittent Rotary Printing Machine



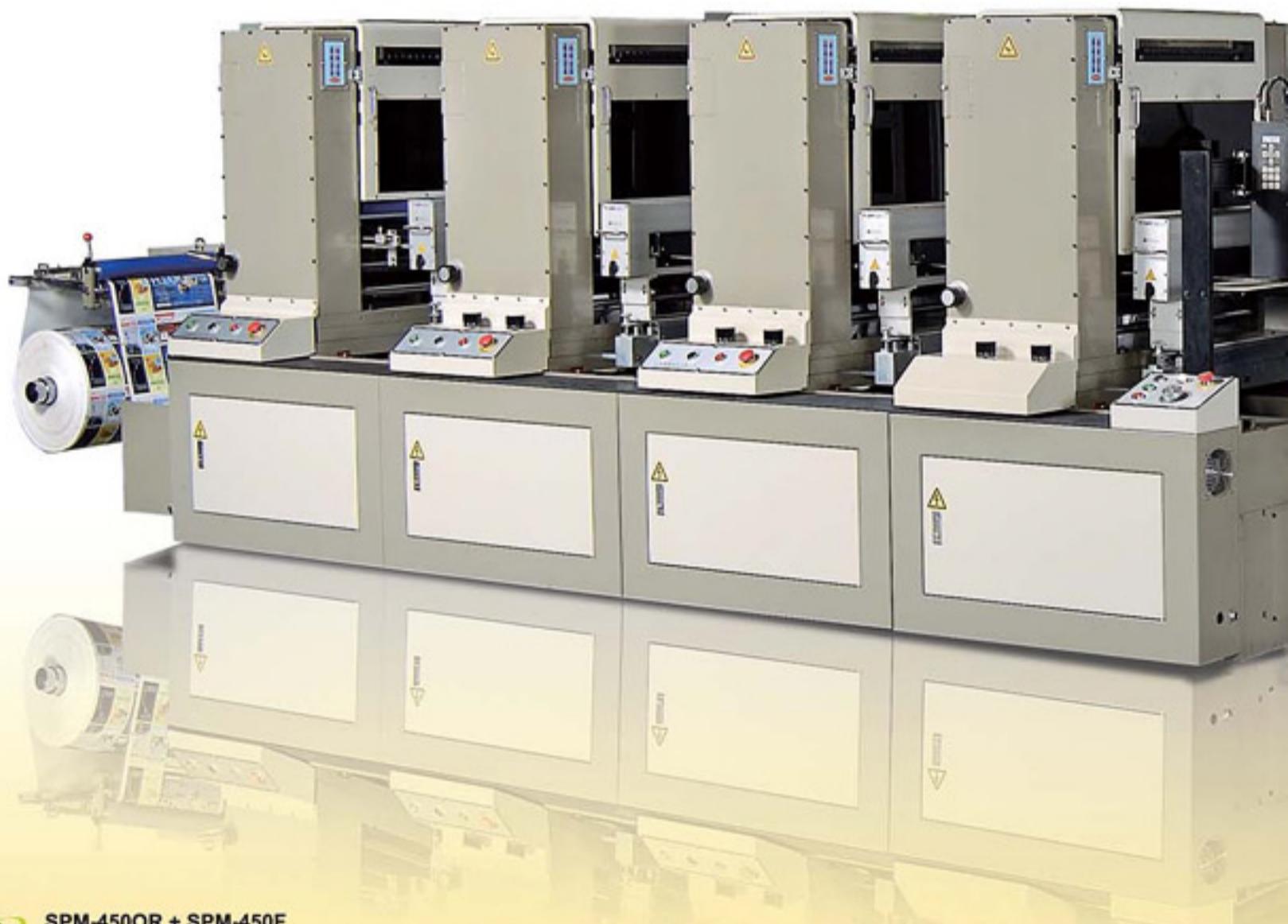
SIMPLE • SMART • SMOOTH

無軸間歇式平板印刷機

SPM-450OR Shaftless Offset Intermittent Rotary Printing Machine

Specifications 規格

最大紙寬 Max. Web Width	450 mm
最大印刷面積 Max. Printing Area (mm)	間歇式 Intermittent Rotary : 430 (W) x 410 (L)
印刷台座 Printing Stations	標準 4 ~ 8 座 standard 4 ~ 8 stations (Max. 6 for offset stations) Other models in tandem can be extended to 10 stations.
最大印刷速度 Max. Printing Speed	12,000 imp / hr
機械重量 Machine Weight	10,000 Kg (N.W.) 12,000 Kg (G.W.)



SPM-450OR + SPM-450F

On-line speed up to 12,000 rpm (imp/min)

Advantages

Shaftless technology

Independent digital multi-servo drive secures stable printing registration, speed, and ink kneading etc.

Intermittent technology

High profitability for short and medium runs. Fastest job changes without standstills, minimum wastage.

Wet offset litho printing technology

Temperature controlled printing unit with advanced damping system achieves state of the art printing quality.

優點

無軸科技

無軸伺服驅動，可確保印刷對位準度速度和揉墨的穩定性。

間歇式科技

高水準的效益適合小量和中量的印刷。最有效率的工作變換，不必停止運轉並且節省不必要的浪費。

有水平板印刷科技

溫度控制印刷座和先進的水棍系統，能夠達到如藝術品般的印刷品質。



Advantages

Web tension control technology

Full automatic web tension control as well as tension ratio settings for different web material specifications.

Registration control technology

The harmony coordination between electronic and mechanical components makes printing speed variations / stop then start printing achieves none or minimum web wastage.

Maximized computerized technology

Computer control maximizes functionality and ease of set up.

優點

張力控制科技

除了全自動紙材張力控制，也可以針對不同規格的材料，去設定張力控制的變化。

印刷對位控制科技

電控和機械之間協調一致性的結構設計，讓印刷速度在改變及停機再開時，可以達到無或最小紙材損耗。

極大化電腦科技

最強大的電腦控制系統功能。



Converting technology

SMOOTH converting supports regular printing materials such as labels, cards, tickets, tags, boxes, lids, as well as A4 and A3 booklet printing. Converting stations can be extended with tandem or stand alone hot stamping, die cutting, embossing, perforating, laminating, serigraphy, slitting and sheeting machines; and enhance the coverage of integrated effects such as RFID, security, hidden messages, scratch off, thermal transfer, tattoo, and stereography puff.

Basic demands

CNC production, super strict QC, and ISO and CE certifications are the starting points for SMOOTH printing machines.

Unexpected low investment

This " Price Rule Breaker " will shock the market and make a significant contribution to the printing industry.

其它應用及後加工科技

除了標籤、卡片、票卡、徽章、盒子、蓋子…等，一般正常的印刷外，也可以印A3和A4尺寸的小冊子
後加工，可由延伸的工作站或機器一次完成，例如：電子條碼、防偽、隱藏訊息、刮刮樂、熱轉印、
紋身貼紙、立體效果…等，都能夠結合在一般印刷裡。

基本的要求

ISO, CE, CNC電腦加工，嚴格的品質管理…等，都是川菱生產線基本的要求。



Applicable Materials & Printing Samples

This machine prints most rolled printing materials (except materials with very high elasticity) including: Art paper, mirror coated paper, foil paper, PET, PVC, PP, PE, electrostatic paper, hologram (LASER) film, phosphorescent film, flocked paper, binding cloth, textiles, garments, satin, ribbon, cardboard, Kraft paper, crepe paper, polar film, diffuse film, silver reflection film, aluminum foil, laminate copper foil, photoelectric film, conductor film, soft PC plate, LCD conductor glue, shockproof glue, high tech laminate material, EMI insulator, sponge rubber, conductor sponge rubber, thermal paper, PE, plastic leather, thin film (IMD), nameplate, heat transfer labels, glue side printing labels, and security labels.

可應用材料和印刷樣品

模造紙、銅版紙、鏡鋼紙、錫箔紙、特多龍(PET)、保麗龍(PVC)、合成紙(PP)、雷射紙、緞布紙、植絨紙、卡紙、牛皮紙、偏光片、擴散紙、銀反射片、貼合銅箔、光電膜、導電膜、軟性PC版、LCD導電膠、防震膠、高科技複合材料、EMI絕緣材料、泡棉、導電泡棉…等，不易變形收縮之材料。



Samples



▲ PP color fading etc effects



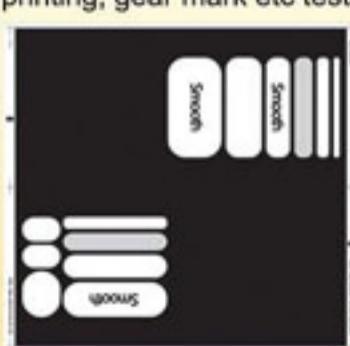
▲ 430 x 410 mm PP color fading 1%,
50μ line, micro printing, gear mark etc tests



▲ Calendar



▲ PVC color fading 1%
etc effects



▲ 430 x 410 mm ink kneading
(zero ghost color) etc tests

Standard Unit

1. Unwinder

- a. Max. 550 mm reel diameter, 76 mm core diameter, approximate length 1000 meters.
- b. Self controlled web feed system includes speed coordinating sensors.

2. Wide screen TFT human machine interface touch screen (HMI)

- a. Includes web tension set up page, inking speed ratio set up page (settings by percentage, time, & limit leaking speed formats), printing stations auto positioning pages, and error inspection pages (with auto alarm system).

★ Other Latin alphabet based languages are available (e.g. German, French, Spanish, Turkish, Malaysian, etc.).

標準配備

1. 送紙機

- a. 最大550 mm卷軸直徑，76 mm紙管直徑，長度大約1000米。
- b. 送紙自動控制系統，包含速度調節感應器。

2. 彩色寬頻人機介面系統與觸控式螢幕(HMI)

- a. 包含紙材張力設定頁面、下墨速率設定頁面(可設定下墨百分比、倍數、最低下墨量…等)
印刷座自動對位頁面、錯誤檢測(自動警報系統)頁面…等。



3. Cool UV offset printing stations - Number displays quantity

- e.g. " 5 of 5 colors printing + UV stations ".
 - a. Shaftless independent servo drive printing stations.
 - b. Independent servo drive ink fountain rollers for inking speed ratios individually, automatically & agitating.
 - c. Advanced inking roller construction, maximized oscillating rollers & form rollers achieve state of the art printing quality.
 - d. Temperature control with continuous damping system, PH setting & alcohol mixer.
 - e. User friendly printing pressure, micro-adjust knob able to simultaneously vertically adjust both ends of impression cylinder while printing.
 - f. User friendly skew micro-adjustment knob for printing registration at each station; adjustable while printing.
 - g. User friendly lubricating piping system on printing station.
 - h. Quartz plate thermal insulation UV able to handle some shrink films.

3. 冷UV平板印刷座：數字表示平板印刷座數量，

例如：5是5色印刷 + UV座

- a. 無軸伺服驅動印刷座。
- b. 獨立式無軸驅動放墨輪系統，可自動地調節下墨速率。
- c. 先進的墨輪結構及最佳化的擺動輪和靠版輪，可以達到如藝術品般地印刷品質。
- d. 水棍系統可以控制溫度，PH值及酒精。
- e. 印刷座印壓微調鈕，可在印刷當中使承壓輪兩端同時上升/下降，方便操作者使用。
- f. 每個印刷座皆有印刷對位角度微調鈕，可在印刷當中做對位精準微調，方便操作者使用。
- g. 印刷座潤滑系統方便操作者做保養。
- h. 石英隔熱UV能夠處理部份收縮膜。



4. Central controlled printing stations auto-positioning & registration system

- a. Independent servo drive for each printing station registration, minimum 10 micron tolerance adjustment in HMI touch screen.
- b. Exclusive MPG switch for printing registration, 10 or 100 micron adjustment modes, any or all stations can be selected while printing.

5. Full automatic web breakage precaution system

Each station equipped breakage sensor for machine protection.

6. Automatic computer controlled ink washing systems

7. Tool kit

8. Diamond finished feed drums

4. 中央控制印刷座自動對位系統

- a. 無軸伺服驅動印刷座，在人機觸控螢幕上可以做10微米誤差的印刷對位調整。
- b. 獨家的MPG旋鈕可在印刷當中選擇單座到全部的印刷座做10或100微米的印刷對位微調模式。



5. 全自動斷紙停車系統

每座配備斷紙感應器可保護機器。

6. 電腦自動控制洗車系統

7. 工具箱

8. 鑽石拉料輪

▲ Cleaning web - No pressing tracks remain.
壓紙痕跡不會留在紙上

Options

1. Cool UV flexo varnish coating station (V)

Anilox rolls designed for easy changeovers and cleaning, handle a variety of tasks and functions.
Eases transitions between varnishing, printing and coating shifts.

2. Magnetic rotary die cut station (R)

- a. Die cut pressure adjustable while printing.
- b. Optional pressure meter system (K&B KMS-3).
- c. Reverse magnetic & anvil cylinders for back side die cutting also available.

選購配備

1. 冷UV水墨印刷金油座

- a. 易拆換式雷雕陶瓷輪結構，方便各種印刷需求。
- b. 易清式印刷座有利於上金油 / 水墨 / 打底等印刷。



▲ Cool UV flexo varnish coating station (V)
冷UV水墨印刷金油座

2. 磁性圓刀座

- a. 印刷過程中可調整模切壓力。
- b. 壓力計(K&B KMS-3)可另外選配。
- c. 亦可選擇背面模切座。



▲ Magnetic rotary die cut station (R)
磁性圓刀座



3. Video web inspection unit (I)

4. Back side printing station

5. 2nd pass scanner unit

- a. For back side printing multiple color registration.
- b. With SMOOTH serigraphy machine & patented heat dryer capable of multiple color adhesive side printing.
- c. Set up by scanner and / or HMI touch screen.

6. Full automatic printing stations registration system (FS)

Full automatic printing registration without adjustment.

7. Digital controlled printing plate (registration) skew & lateral registration adjustment unit



▲ CCD with image memory & rotation functions (Fife InPrint)

CCD 有影像記憶及畫面旋轉等功能 (Fife InPrint)

3. 影像監測系統

4. 背面印刷座

5. 二度印刷電眼系統

- a. 可做背面多色印刷對位。
- b. 與川菱網版印刷機和專利隧道式乾燥複捲機結合應用，可做膠面多色印刷。
- c. 可與人機觸控螢幕和電眼中做多種設定。

6. 全自動印刷對位系統和裝置

全自動印刷對位不需再調整。

7. 數位控制印刷版 (對位) 斜角及横向調整裝置

8. Remote ink segmented fountain & servo control unit
Includes PC for set up & memory.

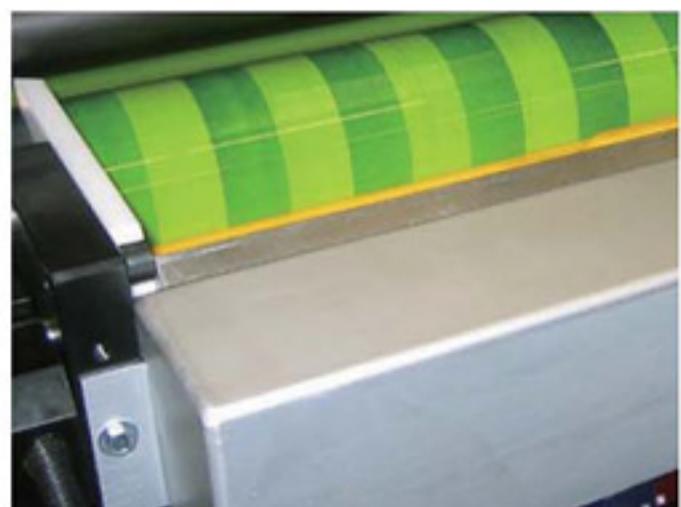
9. Ink density measurement & control unit

10. Ink fountain agitator

11. Full automatic control alcohol mixer with dosing system
For printing station damping system.

12. 500 jobs memory system

To re-print simply recall the saved job and start printing, no need to reset saved items. Includes all parameters e.g. length, registration, inking, tension, etc.



8. 遙控式分段下墨系統及裝置
包括PC設定和儲存。

9. 油墨濃度測量及控制裝置

10. 墨槽攪拌器

11. 全自動控制酒精混合計量系統及裝置
用於印刷座水棍系統。

12. 500組工作記憶系統

再次印刷可從記憶頁叫出儲存名稱，無需調整
可直接正式生產(儲存項目包含跳距、對位點、
下墨量和紙材張力…等)。

13. Data transfer from pre-press storage system

Convert with remote ink segmented fountain and servo control. The computer will read the pre-press artwork file to automatically adjust inking without prior set up.

13. 印前資料轉移系統及裝置

此裝置與遙控式分段下墨系統及裝置整合，電腦可直接讀取印前印刷美工檔案，全自動做墨量調整無須設定。



14. F-340 Jumbo unwinder

- a. Max. 1000 mm reel diameter, 76 mm core diameter equals approximately 4500 meters long.
- b. Self controlled web feed system includes speed coordinating sensors, auto-braking system for tension control, tension micro-adjust knob, pneumatic lifting device and air shaft.

14. F-340大型送紙機

- a. 最大1000 mm捲軸直徑，76 mm紙管直徑，長度大約4500米。
- b. 自動控制送紙系統包括速度調節感應器、自動煞車張力控制系統、張力微調鈕、氣動式起重裝置、氣脹軸…等。



15. Static eliminator

16. Ultrasonic sensor

17. Corona treatment unit

15. 靜電消除器

16. 超音波感應器

17. 電量裝置



請上本公司網站即可線上瀏覽川菱公司機械動態影片。

Please visit our website www.smoothmac.com to see videos of our machines working.



ISO 9002
Since 1994

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