



LEAIC-100100

CCD Registering Screen Printer

全自動CCD影像對位導電玻璃網印機



■ 適用範圍

適用於各種軟硬材質印件之高精度網印機作業，例如：光電產業之LCD框膠、觸控面板、ITO導電玻璃、薄膜、背光模組擴散片、導光板、EL冷光板、...等印刷。配備CCD影像對位，修正上料之對位誤差，提高精準度。

Application: Suitable for high precision screen printing production include soft/hard printing material, such as LCD Cell Sealant, Touch panel, ITO, Membrane, Diffusers for Back Light Module, Light Guide Plate, EL Film, etc. Provide CCD Registering device to correct aligning inaccuracy while loading material and improve

聯恆精密機械股份有限公司

LENSTAR PRECISION MACHINERY CO., LTD.

台中市太平區工業十五路35號
NO.35 Gongye 15th Rd., Taiping Dist, Taichung City 411, Taiwan.
Tel: 886-4-22713938 / Fax: 886-4-22713242
<http://www.lenstar.com.tw>
E-mail: lenstar@lenstar.com.tw

大陸行銷服務據點

華東地區：江蘇省昆山市開發區長江南路666號利得國際主樓1705室
Tel: 0512-55260811 / 0512-55260822 Fax: 0512-55260506

華南地區：廣東省深圳市寶安區沙井和一社區萬豐西部創業工業園內E1棟1樓
Tel: 0755-29713591 / 0755-29713592 Fax: 0755-29713593

LEAIC-100100 全自動CCD影像對位導電玻璃網印機

CCD Registering Screen Printer

產品特性：

- CCD影像自動對位高精密網印機，快速作業，對位精準 $\pm 0.01\text{mm}$ 內，性能優越，生產良率大幅提昇。
- 機台結構，強固質輕，配合頂級進口伺服馬達傳動加上精密導向定位週到，運作穩定、安靜且更滑順快速。
- 印刷檯面一體成型鑄鋁材質，檯面平整度 $\pm 0.1\text{mm}$ ，具印刷膜厚高均勻性。
- 機台印刷座四柱精密滾珠導螺桿同步升降裝置，確保印刷膜厚精度。
- 伺服馬達抬網及傳動印刷搭配高精密數位恆壓印刷頭，讓印壓得以完整展現恆壓效果。
- 人機介面觸控螢幕操作設定簡便，可記憶100組生產條件，並具故障自動檢測及故障排除之顯示。
- 專為ITO導電玻璃自動線印刷設計的自動入、出料段，直接提昇產能與品質良率。
- 連結前後製程的網印機入、出料段，係透過無塵專用的非接觸式動力環輪輸送ITO Glass印件，並由牙叉式機械手臂移載進入檯面進行精密CCD自動對位印刷。充分達到自動線生產所需的特性。
- 設有安全復歸，自動偵錯系統、安全光柵、急停按鈕、警示燈柱等安全設計。
- 另可選配靜電消除棒，光電專用防塵罩，自動入、出料機構等功能。
- CCD registering screen printer adopted with shuttle table, and aligning accuracy within $\pm 0.005\text{mm}$, save more time and provide excellent function and increase production yield.
- The structure of equipment is lighter and stronger, and provides top servo motor, more fast and quiet.
- The table adopts integrative shaping, and material is cast aluminum, the flatness is $\pm 0.1\text{mm}$, printing membrane is equally.
- Provide the synchronous lift device with four bars for printing device, to ensure thickness of printing membrane accuracy.
- Adopt with servo motor to do peeling function, and collect high precision digital constant pressure printing head, perform effect of constant pressure completely.
- Operation by touch panel, easy to set and operate, the memory capacity accept 100 unit production conditions and other function, such as auto examination breakdown and display trouble shooting.
- The design of auto loading/unloading device for ITO auto assembly, promote capacity and yield rate directly.
- Connect front/back production by contactless power link to deliver ITO glass, and load into aligning area by forked robot, and achieve all request of auto production adequately.
- Provide safety device, such as safety return to origin, auto detect error system, safety optical grating, Emergency switch, alarm light, etc.
- Optional accessory: antistatic bar, anti-dust cover for optical industry, auto loading/unloading.

項目 Item	規格 Specification
印刷檯面尺寸 Table dimensions	1100x1200mm
最大印刷面積 Printing Area (MAX)	920x920mm
最小印刷面積 Printing Area (MIN)	730x730mm
印件厚度 Thickness of printing material	0.3-5.0mm
檯面水平精度 Level Precision of Table	$\pm 0.07\text{mm}$
檯面吸氣尺寸 Vacuum Area	900x900mm
檯面吸氣孔徑尺寸 Diameter of Vacuum hole	$\phi 1.5\text{mm}$
檯面吸氣孔間距尺寸 Interval of Vacuum hole	20x20mm
刮印方式 Printing Mode	單刮刀印刷+單抬網 Single squeegee+ single peeling
CCD取像範圍 CCD Capture Area	X $\pm 470\sim 360\text{mm}$ Y $\pm 470\sim 360\text{mm}$
CCD鏡頭視野 CCD Shot Sight	10x7.5mm
影像對位精度(軟體精度) Registering Precision(Software accuracy)	$\pm 0.005\text{mm}$
整合精度 Integration Precision	$\pm 0.02\text{mm}$
對位整合時間 Registering integration Time	<1sec
最大裝框尺寸 Frame Dimension (MAX)	1400x1400mm
最小裝框尺寸 Frame Dimension (MIN)	1100x1100mm
網框厚度 Frame Thickness	30-40mm
網框高度(洗版位) Frame Height (Cleaning Position)	300mm
檯面高度 Table Height	1030 $\pm 30\text{mm}$
刮刀印壓 Printing Pressure	1-6kg
抬網間隙 Gap	0-25 mm (人機介面設定) Setting by touch panel
印刷網版與檯面間距 Distance between Screen and Table	0-15 mm (人機介面設定) Setting by touch panel
印刷行程 Printing Stroke	0-1020mm (人機介面設定) Setting by touch panel
印刷/回墨速度 Printing/Covering Speed	20-600mm/sec (人機介面設定) Setting by touch panel
刮刀傾角 Squeegee Inclination	$\pm 40^\circ$
印刷頭旋角 Printing Device Swing Angle	$\pm 15^\circ$
適用電源 Main Power	3 ϕ , 220V/380V, 50/60Hz
耗電量 Power Consumption	5.0kw
壓縮氣源 Air Pressure	6~8kg/cm ²
耗氣量 Air Consumption	70L/Min
印刷檯面玻璃頂料PIN Lifting pin on Table	12支/pcs + 吸氣孔 Vacuum hole + 高氟O型環嘴 Pad (FFKM)
自動入料段 Auto Loading	非接觸式動力環滾輪 contactless power link roller 玻璃居中整定 center glass 牙叉式機械式手臂移載玻璃 fork robot carrier 玻璃輸送寬度手動調整 delivering width of glass adjust by manual
自動出料段 Auto Unloading	非接觸式動力環滾輪 contactless power link roller 牙叉式機械式手臂移載玻璃 fork robot carrier 玻璃輸送寬度手動調整 delivering width of glass adjust by manual
機器尺寸 Dimension	約4900x2250x1850mm (含自動入出料段 Contain auto loading and unloading device)
機器重量 Weight	約46000kg