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Single Carriage Three System Shoe-upper Computerized Flat Knitting Machine

PAI LUNG MACHINERY MILL CO.,LTD.
No.8 Ding Ping Rd., Ruei-Fang Industrial Park, Ruei-Fang Dist., New Taipei City, Taiwan
台灣新北市瑞芳區瑞芳工業區頂坪路8號
TEL:886-2-24978888 FAX:886-2-24965666
www.pailung.com.tw

THE FABRIC OF INNOVATION

Series

Single Carriage Three System
Shoe-upper Computerized
Flat Knitting Machine

單機頭三系統系列鞋面電腦橫編針織機

PLF-ISH113

Product Introduction

PLF-ISH113



Unceasing innovation is our insisting objective. We realize customer's request and know how to make machine better. Our flat knitting machine, "I" series is born to reach the best performance with high speed and fabric success.

The 45-inch working lengths is the most appropriate for knitting shoe upper demands in our one carriage computerized flat knitting machine series with three system. Full knitting functions are ready including second stitch and split needle function. A new Piezo needle selection system and three knitting system are adopted for high speed efficiency. Machine needle gauge range is supplied as

the main market trend from 12G to 14G, which can be more flexible in manufacture and pattern enrichment.

Pai Lung understands the claim on high consistency of shoe upper size you launch. To effectively control various yarn feeding affection, a friction type of auxiliary feeder

and new electronic yarn feeder are ready for more accurate quality control. Machine is with standard sub roller and main rollers system; the takedown device with multi-level control by programming and reversing ability for particular design work. Both sides are installed cutter and gripper units collaborated with combing setup system for helping yarns saving and easier production.

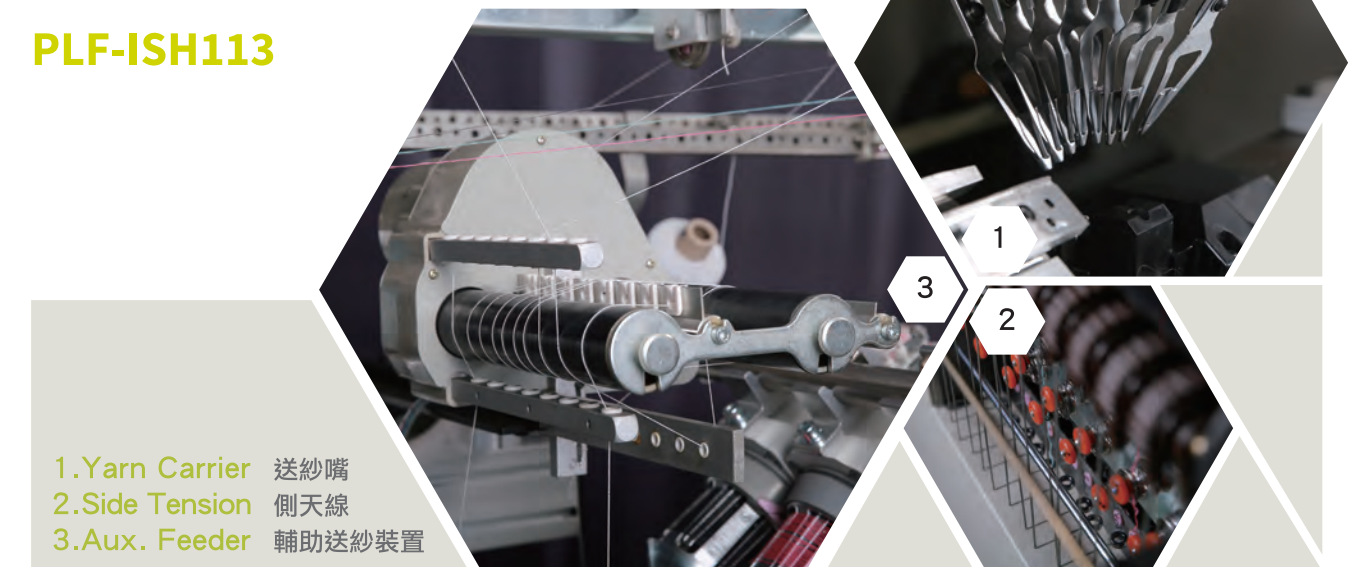
Being active to the latest shoe upper trend, we believe customization and unique application will be the flat knit future. Close cooperation and continues innovation based on our high efficient shoe upper flat knitting machine is the solution that we are preparing for clients' business now and tomorrow.



• Sub Roller 副羅拉系統

產品 介紹

PLF-ISH113



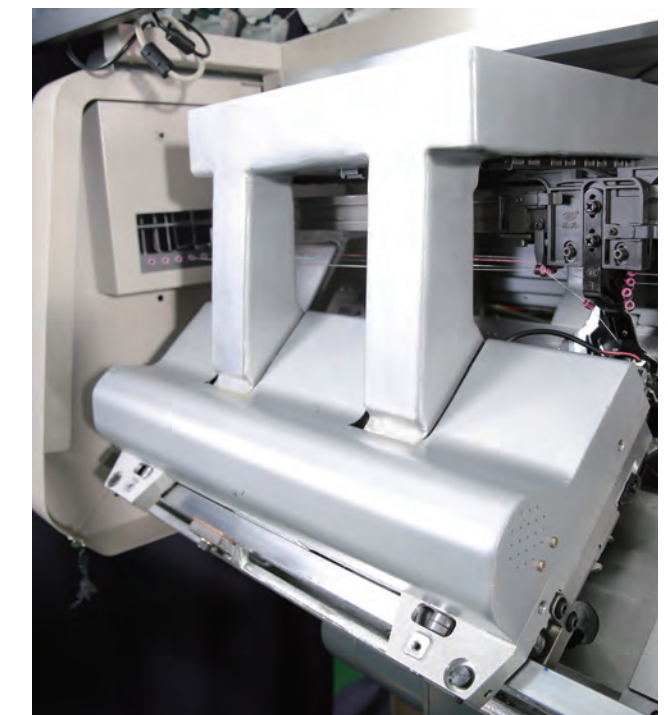
- 1. Yarn Carrier 送紗嘴
- 2. Side Tension 側天線
- 3. Aux. Feeder 輔助送紗裝置

不斷進化是我們對產品持續發展的負責精神。為了更貼近使用者的需求，努力在每一片織布織造上，力求速度與成功率表現極致。作為佰龍的標準，我們的電腦橫編機“I”系列正是成就客戶需求的最佳生產設備。

佰龍單機頭三系統電腦橫編鞋面針織機，工作區長度提供45”的規格，是鞋面織造最適工作區域長度。機頭具備完整織造功能，包含兩段度目及分針，三系統的織造功能，更提昇了生產的效率。搭配革新技術的陶瓷選針系統，使用者能明確的感受高速的生產效率。在針距的規格上，以現今潮流趨勢的12及14針為主，使織物的變化更加豐富多元。

佰龍了解鞋面織造對於尺寸安定性的高度要求，著重紗線喂入時各種影響因素，除了配備實用摩擦式輔助裝置外，亦配備電子主動式送紗率控制組，有效提升鞋面品質。標準主副羅拉設計，具備多段微調，程式開合控制及主羅拉反轉功能，除配合不同織物需求，特殊織造上亦可配合。左右兩側標準式夾切紗組及起底板裝置，對於紗線節省及生產上助益良多。面對現今針織鞋面流行趨勢不斷創新，我們可依客戶不同的需求而持續創新進化，在織造的

精密度上，則秉持一貫精神。精益求精，滿足需求，正是佰龍橫編鞋面針織機的發展理念。



• 3 System Carriage 三系統織造機頭

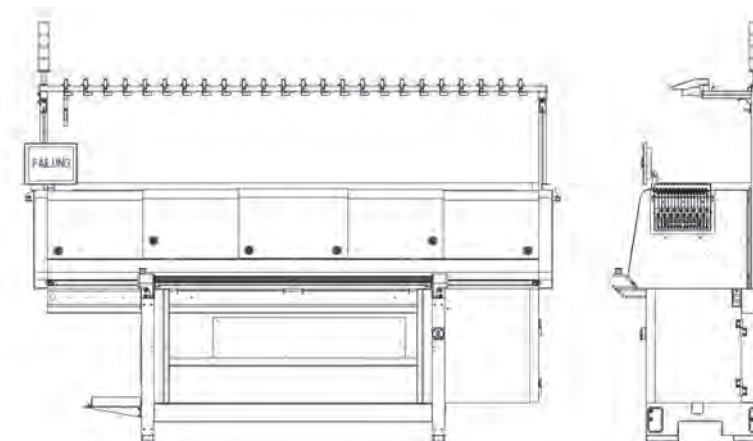
Applications 鞋面織造應用

Through PLF-ISH113, it could make eyelet, shapping, 1:50 coarse flechage, ankle support and many other complicated structures on the shoe upper.

透過PLF-ISH113，可以輕鬆織造孔洞組織，成型，1：50的引返組織，腳踝機套組織和其他許多複雜的組織，豐富鞋面布織造的可能性。



Dimemnsions 機器外觀尺寸圖



45" L x W x H (mm) 2550x 880 x2000 Net weight/毛重 850 kg

Productivity Info 產能資訊

Shapping or Not	Productivity (Per day)
Yes	24 pairs
No	36 pairs

- This information would be affected by yarn and other conditions, please refer to the actual situation.
- 此產能數據會受到紗線規格和織造組織等因素影響，此為參考數據，請以實際為準
100% Polyester 600D(40 D Spandex)



• Main Roller & Comb 主羅拉與起底板



• Electrical Storage Feeder 電子儲紗器

■ Specifications

技術規格

Gauge	12G, 14G
Knitting Width	45” (114cm)
Carriage/System	Single carriage three systems.
Knitting Function	Knit, Tuck, Miss and simultaneous Transfer, front or back, regardless of carriage direction.
Knittable Pattern	Cable, Links-Links, Lace, Shaping, Color Jacquard, Bourrelete.
Needle Selection	Full-Jacquard needle selection by solenoid system.
Stitch Density	Stitch density controlled by stepping motors with adjustable levels which can be stored in 256 levels.
Knitting Speed	Max 1.2m/sec. knitting speed varies according to gauge and knitting conditions. Variably adjustable speed levels. 16 additional programmable speeds.
Racking System.	Servo motor with ball screw racking system. Max 1-inch racking left and right side each. 1/2 and 1/4 pitch also available from any position.
Sinker System	Movable sinker.
Transmission System	Belt driven transmission system via AC servo motor.
Yarn Cutter and Grippers System	2 set of one yarn cutter and two grippers.
Yarn Carriers	8 carriers at each side, total are 16 pcs
Trail	4 trails
Side Tension	16 units on both sides.
Top Tension	24 units.
Aux. feeder	2 pieces on both sides.
Covers	Full safety cover for protecting user and dust-proofing.
Emergency Stop	One emergency stop buttons on left.
Auto-Stop	Break yarn, knot yarn, yarn tension changes, needle broken, fabric drop, fabric rewind, improper position of racking, improper position of carriage, and programming error, etc will automatically stop the machine.
3 Colors Warming Lights	Green light- Normal operations. Yellow light- Fabric take down completed.
Setup Combs System	256 levels takedown combs with special setup needles.
Takedown System	Main roller and sub roller. 256 level of adjustable tensions and controlled by program to open and close.
Language	Language available in Traditional Chinese and English. Other language is potential.
Data Input	USB 2.0
Design software	Pai Lung “Kniteditor” .
UPS	Power supply for resuming knitting after power failure.
Power input	One-phase AC power 220V±10%, 50~60 Hz.
Electronic Yarn Feeder	Two MSF-3 at each side, total are 4 MSF-3 electornic yarn feeders.

Options:

- Plating yarn carrier.
 - Intarisa carriers and kit.
- Base on particular fabric design, MSF-3 electronic yarn feeder could be added in as options

※Above equipment maybe changed without notice.

針距範圍	12G、14G
織造寬度	45英吋(114cm)
機頭系統	單機頭三系統設計。
編織功能	除一般織/吊目 /不織 /移環翻針等，可同時前床翻後床及後床翻前床，不受機頭方向限制。
應用組織	絞花/正反目/挑孔/成型織片/選色提花/贅肉組織等。
選針系統	特殊壓電陶瓷撥片作動多段選針。
編織密度(度目)	線圈密度由步進馬達所控制，具備256段可編程度目值，左右系統獨立。
編織速度	最高1.2米/秒，編織速度因針速和編織條件而有不同。多段可調節速度，並具備16段可編程序速度。
搖床	採高轉速伺服馬達搭配精密滾珠螺桿傳動，在左右各1英吋範圍內之搖床位移皆由程式控制，可於針床任何位置搖1/2針和1/4針並具備個別微調位移之功能。
沉降片	活動式沉降片。
傳動方式	正時皮帶配合同服馬達往復運作。
自動夾切紗組	左右邊各一組。一組紗剪組內包括兩支紗夾與一支紗剪。
紗嘴	兩側各8支紗嘴，總共16支，便於在任何位置切換。
導軌	配置4支導軌。
多段可調式過紗架	左右兩側16支設計。
上段張力天線	24個張力天線。
送紗裝置	左右側各1組。
密閉式工作空間	全機覆蓋以保護人員並兼防塵及減低噪音。
緊急自鎖開關	機台具備1只，遇緊急可立即按下停車鈕，切斷電源。
自停裝置	斷紗，紗結，紗線張力改變，斷針，落布，倒捲，撞針，搖床異位，機頭異位，程式錯誤等皆會使機台設備自動停止。
三色操作警示燈	以不同燈色顯示機台狀態。
起底板裝置	操作簡易，不易起底失敗，配合夾切紗模組，加快生產速度，具備32段可編程起抵拉力值。
捲布系統	羅拉多段電腦控制，全自動打開和關合，具備32段可編程捲布拉力值。
系統顯示	無按鍵設計，採12.1"觸碰式彩色背光液晶面板，具1024 X 768高解析度，人因工程介面設計，畫面操作簡單易懂。
語言種類	中文/英文，可直接切換。亦可提供其它語系。
花型輸入	可使用USB 2.0
軟件	佰龍專用”Kniteditor”。
不斷電系統(UPS)	在突然停電時，提供備用電源完成該行運作後停止，待電復織以完成該片。
規格	單相交流 220V±10%，50~60 Hz。
電子儲紗器	兩邊各2支MSF3電子儲紗器

選配：

- 疊紗紗嘴。
 - 引塔夏設備。
- 依據織造設計的需求，可另選購電子儲紗器MSF-3。

※以上規格配備若有變更否，無法先行通知，仍以實體為準