



Terry / Velour Circular  
Knitting Machine

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THE FABRIC  
OF INNOVATION

PAI LUNG

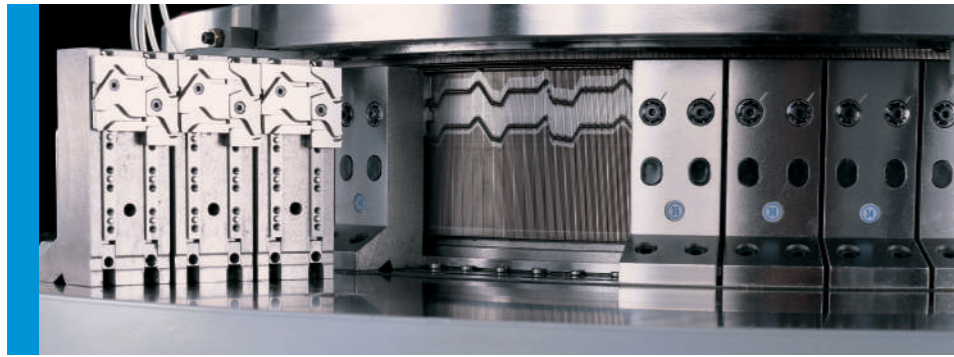


**K**nitel Series

Single Knit  
Terry / Velour Circular  
Knitting Machine  
單面毛巾圓筒針織機

PL-KSP  
PL-KPA





## Products Introduction

For 21st century demand, Pai Lung's K-series terry / Velour machines are designed with latest function for the knitting industry. Humanism factors and high technology are both involved in the machine exteriors and operation. All design work is under the 3-Dimension of CAD/CAE; strength and stress of machine structure are tested by computer simulation for high rpm and production performance.

Full consideration is one of main K-series advantage for machine operation. With the new upper radial type of yarn creels. It create more visual space for easy view in yarn feeding system and stop motion check. Anti-dust equipment and oiler both are place in the machine insides for easier work.

Machine is equipped with the high-tech integrated LCD touch panel, which consists of all of machine operating data in this panel. Friendly guide information and rapid trouble-shooting messages can be presented in the screen. It is very easy for the machine operator to realize and control all situations in the shortest time.

The contact surface between the gear ring of transmission and plate is the oil bath lubrication. This design is able to reduce the running noise, energy loss and parts worn out, also provides higher operating RPM in production. To simplify the maintain processes of cylinder grooving tension, a new adjust design is for easy work without cylinder remove.

The cam measuring screw is based on the driving principal of two closed faces. Accurate indication is able to effectively help the knitting operator is cam indication reference, especially in pattern and fabric weight control.

PL-KSP is the Ordinary loop type of terry knitting machine. The new design sinker developed by concept of consistent loop forming force and precise turning point of ground yarn and loops which creates the perfect loop shape. Different loop sinker for customer adopts in different terry performance include Dummy sinker, 1.5mm, 1.8mm, 2.0mm, 2.2mm, 2.5mm, 2.8mm, 2.9mm, 3.0mm, 3.2mm and 3.5mm sinker loop length, The production are basic pile structure, niki Velour (steam velour), crush velour, velvet, and Burn out terry.

#### ■ CONVERSION KIT FOR OTHER MODELS

Current Terry / Velour circular knitting machine can be converted to following models:

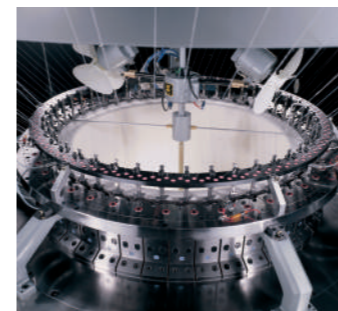
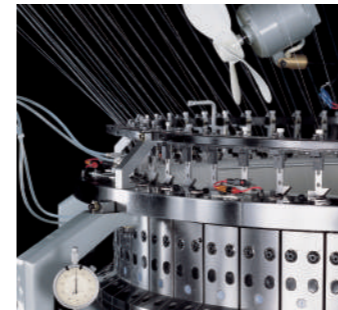
- PL-KSP Terry (Ordinary plaiting) circular knitting machine
- PL-KPA Terry (Reverse plaiting) circular knitting machine
- PL-KSPA Two-tracks pique terry(Ordinary plaiting) circular knitting machine
- PL-KSPB Two-tracks pique terry(Ordinary plaiting) circular knitting machine
- PL-KS3B Four tracks three end fleece circular knitting machine
- PL-KSE3B Four tracks fish-net circular machine

#### SPECIFICATIONS OF MACHINER MODELS

Yarn material: Pure cotton, Blend, and synthetic fibers...Etc.

## 產品介紹

PL-KSP  
PL-KPA



本機為佰龍全新觀念設計機種,強調外觀設計及符合人體工學原理。機台機腳以高強度鋼板結合成型,設計考量融入機體應力及應變潛力等邊界條件,加強機台整體結構強度與不同轉速下平穩度。

整體設計上減少噴油機與噴風裝置外掛於機體外,更易於操作人員 360 度控制機台。全機鞍座及下菱角圈以全新鑄造拋光鏡面處理,並以雙色高溫烤漆 處理機身部分,美觀耐用,提升整體機台質感。

LCD 液晶螢幕觸控系統,將所有機台運轉數據,及生產量控制全由螢幕顯示,人性化操作說明指示引導,以觸控螢幕方式更換畫面,清楚易懂。營造出高科技之專業感。機台傳動主齒輪採浸油式潤滑設計,降低工作運轉噪音及磨耗,提供低傳耗之運轉功能。

下盤針筒之隙座調整直接由外部下方處理,免除整組針筒拆卸之技術處理及工時耗費,不需像以往機型費時費工,大量減低維修成本。型山角調整輪設計,依據螺旋傳動驅動原理設計,刻度精確無誤,有效提供操作人員調整山角之依據,並給予客戶相同布樣再現性的便利。

反包毛巾機 PL-KSP 以特殊設計之信克片,達到完美之反包效果,線圈長度穩定、均勻、毛圈表面平整均勻,不易漏底,更可避免織物因加工剪毛後之脫毛現象,並提供不同之毛長之信克片供客戶採用,包括無毛長信克片 1.5mm、1.8mm、2.0mm、2.2mm、2.5mm、2.8mm、2.9mm、3.0mm、3.2mm 及 3.5mm。成品除一般毛巾布外,更可經由後加工過程製造密絲絨鑽石絨、電子絲絨、立體燒花布等多種變化之布種。

PL-KSPA 為兩段式反包毛巾機,PL-KSPB 為四段式反包毛巾機,可依客戶之需求,提供出針、半針、平針之毛巾山角,配合組織變化,提供數種不同變化的毛巾組織布。信克片同 PL-KSP。

正包毛巾機 PL-KPA 可織造出完美之包底效果,成品包含一般毛巾布或經後處理過程成為單/雙面刷毛布,抗起毛毳顆粒布,或超細纖維製品等另有低口數之粗針距毛巾機 (PL-KPA 30"X10GX36F) 可用於工業用或粗針毛巾布種。

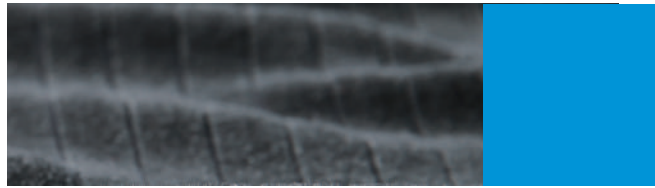
■ 機型變更 透過更換部分零件,佰龍單面毛巾機可將更換為以下機種,便利市場需要變化。

- PL-KSP (反包機型)
- PL-KPA (正包機型)
- PL-KSPA(兩段反包毛巾機)
- PL-KSPB(四段反包毛巾機)
- PL-KS3B(單面四段機型)
- PL-KF3B-LP(單面三線縲緯衛衣機型)
- PL-KSE3B(單面魚網眼機型)



# Applications

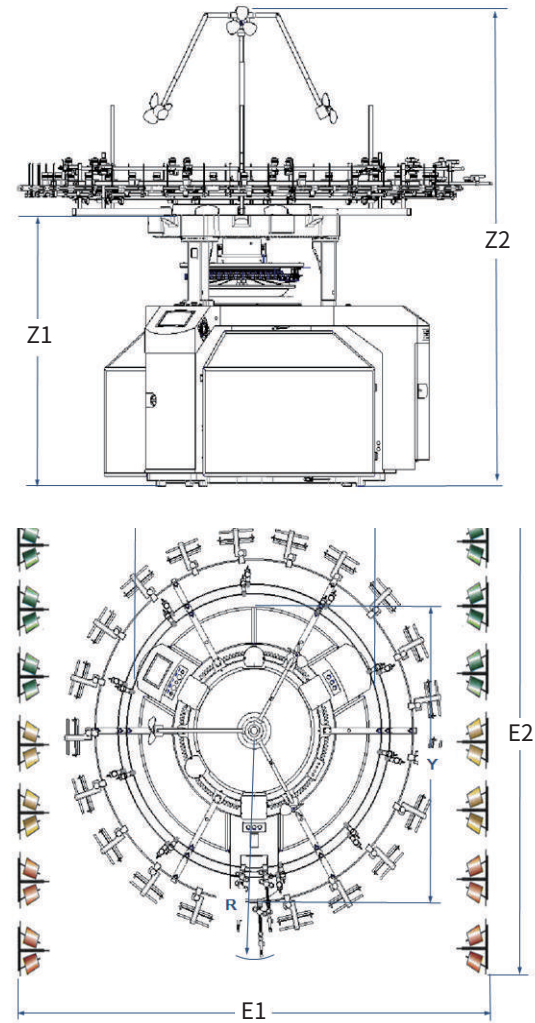
**K** Pai Lung K-series  
Single Knit



**Feeder No. & Needle Chart** 口數 & 針筒總計數表

Dia	Feeder	18G	20G	22G	24G
30	48F	1692	1888	2072	2264
32	50F	1808	2008	2216	2416
34	54F	2040	2264	2488	2712
38	60F	2136	2392	2624	2864
40	62F	2264	2512	2768	3016
42	64F	2376	2640	2904	3618

**Dimensions** 機台外觀尺寸圖



TF	X	Y	R	Z1	Z2	E1	E2
4"~12"	1530	2000	1179.5	1957	3329.3	1915	2559
13"~18"	1815	2040	1482	1824.05	3210.8	2630	3164
19"~24"	1950	2190	1554.5	1824.05	3210.8	3309	3345
25"~30"	1885	2200	1617	1849.5	3301.8	3434	4060
31"~34"	2035	2370	1682	1849.5	3301.8	3564	4775
35"~40"	2177	2531	1762	1849.5	3301.8	3724	5490
41"~46"	2260	2665	1878	2049.5	3501.8	3956	6205
47"~52"	2400	3050	1993	2049.5	3501.8	4186	6920
53"~58"	2900	3640	2155	2312.5	3670	4510	7635
59"~64"	3300	3530	2700	2312.5	3670	5600	8350

# Dimensional drawings

- Above specification may be changed without notice.
- Investigating management software does not include factory layout.
- 以上規格配備若有變更，無法先行通知，仍以實體為準。
- 客戶需自行購買配合整廠管理所需之配線。

# Basic Configuration

	標準配備	選項配備
 控制介面	<ul style="list-style-type: none"> <li>- 數據顯示控制面板</li> <li>• 三班制工作計數, 機台轉速, 布量預控設定</li> <li>• 異常停機原因顯示</li> <li>• 一般操作及緊急停止按鈕</li> </ul>	<ul style="list-style-type: none"> <li>- 整合式觸控功能液晶螢幕</li> <li>• 完整提供所有操作狀況及數據顯示</li> <li>• RS-485 介面可結合監控系統 POMS</li> <li>• Decotex 連接埠</li> </ul>
 儲紗裝置	<ul style="list-style-type: none"> <li>- 積極式儲紗送紗器 MPF-20L1</li> <li>- 儲紗器環 2 圈+1 組預備鐵圈</li> </ul>	<ul style="list-style-type: none"> <li>- 積極式儲紗送紗器 MPF-20P1/ NEO Knit</li> <li>- 氨輪輸紗器 MER3</li> </ul>
 織針及沉降片	<ul style="list-style-type: none"> <li>- 毛巾機專用織針</li> <li>- 毛巾機專用沉降片(依據不同毛長需求)</li> </ul>	<ul style="list-style-type: none"> <li>- 依客戶需求提供不同毛長之沉降片以及備用織針</li> </ul>
 三角配置	<ul style="list-style-type: none"> <li>- 毛巾機專用三角配置</li> </ul>	
 電源	<ul style="list-style-type: none"> <li>- 380V, 50/60Hz,</li> <li>- 2.2Kw/3Hp - 3.7Kw/5Hp</li> <li>- 5.5Kw/7.5Hp - 7.3Kw/10Hp</li> <li>- 變頻傳動控制裝置</li> </ul>	<ul style="list-style-type: none"> <li>- 220V, 50/60Hz</li> <li>- 415~460V, 50/60Hz</li> </ul>
 捲布裝置	<ul style="list-style-type: none"> <li>- 佰龍機械式捲布機</li> <li>- 均衡張力方形撐布架裝置</li> </ul>	<ul style="list-style-type: none"> <li>- 馬達式捲布機</li> <li>- 摺布/ 捲布兩用捲取機</li> <li>- 開幅剖布/ 捲布裝置</li> <li>- 泳立機械式變速捲布機</li> <li>- 高捲裝捲布直徑36"</li> <li>- 高捲裝捲布直徑45"</li> </ul>
 紗架	<ul style="list-style-type: none"> <li>- 採用 B8/B9 組合式落地紗架</li> </ul>	<ul style="list-style-type: none"> <li>- D8/D9 組合式 PVC 風管或鋁管落地紗架</li> <li>- 頂蓬式紗架</li> <li>- 風扇除絮型風扇紗架</li> <li>- 密閉式過濾紗架系統</li> </ul>
 機架	<ul style="list-style-type: none"> <li>- 佰龍 K 系列機盤</li> <li>- 浸油潤滑四鋼線軸承</li> <li>- 順時鐘轉向運轉下布</li> </ul>	
 喂紗嘴	<ul style="list-style-type: none"> <li>- 毛巾機喂紗舌片</li> </ul>	<ul style="list-style-type: none"> <li>- 氨綸添紗裝置</li> </ul>
 噴油機	<ul style="list-style-type: none"> <li>- Pulsionic 5.2 脈衝式壓力噴油機</li> </ul>	<ul style="list-style-type: none"> <li>- Uniwave 噴霧式噴油機</li> <li>- 佰龍噴霧式噴油機</li> </ul>
 其他	<ul style="list-style-type: none"> <li>- 壞針或布面破洞自停裝置</li> <li>- 機架及布面照明裝置</li> <li>- 上段風扇吹絮裝置</li> <li>- 中段風扇及噴風吹絮裝置</li> <li>- 針筒座高度規</li> <li>- 壓縮空氣最低需求: 6 bar, 250 l/min</li> <li>- 中央布目疏密調整裝置</li> </ul>	<ul style="list-style-type: none"> <li>- Uniwave 中段噴風除塵裝置</li> <li>- 美名格上段風扇吹絮</li> <li>- 整合式液晶螢幕觸控螢幕可連結以下裝置:</li> <li>• POMS 佰龍線上監控系統</li> <li>Decotex 送紗長測量儀(提供 2 組傳送皮帶紗長數據, 可依需求增加到 8 組數據)</li> <li>• 電子中央布目調整裝置</li> <li>電子皮帶轉輪控制裝置</li> </ul>
 轉換件		<ul style="list-style-type: none"> <li>- PL-KSP/KPA 可更換-</li> <li>• 不同針距之針筒</li> <li>• 普通單面機 PL-KS3B 單面四跑道三線縲緯</li> <li>• Single Jersey PL-KS3B</li> <li>• Terry plating PL-KSP</li> <li>• Mesh PL-KSE3B</li> <li>• Mesh plating PL-KSEP3B</li> </ul>

	Standard	Options
Control	<ul style="list-style-type: none"> <li>- Digital control panel</li> <li>• 3 shift counter, rpm, fabric roll per-set, &amp; working hr.</li> <li>• Stop reason indication.</li> <li>• Emergency &amp; control buttons</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated LCD control system</li> <li>• Full info &amp; control present</li> <li>• Ready for POMS</li> <li>• Ready for Decotex</li> </ul>
Power	<ul style="list-style-type: none"> <li>- 380V, 50/60Hz,</li> <li>- 2.2Kw/3Hp - 3.7Kw/5Hp</li> <li>- 5.5Kw/7.5Hp - 7.3Kw/10Hp</li> </ul>	<ul style="list-style-type: none"> <li>- 220V, 50/60Hz</li> <li>- 415~460V, 50/60Hz</li> </ul>
Take - up	<ul style="list-style-type: none"> <li>- Pai Lung mechanical take up system</li> <li>- Cadratex fabric spreader</li> <li>- standard fabric roll dia' 17"</li> </ul>	<ul style="list-style-type: none"> <li>- Motor take up system</li> <li>- Folding/ rolling take up system</li> <li>- Open width take up system</li> <li>- Yung Leader mechanical take up system -Heavy Duty fabric roll dia. 36"</li> <li>- Heavy Duty fabric roll dia. 45"</li> </ul>
Needle	<ul style="list-style-type: none"> <li>- Terry-used needle set-up -Terry-used sinker(by different pile height)</li> </ul>	<ul style="list-style-type: none"> <li>- Spare sinker&amp;needle as request</li> </ul>
Camming	<ul style="list-style-type: none"> <li>- Terry-used camming set-up</li> </ul>	
Yarn storage	<ul style="list-style-type: none"> <li>- Positive feeder MPF-20L1 -2 feeder iron rings&amp;1 spare</li> </ul>	<ul style="list-style-type: none"> <li>- Postive feeder MPF-20P1/ NEO Knit - Elastane roller MER3</li> <li>- other brand feeders on request</li> </ul>
Frame	<ul style="list-style-type: none"> <li>- Pai Lung K frame</li> <li>- Oil-bathed wire bearing system</li> <li>- Count clockwise direction</li> </ul>	
Yarn carries	<ul style="list-style-type: none"> <li>- Terry-used yarn yARRIER</li> </ul>	<ul style="list-style-type: none"> <li>- Spandex attachment</li> </ul>
Oiler	<ul style="list-style-type: none"> <li>- Pulsionic 5.2 pressure oiler</li> </ul>	<ul style="list-style-type: none"> <li>- Uniwave misty oiler</li> <li>- Pai Lung misty oiler</li> </ul>
Creels	<ul style="list-style-type: none"> <li>- B8/B9 type combi creels</li> </ul>	<ul style="list-style-type: none"> <li>- D8/D9 type PVC or aluminums tube creels</li> <li>- Overhead creels</li> <li>- Fan creels</li> <li>- Filter creels</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Needle detectors</li> <li>- Lightings on frame &amp; fabrics</li> <li>- Top fans system</li> <li>- Central fan &amp; air blower</li> <li>- Cylinder height gauge</li> <li>- Min compressed air : 6 bar, 250 l/min</li> <li>Central stitch adjustment</li> </ul>	<ul style="list-style-type: none"> <li>- Uniwave central anti-dust blow system</li> <li>- Memminger top fan system</li> <li>- Integrated LCD control system can be added:</li> <li>• POMS on-line monitoring</li> <li>• Decotex port(ready for 2 yarn feeding length figures, and can be added to 8 figures</li> <li>• Electronic central stitch control Electronic tape speed control</li> </ul>
Conversion kit		<ul style="list-style-type: none"> <li>- PL-KSP/KPA</li> <li>• Other gauge cylinder change</li> <li>• Three end fleece PL-KF3B</li> <li>• Single Jersey PL-KS3B</li> <li>• Terry plating PL-KSP</li> <li>• Mesh PL-KSE3B</li> <li>• Mesh plating PL-KSEP3B</li> </ul>