

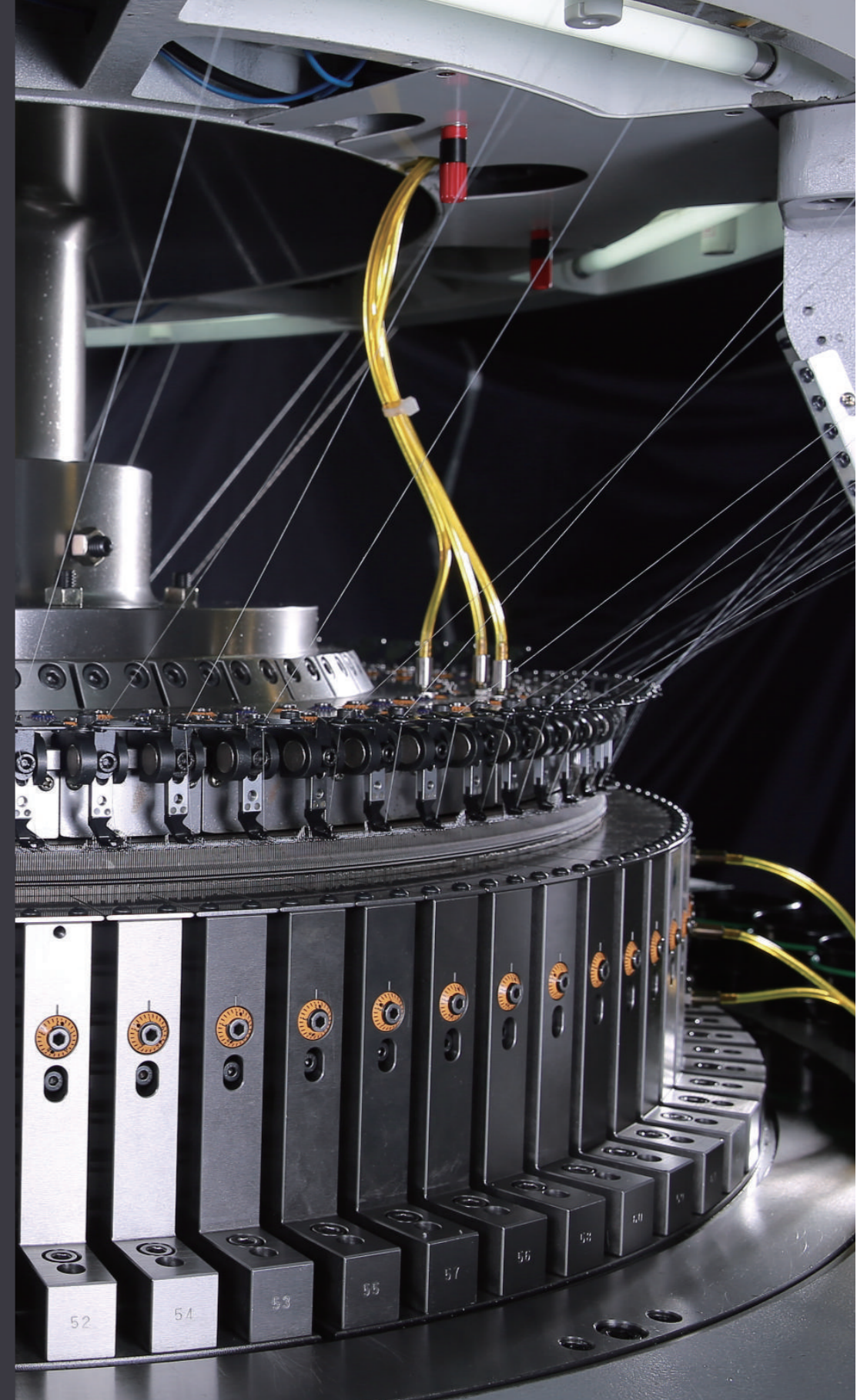


Double Knit 2+6 & 4+6 Tracks  
Interlock Circular Knitting Machine

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

PAI LUNG

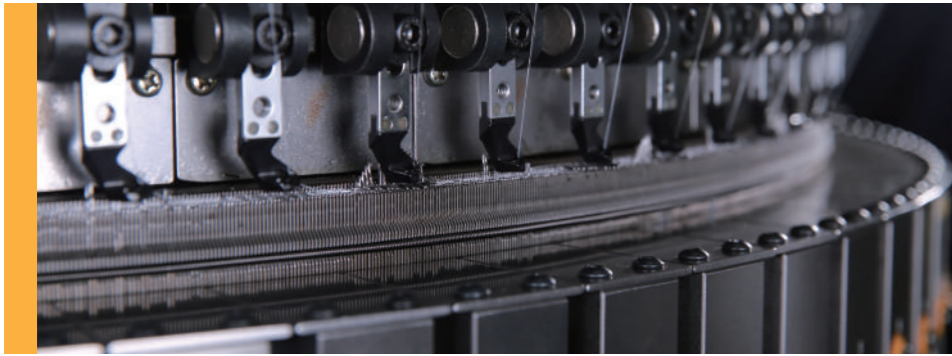


**K**nitel Series

**Double Knit**

2+6 & 4+6 Tracks  
Interlock Circular Knitting Machine  
雙面2+6 & 4+6 跑道圓筒針織機

PL-KD3C  
PL-KD2.5D



## Products Introduction

Pai Lung's K series represents a remarkable new concept that draws on highly original thinking in design and clever new advances in engineering. It combines interior Pai Lung's latest Knitel technology to a double jersey system in a redefined knitting head that's no longer than a interlock machine only.

The main gear transmission of dial and cylinder in the double jersey machine are the oil bathed lubrication. This design can deduce the running noise, energy loss, and part worn out, also provide higher operating RPM in production. The K frame design can separate the frame oil and waste needle oil effectively for easy maintenance. The housing grooving structure can afford long-term period of any heavy loading from the take up system.

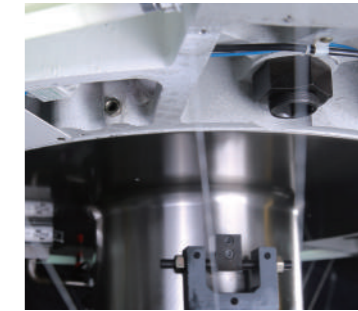
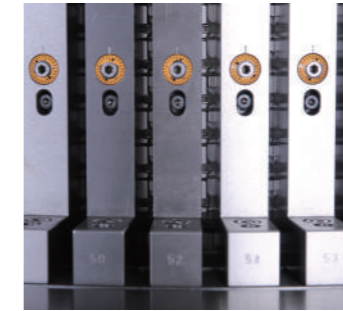
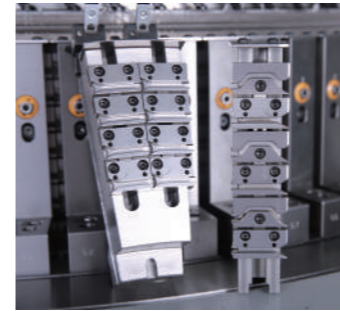
Considered the various yarn material applications, the knitting head of Pai Lung interlock machine can offer the best solution for different request in knitting, like fine polished and hardness cam, the feeding angle of the yarn carrier, and yarn tension in needle knock over. The cam measuring screw is based on the driving principle of two closed faces. Accurate indication is able to effectively give knitting operator in pattern and weight reference.

Based on 2+6 cam track design, not only plain interlock fabrics which produced by normal 2+2 cam track type, also punte de roma, eight lock double pique, single pique, wet ripple, and reversible etc. Also in 2+4 track cam arrangement system which can produce pattern like twills herringbone creapes, double lacoste, vertical striper, and small pique etc.

6 cylinder cam tracks can produce more complicated pattern without operating difficulty. Some small jacquard pattern design for sportswear can be created in this machine instead of mini jacquard model.

By the combination of 4 tracks on dial and 6 tracks on cylinder, imitate the function of jacquard effect. Makes the back side more like 3D structure, also enhanced the air permeability. Will outstandingly increase the comfort of sportswear.

model	track	cylinder	gauge
PL-KD3C	2+6	26"~42"	18~42G
PL-KD2.5D	4+6	26"~42"	14~42G



## 產品介紹

PL-KD3C  
PL-KD2.5D

追求最高的織造品質，是佰龍機械一直努力不懈的目標，將原有Kritel系列架構精華導入，提升雙面棉毛機性能及織造品質，更是佰龍機械為服務業界最佳見証。

佰龍雙面棉毛機採用Kritel針筒座設計，杜絕機台底部溢油污染織物之可能。而最新主傳動齒輪設計，大盤機油及廢針油可以確實分離。大盤及上盤傳動齒輪皆採用浸油設計，運轉輕快，穩定度提高，且降低噪音及減少織物因煞車造成之影響。新式隙座系統更能支撐高張力及高負重之長期承載影響，減低各項機械影響因素以降低人造纖維織物暗影產生為最高境界。

考慮日新月異之紗線運用及添紗功能使用，佰龍提供最佳解決之組合運用，使能符合多種變化的需求。三角軌跡設計，喂紗嘴入紗角度，及織針吃紗位置及張力，搭配先進硬度處理之針筒，佰龍以Kritel系列之核心技術，將織針軌跡，皆經嚴密電腦模擬計算，及經過業界實際反覆測試獲得結果。三角製造精密，表面光滑，並皆以合銷固定三角座滑塊，提供精準定位，織物布目得以呈現更佳的均一程度及外觀平整效果，並大幅提升運轉耗材及零件壽命。產出織物品質提昇，及機台維護成本降低，更能提升客戶競爭實力。

PL-KD3C在針盤兩段三角及針筒六段山角組織架構下，不僅可以生產一般2+2跑道棉毛組織，經過山角更換，可以織造龐地羅馬，互鎖，複式凹凸，單式凹凸，波紋組織等。亦可在2+4跑道組織上，提供斜紋布，人字紋布，起皺布，交錯全針，小型提花，空氣層，夾層布，凹凸橫楞及絲棉組織等。此機型更可以提供更複雜小型提花組織設計之功能，適用於運動面料及休閒服飾用途，可以部分取代機械提花機之功能。

PL-KD2.5D以針盤四段跑道搭配針筒六段跑道的排列組合，幾乎可以取代80%小型提花的功能，讓背組織更立體化，提升布料的透氣性。如果運用在運動用衣著上，則可讓排汗性及衣物舒適度更上一層樓。

### 機種規格衍生及織物特性

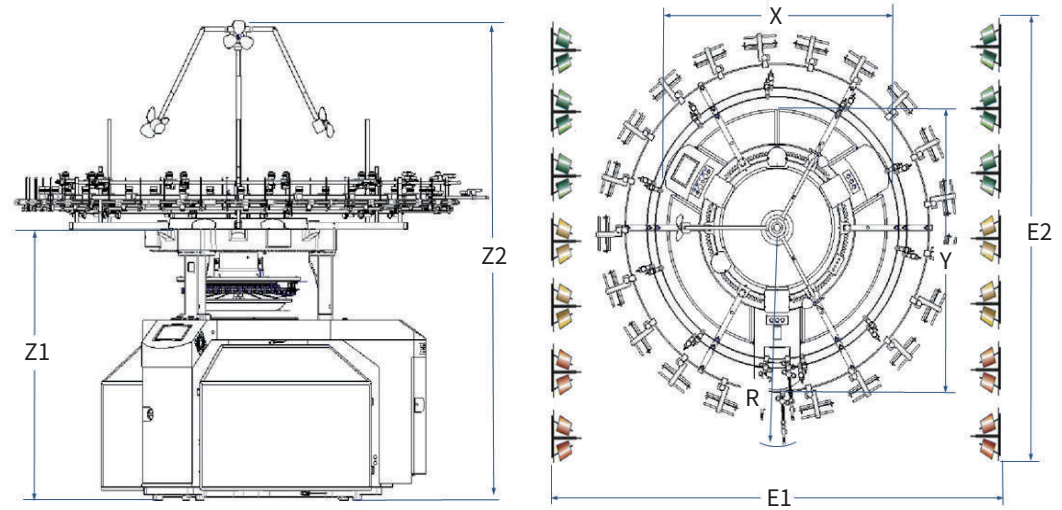
機型	跑道數	針筒直徑	針距範圍
PL-KD3C	2+6	26"~42"	18~42G
PL-KD2.5D	4+6	26"~42"	14~42G

**K** Pai Lung K-series  
Double Knit

# Applications



**Dimensions** 機台外觀尺寸圖



**Production** 產量

Dia. 直徑	Gauge. 針距	R.P.M. 轉速	Yarn 原料	Weight 重量 (g/m <sup>2</sup> )	Width 幅寬
30"X74F	20G	25	Cotton 30/1 Ne	220-230	34"-35"
30"X74F	24G	25	Polyester 100/1 D	110-250	32"-36"
32"X90F	28G	20	Cotton 30/1 Ne	235-245	38"-39"
32"X90F	28G	18	Polyester 75/1 D	120-160	43"-44"

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

**Feeder No.** 口數

Dia	PL-KD2.5D	PL-KD3C	HP
26"	64F	72F	5
28"	70F	78F	5
30"	74F	84F	5
32"	78F	90F	7.5
34"	84F	96F	7.5
36"	88F	100F	7.5
38"	94F	106F	7.5
40"	98F	112F	10
42"	104F	118F	10













**Needle Chart** 針筒總針數表

	18G	20G	22G	24G	26G	28G	30G	32G	34G	36G	38G	40G	42G
26"	1464	1632	1800	1968	2124	2280	2424	2592	2772	2940	3096	3264	3420
28"	1584	1752	1920	2112	2280	2448	2616	2784	2988	3156	3336	3516	3684
30"	1692	1896/1684	2062/2040	2256	2448	2616/2592	2760	2988/2796	3204	3384	3576	3768	3948
32"	1800	2016/2208	2400	2616/2604	2784	2052/3000	3192	3216	3408	3612	3816	4020	4212
34"	1920	2136	2340/2352	2556/2544	2784/2772	2988/2976	3120/3180	3384	3624	3840	4056	4272	4476
36"	2040	2256	2484/2472	2712/2700	2940	3168	3360	3600/3576	3840	4068	4296	4524	4740
38"	2160	2376	2628/2616	2868	3096	3336/3312	3552	3730/3816	4056	4296	4536	4764	5004
40"	2269/2256	2520	2760	3024/3000	3264	3504	3744	3984	4272	4524	4764	5016	5268

- 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>• 機台停機原因顯示</li> <li>• 一般操作及緊急停止按鈕</li> </ul>	<ul style="list-style-type: none"> <li>- 整合式液晶螢幕</li> <li>• 觸控功能</li> <li>• 完整提供所有操作狀況及數據顯示</li> <li>• 可結合多項監控系統如 POMS 線上監控系統</li> </ul>
 電源	<ul style="list-style-type: none"> <li>- 380V, 50/60 Hz - 2.2Kw/3Hp</li> <li>- 3.7Kw/5Hp - 5.5Kw/7.5Hp</li> <li>- 7.3Kw/10Hp - 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>- 機械式變速捲布機</li> <li>- 均衡張力方形撐布架裝置</li> </ul>	<ul style="list-style-type: none"> <li>- 馬達式變矩捲布機</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> </ul>
 織針及沉降片	<ul style="list-style-type: none"> <li>- 2 段針盤織針</li> <li>- 2 段針筒織針</li> </ul>	<ul style="list-style-type: none"> <li>- 2段 4段或6段織針組織</li> <li>- 依客戶需求提供預備織針數量</li> </ul>
 三角配置	<ul style="list-style-type: none"> <li>- 三角以合銷固定, 定位精準</li> <li>- 針盤及針筒各 2 段跑道三角配置</li> <li>- 密閉型三角設計</li> <li>- 沉降片三角座每 2 路 1 組設計</li> <li>- 針筒座三角座每 1 路 1 組設計</li> </ul>	<ul style="list-style-type: none"> <li>- 針盤 2 跑道及 4 跑道及針筒 6 段跑道山角配置</li> <li>- 依客戶需求提供機身及預備三角配置</li> <li>- 壓針三角</li> </ul>
 儲紗裝置	<ul style="list-style-type: none"> <li>- 積極式儲紗送紗器 MPF-30L1</li> <li>- 儲紗器環 3 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-30P1/ NEO Knit</li> <li>- 氨輪輸紗器 MER3</li> <li>- 依客戶需求提供其他形式儲紗裝置</li> </ul>
 機架	<ul style="list-style-type: none"> <li>- 佰龍 K 系列機盤</li> <li>- 浸油式送紗傳動齒輪箱</li> <li>- 斜頂三角座 - 標準捲布直徑 17"</li> <li>- 逆時鐘轉向機架</li> </ul>	
 喂紗嘴	<ul style="list-style-type: none"> <li>- 雙孔喂紗嘴無瓷孔</li> </ul>	<ul style="list-style-type: none"> <li>- 氨輪準備裝置</li> <li>- 氧化鋯單孔喂紗嘴</li> <li>- 氧化鋯雙孔喂紗嘴</li> </ul>
 噴油機	<ul style="list-style-type: none"> <li>- Pulsonic 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>
 紗架	<ul style="list-style-type: none"> <li>- D8/D9 組合式 PVC 風管落地紗架</li> </ul>	<ul style="list-style-type: none"> <li>- B8/B9 組合式開放落地紗架</li> <li>- 頂蓬式紗架 - 風扇除絮型風扇紗架</li> <li>- 鋁製風管 - 密閉式過濾紗架系統</li> </ul>
 其他	<ul style="list-style-type: none"> <li>- 壞針自停裝置</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>- 壓縮空氣需求: 6 bar 250 l/min</li> </ul>	<ul style="list-style-type: none"> <li>- 中央布目疏密調整裝置</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 (連接埠已提供 2 組傳送皮帶紗長數據, 可依需求購機時增至 8 組數據功能)</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>- 不同針距之針筒</li> <li>- 羅紋轉換件</li> <li>- 包紗管</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>• Touch panel</li> <li>• Full info &amp; control present</li> <li>• Ready for POMS and others electronic control &amp; monitor connection</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> <li>- Inverter power control</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>- Mechanical take up system</li> <li>- Cadratex fabric spreader</li> </ul>	<ul style="list-style-type: none"> <li>- Motor take up system</li> <li>- Folding/ rolling take up system</li> <li>- Open with/ rolling take up system</li> <li>- Yung Leader mechanical take up system</li> </ul>
 Needle/Sinker	<ul style="list-style-type: none"> <li>- 2 track cylinder needles</li> <li>- 2 track dial needles</li> </ul>	<ul style="list-style-type: none"> <li>- 4 track cylinder needles</li> <li>- 6 track cylinder needles</li> <li>- Sparer &amp; needles as request</li> </ul>
 Camming	<ul style="list-style-type: none"> <li>- 2 track cylinder and dial each cams arrangement</li> <li>- 2 feeder/ per cam box</li> <li>- 1 feeder/ per cylinder cam box</li> <li>- Scope</li> </ul>	<ul style="list-style-type: none"> <li>- 4 track cylinder or 6 track cylinder</li> <li>- cams arrangement</li> <li>- Extra cam arrangement depends on request</li> <li>- Blister cams</li> </ul>
 Yarn storage	<ul style="list-style-type: none"> <li>- Positive feeder MPF-30L1</li> <li>- 3 feeder iron rings&amp;1 spare</li> </ul>	<ul style="list-style-type: none"> <li>- Postive feeder MPF-30P1/ NEO Knit</li> <li>- 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 quantity wheels gear box</li> <li>- Top inclined cylinder cam box</li> <li>- Count clockwise direction</li> <li>- Standard fabric roll dia' 17"</li> </ul>	
 Yarn carries	<ul style="list-style-type: none"> <li>- 2 holes type without ceramics</li> </ul>	<ul style="list-style-type: none"> <li>- 1 hole type without ceramics</li> <li>- 2 holes type with ceramics</li> <li>- Spandex attachment</li> </ul>
 Oiler	<ul style="list-style-type: none"> <li>- Pulsonic 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>- D8/D9 type PVC tube creel</li> </ul>	<ul style="list-style-type: none"> <li>- B8/B9 types combi creels</li> <li>- Overhead creels - Fan creels</li> <li>- Aluminum tube - 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; rotating blower</li> <li>- Cylinder height gauge</li> <li>- Compressed air : 6 bar 250 l/min</li> </ul>	<ul style="list-style-type: none"> <li>- Central stitch adjustment</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</li> <li>• Electronic tape speed control</li> </ul>
 Conversion kit		<ul style="list-style-type: none"> <li>- Rib conversion kit</li> <li>- Other gauge cylinder change</li> <li>- Enveloped fabrics equipment</li> </ul>