

烘乾機系列

Shrinking Dryer Series



 力根實業股份有限公司
LK&LH CO., LTD



總公司：桃園市龜山區東舊路街142號
Head Office：142 Stree East Chiulukeng,
Kweishan, Tao Yuan, Taiwan.
TEL：886-3-3292488 FAX：886-3-3295292
http：//www.lknh.com.tw
E-mail：lknh@ms29.hinet.net

中國聯絡處：江蘇省昆山市長江南路1128號219室(日月星城)
TEL：86-512-57780055,57780077
FAX：86-512-57780099
http：//www.lknh.com.tw
E-mail：lknh@ms29.hinet.net



力根專利保護中

LK-625 Series 烘乾機系列

- 電腦化無張力烘乾機特點
Computerized Control Tensionless Dryer features... **03**
- 入布縮碼系統
Entrance overfeeding system... **05**
- 鏈條式縮碼系統
In-feed vertical chain transporting and overfeeding... **06**
- 高效能熱風循環系統
High efficiency hot air circulationsyst... **07**
- 排氣系統
Exhaustingsystem... **08**
- 主控制系統
Main control cabinet system... **09**
- 出口裝置
Exit devices... **10**
- 機台尺寸(三種尺寸規格圖)
Machine Dimension LK-625T... **11**
- 機台尺寸(二種尺寸規格圖)
Machine Dimension LK-625V... **13**
- 機台尺寸規格圖
Machine Dimension LK-625S... **15**

TENSIONLESS DRYER



LK625系列

無張力烘乾機之功能乃利用織物在濕布狀態，進行烘乾的過程中，盡量避免將織物經緯向的牽伸，讓織物在自然且鬆弛的狀態下烘乾，讓布匹有充分的收縮，可達到布匹最佳的殘縮率以穩定布匹尺寸，增加布匹豐厚柔軟之舒適手感。



LK625 系列 電腦化無張力烘乾機具有以下特點：

- 人性化操作介面，兼具管理者需求設計。
- 加工流程電腦化，提高品質再現性。
- 可結合中央自動流程化控制系統，使於整廠自動化管理。
- 軟硬體均為LK自行研發，擴充性佳售服無虞。
- 具遠距維修功能。



LK625 Series

LK 625 Tensionless Dryer is working under wet conditions to process the drying processes, to avoid the fabrics been stretched in weft or warp direction, and let the fabrics be relaxed in normal drying status, will be fully shrink and reach at the maximum fabric shrinkage rate, not only stabilize the fabric sizes, but also increase the softness and handle of fabric.

LK 625 Series Computerized Control Tensionless Dryer have the following features:

- Operation interface based on humanized principles and combined with manager men design requirement .
- Commissioning flows in computerized control, to highlight the product quality.
- Incorporate with central automation process in PLC control system, integrate the turn-key plant automations.
- LK have developed it's own software and hardware, so it can expand more versatility and maintenance without any problems.
- It can be through INTERNET for monitoring your machine functions. Easy for maintenance.



LK-625S Series/LK-625T Series

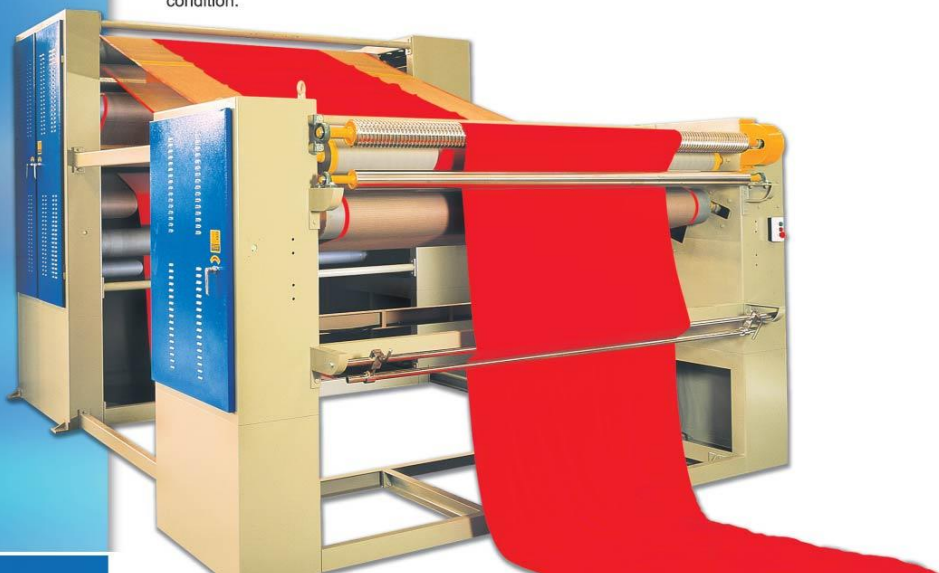
入布縮碼系統

- LK-625採獨特之閉迴路方式精準控制縮碼系統。
- LK-625入布裝置採輸送網方式，使布匹真正在自然且鬆弛的狀態下進行縮碼喂布功能。
- 烘箱輸送網採比例運動訊號方式控制，各輸送網可獨立調整，布匹以最自然鬆弛方式漸縮烘乾。



Entrance overfeeding system

- LK-625 is adopted of the unique modulating motor for driven control and feed-back control system, by close cycle loops for precise overfeeding control system.
- The fabric entry device of LK-625 is adopted of conveyor belt transporting system, to let the fabric passing in complete relaxing status to precede the overfeeding and in-feeding functions.
- Each conveyor belt of heating oven is adopted of automatic modulating driven system, each conveyor belt can be adjusted individually, the fabrics will be treated in relaxing and shrinking at optimal drying condition.



LK-625V Series

鏈條式縮拉碼系統

- 採LK專用型運動比例設定及迴授控制表，以閉迴路方式精準控制縮碼系統。
- 採人性化氣壓式縮碼控制，方便操作又美觀。
- 入布展邊及輔助托板，結合平皮帶組，易於展布上針。
- 縮碼壓布毛刷採皮帶式，增加布邊下壓時間，避免布邊脫針。

In-feed vertical chain transporting and overfeeding

- Adopted of LK specialized model for auto modulating setting, feed-back controller, closed cycle to accurate control the overfeeding system.
- By virtue of humanized pneumatic control, easy to operate and smooth looking.
- Fabric entry scrolling and auxiliary supporting plate, to combine with belt driven, easy for fabric pinning on.
- Overfeeding press on brush with the belt type, increase the fabric selvage pressing time, to avoid the fabric selvage pinning off.



雙上漿機組合 (選配)

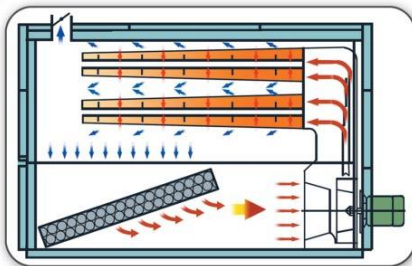
- 針對各種短針織物，使其上藥平均節省藥劑。

Twin Paddle mangle combinations (Optional)

- For the various spun yarns knitwear's, to let the chemicals distribution and save the chemicals.

高效能熱風循環系統

- 熱風噴嘴採特殊導流結構，以確保風向平均分散，風量及溫度之均勻性最佳。
- 最佳的三度空間氣流設計與強韌結構體，使布匹流程順暢並可控制布匹漂浮，較長的布匹停留時間及最佳預縮率。
- 熱風噴嘴採上下交錯排列方式，可使自然且鬆弛織物達最大波浪震盪，以達到布匹最適之殘縮率。
- 人性化雙層抽取式過濾網設計，運行中可即時清理過濾網棉絮以確保熱風循環效能。



● 烘箱氣流示意圖 Hot air circulation system

High efficiency hot air circulation system

- The jet-nozzle is adopted of special ducting structure, thought computer design of the air integration ideas, ensure the hot air will be uniformly distributed, air volume and temperature in optimal distributions.
- Permits development of 3-dimensional and expressive structures during passage though the dryer, to control fabric dynamics, long retention times and high overfeed rates.
- The jet-nozzle is adopted of upper and down interchange arrangement, ensure the fabric in tumble movement operation, fabric in natural and relaxed condition to reach the maximum vibration and drying efficiency, also in optimal shrinkage rate.
- Screen filter is adopted of double screen filters designs, is easily accessible and the air circulation filters can be cleaned during operation without stopping the machine. It save time of maintenances.



- 交錯排列的噴嘴，使布匹漂浮在熱風中，形成波浪式的振盪，使布匹達到最佳的預縮及手感。

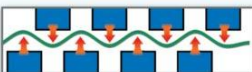
Inter lock arrangement of jet nozzle. To treat the fabrics floating in the hot air, and formed a wave vibrations.

It is expected that handle and shrinkage rate will be reached.

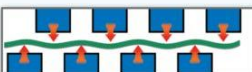
布匹烘乾過程示意圖



- 第一階段：超噴入布，布匹呈大幅波浪狀。
1st phase, tumbling movement in big waves.



- 第二階段：波浪漸縮，顯示已有預縮現象。
2nd phase, tumbling movement become smaller for shrinking.



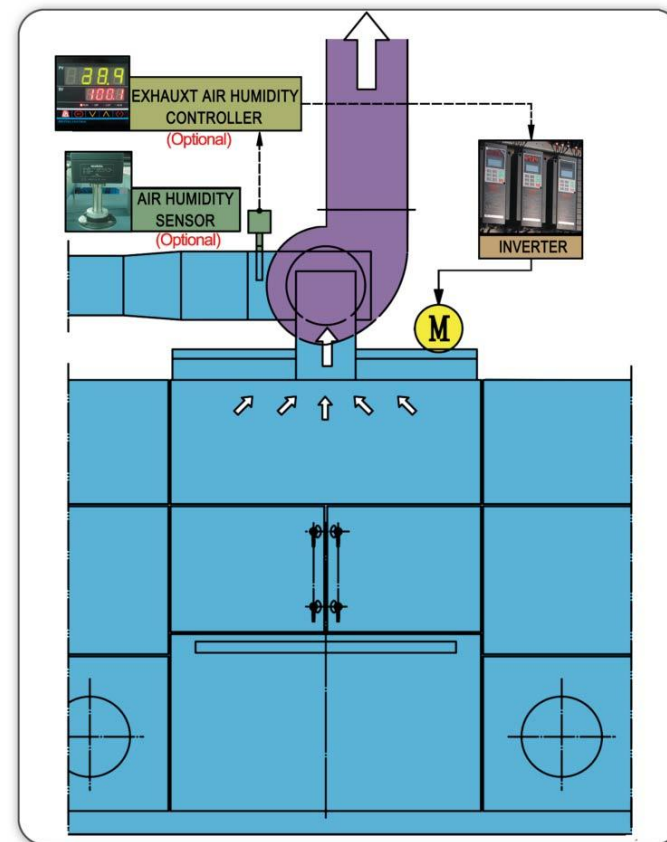
- 第三階段：布匹已乾燥，並有大程度預縮現象。
3rd phase, fabrics is completely drying.

排氣系統

- 排氣流量設計與循環風系統成最佳比例，確保烘箱均溫性。
- 結合排氣變頻控制及布匹定型品質要求，務使單位能源成本最符合經濟效益。
- 可進階結合排氣濕度控制，全自動化節能控制烘箱及排氣濕度要求。（選配）

Exhausting system

- The exhaust moisture air volume designs and airing circulations will be matched in best ratio, ensure the heating oven temperature uniformly and energy in effective uses.
- Scientific digital management ideas, incorporate with exhaust blower inverter control and fabric thermo-fixing quality demand, ensure energy saving cost will comply with economic efficiency.
- It can be combined with exhaust moisture automatic control system, for the fully automatic moisture detecting and controllable demand in heating oven. (Optional)

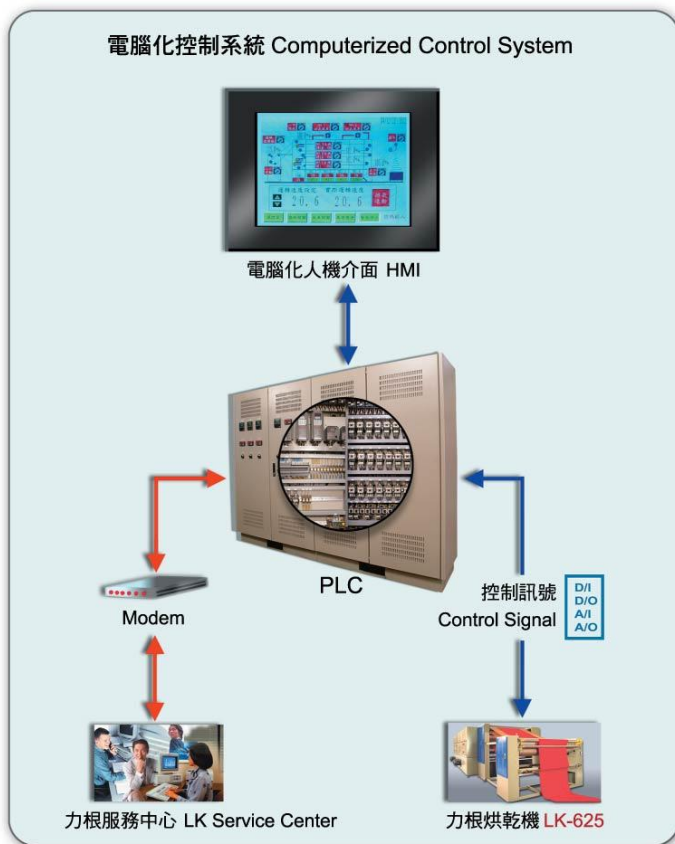


主控制系統

- 採單點分散控制，集中管理之PLC+電腦人機介面控制系統，操作方便又簡單。
- 人性化操作介面，兼具管理者需求設計。
- 可結合中央自動流程化控制系統，便於整廠自動化管理。

Main control cabinet system

- By virtues of single point distribution control, central management in PLC interface control system, easy to operate.
- Human design operation interface will meet the operator demands.
- Combine with central automation flow charts control system, for the turn-key plant automation management.

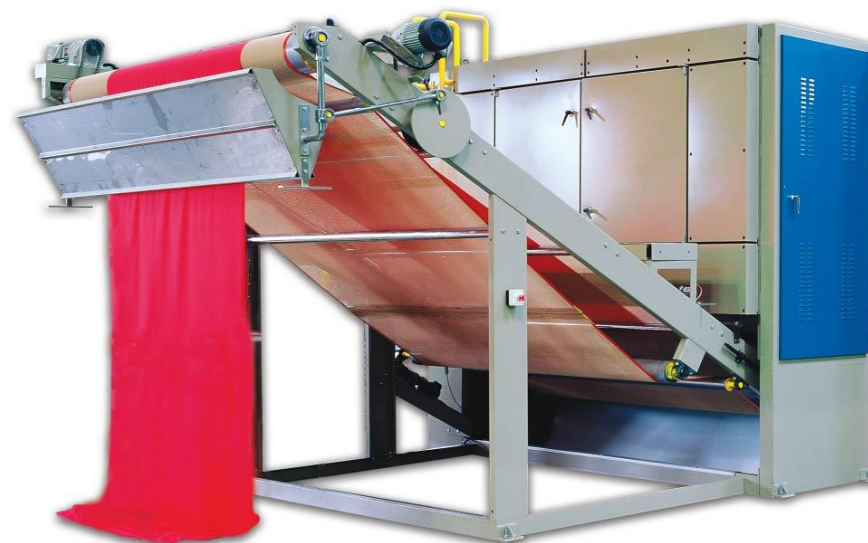


出口裝置

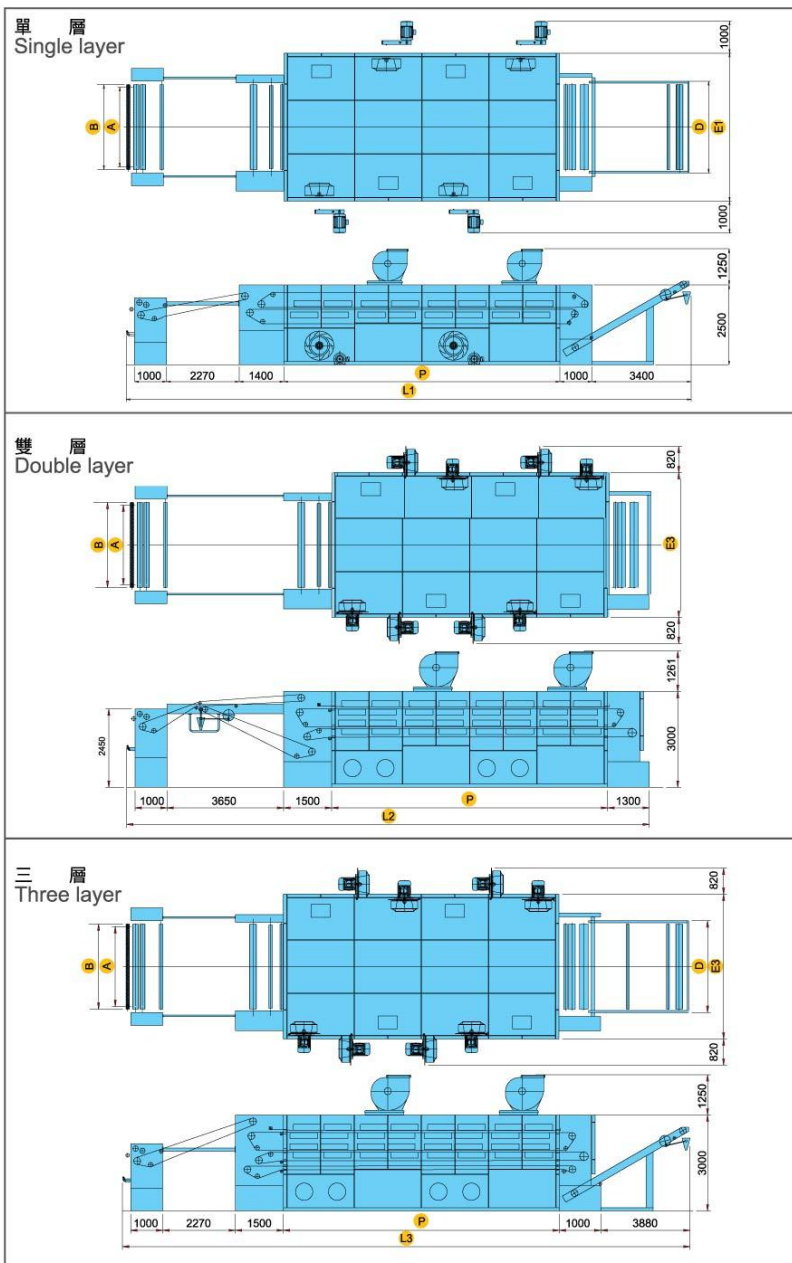
- 出布方式採爬山式輸送網裝置，並且使用閉迴路控制系統，使輸送網可獨立調整其速度，讓布匹以最自然鬆弛的方式出布。

Exit devices

- By virtue of conveyor belt delivery at the exit, and with closed circuits control system, At the same time, it can be adjusted the running speed of conveyor belt individually, to let the fabric delivery in most relaxing and natural way.



三種尺寸規格圖 Machine Dimension



LK-625T Series

機台尺寸表 Machine Dimension

機械寬度 Machine Width	A	B	D	E1	E3	工作布寬 Working Width	輸送網寬 Conveyor Width
2000mm	2000	2160	2360	4130	4030	1850mm	1950mm
2300mm	2300	2460	2660	4430	4330	2150mm	2250mm
2500mm	2500	2660	2860	4630	4530	2350mm	2450mm
2700mm	2700	2860	2960	4830	4730	2550mm	2650mm
2800mm	2800	2960	3060	4930	4830	2650mm	2750mm
3000mm	3000	3160	3260	5130	5030	2850mm	2950mm

機台設計基準 Basic Design

室數 Chamber	P	L1	L2	L3	機械速度 Max Speed	風力馬車 /單層 Fan HP	風力馬車 /三層 Fan HP	熱量需求 Heating Requirement
2	4430	13760	12140	14340	30M/min	2x40HP	4x25HP	60萬 Kcal
3	6530	15860	14240	16440	30M/min	3x40HP	6x25HP	90萬 Kcal
4	8630	17960	16340	18540	40M/min	4x40HP	8x25HP	120萬 Kcal
5	10730	20060	18440	20640	60M/min	5x40HP	10x25HP	150萬 Kcal
6	12830	22160	20540	22740	60M/min	6x40HP	12x25HP	180萬 Kcal

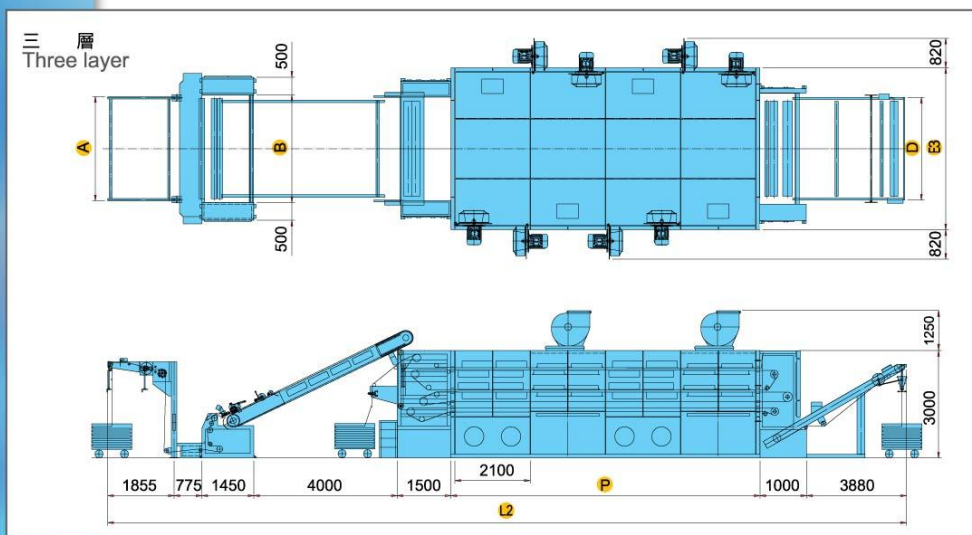
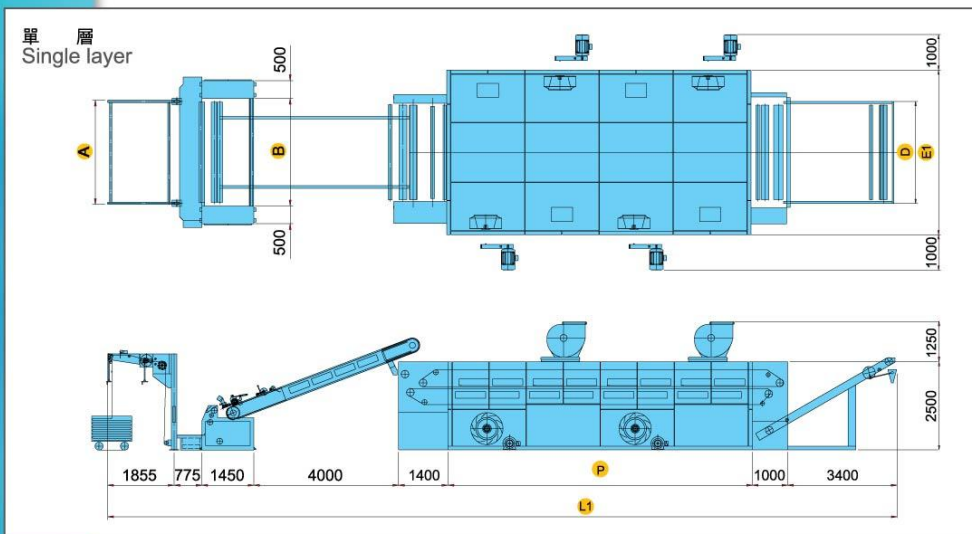
使用溫度與熱源 Working Temp and Heat Source

使用熱源 Heat Source	使用溫度 Working Temp
瓦斯 LPG. or NG	220°C max
熱煤油 Themo Oil	220°C max
蒸氣 Steam	6kg/cm ² : 130°C max 12kg/cm ² : 160°C max
蒸汽+電熱 Steam+Electric	195°C max

※本公司擁有設計變更之權力，尺寸如有變更時不另行通知!

Our Company has the right to change the designs,
If the sizes need to be changed, will not inform again.

二種尺寸規格圖 Machine Dimension



LK-625V Series

機台尺寸表 Machine Dimension

機械寬度 Machine Width	A	B	D	E1	E3	工作布寬 Working Width
2000mm	2412	2700	2360	4130	4030	1850mm
2300mm	2712	3000	2660	4430	4330	2150mm
2500mm	2912	3200	2860	4630	4530	2350mm
2700mm	3112	3350	2960	4830	4730	2550mm
2800mm	3212	3450	3060	4930	4830	2650mm
3000mm	3412	3650	3260	5130	5030	2850mm

機台設計基準 Basic Design

室數 Chamber	P	L1	L2	機械速度 Max Speed	風力馬車 /單層 Fan HP	風力馬車 /三層 Fan HP	熱量需求 Heating Requirement
2	4430	18310	18890	30M/min	2x40HP	4x25HP	60萬Kcal
3	6530	20410	20990	30M/min	3x40HP	6x25HP	90萬Kcal
4	8630	22510	23090	40M/min	4x40HP	8x25HP	120萬Kcal
5	10730	24610	25190	60M/min	5x40HP	10x25HP	150萬Kcal
6	12830	26710	27290	60M/min	6x40HP	12x25HP	180萬Kcal

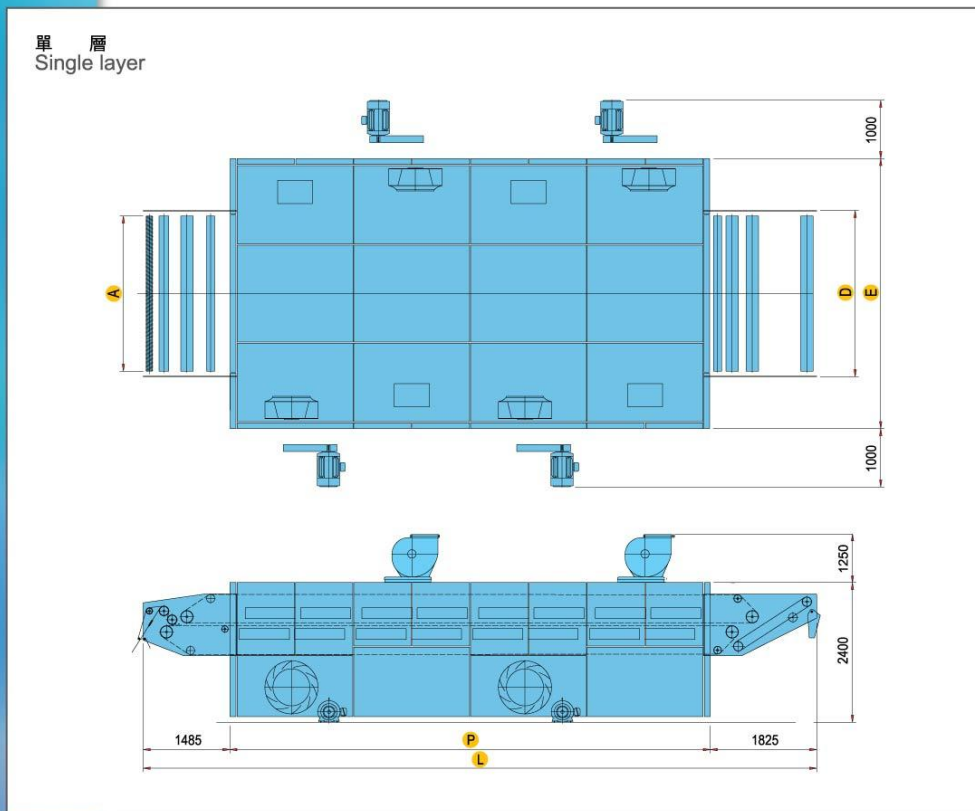
使用溫度與熱源 Working Temp and Heat Source

使用熱源 Heat Source	使用溫度 Working Temp
瓦斯 LPG. or NG	220°C max
熱煤油 Themo Oil	220°C max
蒸氣 Steam	6kg/cm ² : 130°C max 12kg/cm ² : 160°C max
蒸汽+電熱 Steam+Electric	195°C max

※本公司擁有設計變更之權力，尺寸如有變更時不另行通知！

Our Company has the right to change the designs,
If the sizes need to be changed, will not inform again.

尺寸規格圖 Machine Dimension



LK-625S Series

機台尺寸表 Machine Dimension

機械寬度 Machine Width	A	D	E	工作布寬 Working Width	輸送網寬 Conveyor Width
2000mm	2160	2350	4130	1850mm	1950mm
2500mm	2660	2850	4630	2350mm	2450mm
2800mm	2960	3150	4930	2650mm	2750mm
3000mm	3160	3350	5130	2850mm	2950mm

機台設計基準 Basic Design

室數 Chamber	P	L	機械速度 Max Speed	風力馬車/單層 Fan HP	熱量需求量 Heating Requirement
2	4430	7740	30M/min	2x40HP	60萬 Kcal
3	6530	9840	30M/min	3x40HP	90萬 Kcal
4	8630	11940	40M/min	4x40HP	120萬 Kcal
5	10730	14040	60M/min	5x40HP	150萬 Kcal
6	12830	16140	60M/min	6x40HP	180萬 Kcal

使用溫度與熱源 Working Temp and Heat Source

使用熱源 Heat Source	使用溫度 Working Temp
瓦斯 LPG. or NG	220°C max
熱煤油 Themo Oil	220°C max
蒸氣 Steam	6kg/cm ² : 130°C max 12kg/cm ² : 160°C max
蒸汽+電熱 Steam+Electric	195°C max

※本公司擁有設計變更之權力，尺寸如有變更時不另行通知!

Our Company has the right to change the designs,
If the sizes need to be changed, will not inform again.