



晏邦電機
YANN BANG



除濕乾燥機

DEHUMIDIFYING
DRYER

QUALITY OF LIFE
品質再進化 創造新生活美學



ISO 9001:2008 品質保證
An ISO 9001:2008
Certified Company

除濕乾燥機 DEHUMIDIFYING DRYER

突破世界標準(露點 -40°C)

使用傳統熱風乾燥方式或坊間一般所謂的除濕乾燥機，下列現象是否令您束手無策？

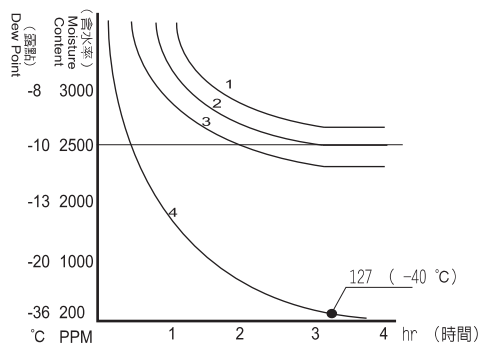
- 常因流痕、水泡、銀條、龜裂、透明度不佳等現象困擾不已？
- 經常以肉眼檢視產品完美無瑕，但卻因韌性、拉力、衝擊強度等物性試驗不合格，而遭致退貨？
- 氣候或季節變化，導致不良率忽高忽低，延誤商機？

上述因塑料未充分乾燥，即成型所招致的問題，豈是熱風乾燥或一般除濕乾燥機所能解決。

惟有選擇全國唯一突破世界標準（露點 -40°C）且已堂堂跨越 -50°C 的晏邦除濕乾燥機，才能讓您於塑膠成型中，確保品質及充份展現塑料完美的物性，進而提升競爭能力。

溫濕度對照表

露點溫度 Dew-Point		相對濕度 Relative Humidity	含水率 Moisture Content	
°C	°F	%	PPM	%
-50°	-58°	0.169	38.96	0.0038
-40°	-40°	0.533	127.50	0.0127
-30°	-22°	1.640	377.76	0.0377
-20°	-4°	4.440	1025.00	0.1025
-10°	+14°	11.150	2573.68	0.2573
0°	+32°	26.120	6027.63	0.6027
+10°	+50°	52.520	12117.10	1.2117
+20°	+68°	100.000	23072.37	2.3072



1. 熱風乾燥 (夏季) 2. 熱風乾燥 (春秋季) 3. 熱風乾燥 (冬季) 4. 晏邦除濕乾燥 (四季)

1. Hot Air Drying (Summer) 2. Hot Air Drying (Spring /Autumn) 3. Hot Air Drying (Winter) 4. Yann Bang's Dehumidifying (Four seasons)

機型選擇方法

1. 請根據機型、塑料種類、參考功能表的乾燥能力85%~90%為最佳選擇。
2. 料斗乾燥機的規格=成型機每小時使用量x塑料乾燥時間。
3. 本型錄建議搭配之乾燥機與填料機型號，將隨塑料等級、初期含水率、物理特性、環境條件及需求不同等因素而需調整。
4. 功能表為理想狀態下，塑料含水率至少低於0.02%時之最大乾燥能力，功能表請洽業務人員。

Go Under Dew Point-40°C

Do the following situations make you feel quite helpless when using traditional hot air dryers and other brands of dehumidifying dryers?

- The product contains flaws, such as record grooves effect, entrapped air, stress-whitening, moisture streaks, and etc.
- The product looks flawless, but is returned by the buyer because the product fails the tenacity, impact, or tensile strength tests.
- The variance of the climate or season make the quality inconsistent.

These problems are caused by incomplete dehumidifying of the hygroscopic resins before they are sent to the mold. These problems cannot be solved by using hot air dryers.

Yann Bang is the only brand of dehumidifying dryers in Taiwan that can exceed the world standard of dew point - 40°C and head to -50°C. By choosing Yann Bang, you can ensure the quality of your products and increase your ability to compete with competitors.

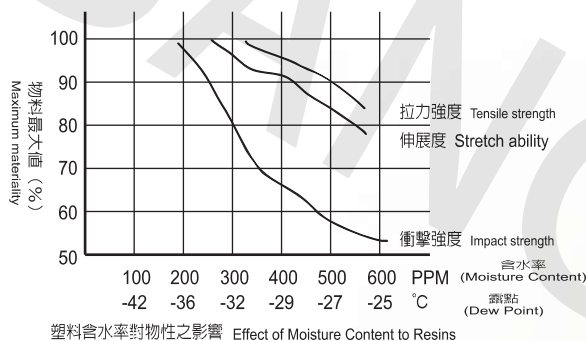
Hygrometric Equivalents

露點溫度：水蒸氣凝結成水滴時所需的溫度，也就是說露點愈低，愈不容易形成水氣，含水率愈低，除濕效果愈好。

相對濕度：指在某一特定溫度條件下的空氣含濕率，一般以百分比表示。

Dew Point: The temperature needed for vapor to transform into water. The lower the dew point is, the less the moisture content will be. The less the moisture content is, the better the result of dehumidifying will be.

Relative Humidity: The humidity at particular temperature, usually indicated by percentage.



How to choose the models?

1. For the best result, please choose the models of dehumidify dryers according to 85-90% of capacity.
2. The required capacity of Hopper Dryer = Machine hourly capacity x Drying time(hr).
3. To choose the suitable model of dryers and loaders will be changed by resin grade, initial moisture content, physical properties, drying condition and other factors.
4. The "PERFORMANCE TABLE" shows the maximum values in kg/hr at 0.02% of residual moisture content, as to performance table, please contact us.

1. 獨特的區域間隔，保溫構造。
2. 高效率且節省能源的母子除濕輪設計。
3. 輕巧簡易的裝卸設計。
4. 不需採用閥門來控制各區氣體之流向。
5. 精確的智慧型PID數字型溫度控制器。
6. 針對含油性特高之塑料，如PET，亦有獨到解決能力和配備。
7. 智慧型微電腦控制及防超溫保護器。
8. 省電型加熱器與節電設計之控制裝置，使運轉格外省電。
9. 設想周到的SSR系統與多重安全保護裝置。
10. 榮獲國內外多項專利，例如日本、美國、德國、台灣及大陸。



微電腦控制面板

- 智慧型電熱偵測系統。
- 溫度、濕度、露點檢測功能 (選配)
- 一週操作時間預約。

1. Unique design of insulated desiccant rotor system.
2. Efficient and energy saving design of exclusive rotation mechanism for the rotor & desiccant chambers.
3. Easy-load design for desiccant replacement.
4. No pneumatic valves necessary to control the air flow between areas.
5. Accurate PID temperature controller.
6. Ideally design for PET preform systems.
7. Intelligent microprocessor control and overheat protector.
8. Energy saving heater and unique design for saving electricity.
9. Well designed Solid State Relay (SSR) and protective devices.
10. Obtained numerous domestic and oversea patents of Japan, the United States, Germany, Taiwan and China.

Electrical Microprocessor Control

- Advanced detective devices.
- Temperature, Humidity, Dew Point detector devices. (option)
- Seven-day timer.



機型	Model	DHML-1		DHML-2		DHML-3		DHML-5		DHML-7.5		DHML-10		DHML-15		DHML-20	
週率	Frequency	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ
乾燥風量	Air Flow (m ³ /hr)	100	80	260	220	390	330	390	330	660	600	720	660	1440	1140	1440	1140
乾燥風車	Drying Blower (kw/hp)	0.75/1		1.75/2.5		2.2/3		3.75/5		5.5/7.5		7.5/10		11.25/15		15/20	
再生風車	Reg. Fan Motor (kw)	0.18		0.18		0.18		0.375		0.375		0.75		0.75		0.75	
再生電熱	Reg. Heater (kw)	4.5		7.8		7.8		9.5		9.5		9.5		16		16	
總消耗電力	Total Load (kw)	5.625		9.675		10.375		13.625		15.5		20.25		27		30.75	
風管口徑	Air Piping (inch)	2		2.5		3		3.5		4.5		6		6		8	
冷卻水需求	Cooling Water Required (l/min)	20		25		25		32		32		40		40		50	
機械尺寸	Dimension (W×D×H) (cm)	60×86×168		87×106×198		87×106×198		125×145×227		126×145×235		175×180×268		175×180×268		175×180×268	
重量	Approx. Weight (kg)	230		420		470		640		720		820		980		1180	
建議搭配乾燥機	Suitable Dryers	DHD-100		DHD-200		DHD-400		DHD-560		DHD-800		DHD-1000		DHD-1500		DHD-2000	

備註：1.產品規格若有變更，恕不另行通知。2.如需更大機型，歡迎訂製。3.如果單機一對多筒時，乾燥風車加一級或加大除濕機機型。

Remarks: 1. We reserve the right to change the technical data without prior notice. 2. Customized specification are available upon your early inquiry.

3. If your Dehumidifying Dryer works with more than one suction hopper, suggest to upgrade one level of your blower or select upper model of dehumidifying dryer.

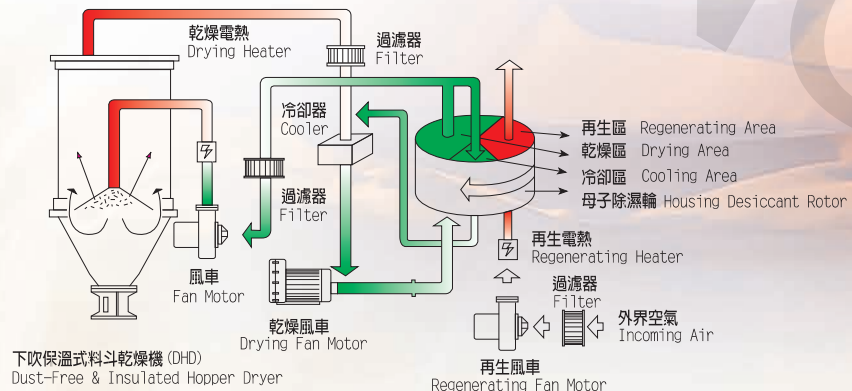
專利母子型的功能圖

Functional Diagram of Housing Desiccant Rotor Design

台灣專利 TAIWAN PAT.: 81204 & 88022

美國專利 U.S.A. PAT.: 5301439

大陸專利 CHINA PAT.: 93213382.7



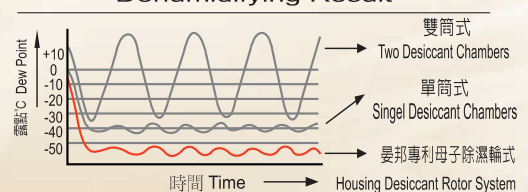
除濕方式差異表

Comparing Diagram of Dehumidifying Way

項目 Item	型式 Model	晏邦專利母子除濕輪式 Housing Desiccant Rotor System	雙筒式 Two Desiccant Chambers	單筒式 Singel Desiccant Chamber
除濕結構 Structure of Desiccant Chambers	乾燥區 Drying area	○	○	○
	再生區 Regenerating area	○	○	○
	冷卻區 Cooling area	○	×	○
	三區獨立互不干擾 Insulated noninterference areas	○	○	×
乾燥風口出風溫度 Dry air temperature at dry air outlet		45°C ~ 50°C	75°C ~ 80°C	70°C ~ 75°C
露點測試報告表 Dew point test report		○	×	×

除濕效果

Dehumidifying Result





YANN BANG

蜂巢輪型

1. 採用進口蜂巢輪陶瓷纖維，可提供乾燥空氣露點 -40°C 以下。
2. 智慧型液晶微電腦控制及防超溫保護器。
3. 精確智慧型PID溫度控制器。
4. SSR系統與多重安全保護裝置。
5. 輕巧簡易安裝、拆卸容易。

Honeycomb Series

1. Import Honeycomb of ceramic fiber, exceed dew point below -40°C of dried air.
2. Intelligent microprocessor control and premium overheat protector.
3. Accurate PID temperature controller.
4. Well designed Solid State Relay(SSR) and protective devices.
5. User-friendly design for easy maintenance.



機型	Model	DHC-60		DHC-80		DHC-100		DHC-200		DHC-400		DHC-600		DHC-800		DHC-1000	
週率	Frequency	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ
乾燥風量	Air Flow (m³/hr)	60	50	100	80	120	100	200	180	350	300	450	420	660	600	720	660
乾燥風車	Drying Blower (kw/hp)	0.4/0.5		0.75/1		0.75/1		1.75/2.5		2.2/3		3.75/5		5.5/7.5		7.5/10	
再生風車	Reg. Fan Motor (kw)	0.1		0.1		0.1		0.375		0.375		0.375		0.75		0.75	
再生電熱	Reg. Heater (kw)	4.5		4.5		4.5		6		7.8		9		13		18	
總消耗電力	Total Load (kw)	5		5.35		5.35		9.675		11.575		13.125		19.25		26.25	
風管口徑	Air Piping (inch)	2		2		2		2.5		3		3.5		4.5		6	
冷卻水需求量	Cooling Water Required (l/min)	20		20		20		25		25		32		32		40	
機械尺寸	Dimension (W×D×H) (cm)	60×78×150		60×78×150		60×78×150		60×82×170		87×107×198		87×107×198		190×190×230		190×190×230	
重量	Approx. Weight (kg)	130		160		160		200		300		380		430		520	
建議搭配乾燥機	Suitable Dryers	DHD-12		DHD-25		DHD-50		DHD-100/150		DHD-200/300		DHD-400/560		DHD-600/800		DHD-1000	
建議搭配填料機	Suitable Loader	TA(E)-6L TA(F)-6L-2D		TA(E)-6L TA(F)-6L-2D		TA(E)-6L TA(F)-6L-2D		TA(E)-6L TA(F)-6L-2D		TA(E)-8L TA(F)-8L-2D		TA(E)-10L TA(F)-10L-2D		TA(E)-10L TA(F)-10L-2D		TA(E)-12L TA(F)-12L-2D	

備註：1. 產品規格若有變更，恕不另行通知。 2. 如需更大機型，歡迎訂製。 3. 如果單機一對多筒時，乾燥風車加一級或加大除濕機機型。
Remarks: 1. We reserve the right to change the technical data without prior notice. 2. Customized specification are available upon your early inquiry.
3. If your Dehumidifying Dryer works with more than one suction hopper, suggest to upgrade one level of your blower or select upper model of dehumidifying dryer.

真空式

Vacuum Series



台灣精品2009
TAIWAN EXCELLENCE

真空式除濕乾燥機 Vacuum Dehumidifying Dryer

榮獲第18屆台灣精品獎，並取得德、日、美、台、中五國專利。運用真空方式達到快速乾燥效果，能縮短乾燥時間、提高產能、節省能源，是新一代光學產業不可或缺的最佳設備。詳細規格表及功能，請參考「循環預熱真空式除濕乾燥機」型錄。

Awarded "The 18th Taiwan Excellence", and patents in Germany, Japan, USA, Taiwan and China. The Vacuum Dehumidifying Dryer can shorten your drying time, increase your production, and save your energy and cost. It is an indispensable drying equipment for optics industry. For more technical details please refer to catalog of Vacuum Dehumidifying Dryer.

直結式真空乾燥機 Vacuum Dryer

取得德、日、台、中四國專利，利用真空原理對原料進行二次乾燥，短時間內即可快速降低塑料含水率，露點可達-25°C，方便清料，省時又省力，可搭配任何廠牌的料斗乾燥機，充分運用原有設備即可大幅提昇乾燥品質，是花小錢、賺大錢的好投資。

With patents technology in Germany, Japan, Taiwan and China re-dry plastic resins by the vacuum theory to quickly reduce moisture content in short time and reach dew point down to -25 °C. The dryer is light and easy maintenance. Any brand of hopper dryer can install directly upon it to upgrade your drying production more efficiently without occupying your space but save more time and energy cost

機型	最高溫度	乾燥筒量	真空馬達	搭配烤筒	抽真空時間	空氣壓力需求	機械尺寸
Model	Max. Temp. °C	Chamber Capacity ℓ	Vacuum Motor kw	equip with hopper dryer kg	vacuum time sec.	Air Pressure kg/cm²	Dimension cm
VB-3	160	3	0.75	12~100	25	4 ↑	(D×W×H) 77×69×160

備註：產品規格若有變更，恕不另行通知。
Remarks: We reserve the right to change specifications without prior notice.



三機一體多功能型

Multi-Function Series

1. 同時具備乾燥、除濕及自動輸送三大功能，經濟又實惠。
2. 運轉低噪音，提昇環境品質。
3. 附有工作輪，可隨需求移動，機動性高。
4. 結構緊實、體積減少，提高空間使用率。
5. 整合乾燥、除濕功能結構，降低耗能，節能又減碳。
6. 空氣濾清器、抽空裝置不用工具即可拆卸，保養容易又省時。
7. 料斗乾燥機採白鐵材質（另有其他材質供選擇），筒內不殘留原料，且附清理門，清理容易。
8. 台灣專利 226845 & M300795、大陸專利 02272700.0

1. Save money. Three-in-one design can dry, dehumidify, and automatically convey resins.
2. Low noise to promote the quality of environment.
3. Easy to move. The unit with wheels can move anywhere for your need.
4. Designed structure to save more space for use.
5. Combine drying and dehumidification system to save energy and lower carbon emission.
6. Air filter and pipe cleaning device are easy to take out without any tool to save your time.
7. Hopper Dryer made by stainless steel (other material is also available) with clean door for easy maintenance.
8. Taiwan Pat. 226845 & M300795, China Pat. 02272700.0



機型	Model	DHC-NA60		DHC-NA80		DHC-NA100		DHC-NA200		DHC-NA400		DHC-NA600	
週率	Frequency	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ
乾燥風量	Air Flow (m³/hr)	60	50	100	80	120	100	350	300	450	420	450	420
乾燥風車	Drying Blower (kw/hp)	0.4/0.5		0.75/1		0.75/1		2.2/3		3.75/5		3.75/5	
乾燥電熱	Drying Heater (kw)	4		6		6		11		20		23	
再生風車	Reg. Fan Motor (kw)	0.1		0.1		0.1		0.375		0.375		0.375	
再生電熱	Reg. Heater (kw)	4.5		4.5		4.5		7.8		9		9	
填料機	Suitable Loader (kw/hp)	0.75/1		0.75/1		0.75/1		0.75/1		1.5/2		2.2/3	
總消耗電力	Total Load (kw)	9.75		12.1		12.1		22.125		34.625		38.325	
風管口徑	Air Piping (inch)	2		2		2		3		3.5		3.5	
冷卻水需求	Cooling Water Required (l/min)	20		20		20		25		32		32	
機械尺寸	Dimension (W×D×H) (cm)	85×125×172		85×125×175		85×135×205		113×180×245		111×189×281		206×286×280	
重量	Approx. Weight (kg)	165		220		298		354		597		693	
乾燥機容量	Suitable Dryer (kg)	25		50		100		200		400		600	
建議成型機 搭配吸料筒	Suitable Suction Hopper for IMM	GSS		GSM		GSM		GSM/GSB		GSB		GSB	

備註：1.產品規格若有變更，恕不另行通知。2.如需更大機型，歡迎訂製。3.如果單機一對多筒時，乾燥風車加一級或加大除濕機機型。
Remarks: 1. We reserve the right to change the technical data without prior notice. 2. Customized specification are available upon your early inquiry.
3. If your Dehumidifying Dryer works with more than one suction hopper, suggest to upgrade one level of your blower or select upper model of dehumidifying dryer.

選配專利節能裝置

Option: Patented Energy-efficient Device



最新節能技術能使料筒內溫度迅速上升，提昇原料乾燥程度並縮短烘料時間30%以上，節能又可降低故障率延長機器壽命，同時，能過濾原料中的粉塵與油氣，減少空氣污染，節能又環保。

The advanced technology recycles internal heat and faster heating. The temperature inside hopper increases quickly for better drying and shorten above 30% of drying hour. Simultaneously the unit can separate dust and oil for better quality. An energy-efficient device can save energy and improve working environment for you.

專利Patents: 德國 GERMAN PAT. Nr 202013009957.7 台灣 TAIWAN PAT. M46154
大陸 CHINA PAT. ZL201320264074.7

微量型

微量型除濕乾燥機運用空氣壓縮機之氣體來乾燥塑料，完成生產工作，空氣壓縮機產生之風量適合3C產品細小零件的生產，完美的乾燥程度加上適度的乾燥風量，生產效益大加分。

空氣經過空氣壓縮機濾水處理，並在5~7kg/cm²的壓力下進行壓縮，再經過分子篩使得乾燥空氣露點達-40~-50℃以上，讓塑料於成型過程中，充份展現塑料完美的物性。依照塑料種類不同，所需乾燥時間也略有不同，為2~6小時之間。

微量型亦可結合乾燥與輸送功能，成為一台微量三機一體除濕乾燥機，經濟又實惠，相較於一般除濕乾燥機，此機型體積輕巧可直接裝置於成型機之入料口，或將控制器與筒身分開放置，而乾燥後的原料直接投入生產，避免原料回潮，確保生產品質。

Micro Series

The latest micro dehumidifying dryer uses compressed air to dry the plastic resin. The air volume generated by the air compressor is suitable for the production of small parts, such as electronics parts. The perfect grade of dryness coupled with a moderate amount of drying air, the production efficiency greatly increased.

Air compressor process the air via water filtration, and the air will be compressed between pressure 5~7kg/cm². The compressed air will then go through the molecular sieve and supply the dry air with dew point up to -40~-50℃. During the molding process,

it will fully demonstrate the perfect plastic properties. In accordance with the different types of plastic, the drying time required is also slightly different, for 2 to 6 hours.

The multi-function design can dry, dehumidify, and automatically convey resins. Comparing to the regular dehumidifying dryer, it can save space and directly connect to the inlet of molding machine. It can directly convey the drying resins to production to prevent resurgence and to ensure the production complete.

特點

1. 露點偵測顯示
2. 空壓源不足檢測
3. 內建正壓輸送系統
4. 防超溫保護器
5. 一週型計時器
6. 加裝高密度過濾器
7. 具備工業4.0功能，可利用乙太網路及RS485 與其他品牌連結
8. 控制器與主體可採分離或合併，便利於空間安排

Features

1. Display the dew point detection
2. Insufficient air pressure detection
3. Built-in positive pressure conveying system
4. Overheat preventer
5. Weekly timer
6. Install high-density filter
7. With Industry 4.0 features, Ethernet and RS485 can be used to connect with other brands.
8. The controller and main body can be separated or combined to facilitate for space arrangements.



DHM-SL-06+AL-01+HD-6S

機型 Model	電壓 Voltage	乾燥能力 Drying Capacity kg/hr	最大風量 Maximum Air Volume m ³ /hr	最高溫度 Highest Temperature ℃	總功率 Total Power kw	乾燥筒容量 Drying Hopper Capacity L	露點範圍D.P. Dew Point Range D.P. ℃	空壓範圍 Pneumatic Range bar	機械尺寸 Dimension W×D×H cm	重量 Approx. Weight kg
DHM-SL-06	220V / 1Ø	0.1~1.6	3.5	180	1.2	6	-40 ~ -50	5 ~7	55×60×87	26

備註：產品規格若有變更，恕不另行通知。

Remark: We reserve the right to change specifications without prior notice.

雙筒型

專利的雙筒型設計，讓進入除濕筒中的潮濕風可達到更好地除濕效果，同時利用交換座可以使兩個除濕筒交換使用。能夠達到降低耗電量、節約能源之目的。本機型適合搭配處理能力較大型之料斗乾燥機設備，詳細規格能力請洽業務人員。

Dual-chamber Series

With patented dual-chamber design, the unit can dehumidifying better and save more power energy for you. The model suits to the hopper dryer for large size per hour capacity. Please contacts us for the specification and more.



台灣專利 TAIWAN PAT.: 173717

日本專利 JAPAN PAT.: 3068082

德國專利 GERMANY PAT.: 20011754.8

大陸專利 CHINA PAT.: 99236501.5

選擇配備

- 露點指示計
- 除油過濾筒
- 下吹保溫式料斗乾燥機
- 保溫式料斗乾燥機
- 耐熱矽膠風管與配管零件

Options

- Dew-point meter
- Oil eliminator
- Dust-free & insulated hopper dryer (DHD)
- Insulated hopper dryer (IHD)
- Refractory silicone pipe accessories

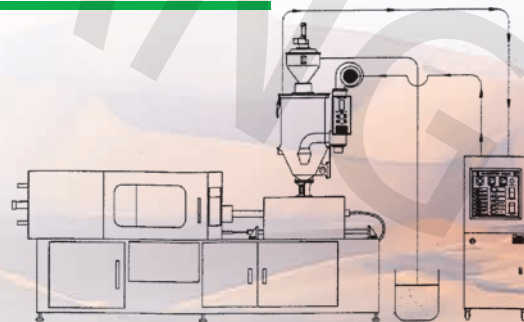
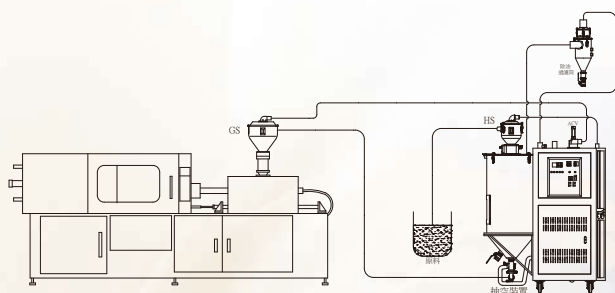


晏邦除油過濾筒解決熱油氣進入除濕乾燥機降低效能的困擾，一般過濾器無法去除的熱油氣，使用晏邦專利產品(台灣專利:M327784) 除油過濾筒，可延長蜂巢輪或分子篩的使用壽命。

YANN BANG Oil Eliminator replaces the generic filter which can't eliminate the hot oil gas. Using this patented oil eliminator (Taiwan Patent:M327784) can prevent the hot Oil gas Entering into the desiccant dryer and prolong life of honeycomb wheel and desiccative

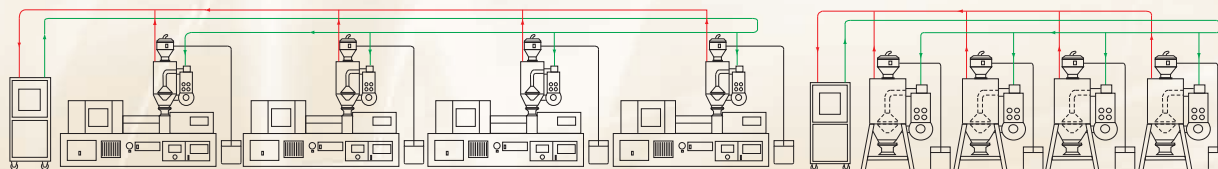
一對一除濕系統

Individual Station of Drying System



一對多除濕系統

Multi Station of Drying System





LEADER OF TAIWAN
IN AUXILIARY EQUIPMENT FOR RUBBER AND PLASTICS
台灣塑橡膠週邊設備領導品牌

晏邦電機工業有限公司 YANN BANG ELECTRICAL MACHINERY CO., LTD.

總公司 HEADQUATER

41154台中市太平區工業20路26號 (大里工業區)
No.26, Industry 20th Rd., Taiping District, Taichung City, Taiwan 41154
TEL: +886-4-22716999 FAX: +886-4-22711988
yb@yannbang.com
www.yannbang.com

台南分公司

70968台南市安南區工明三路28號
TEL: 06-2463333 FAX: 06-2464021

台北分公司

23552新北市中和區中正路448號
TEL: 02-82451836 FAX: 02-82457236

