

# 快速乾燥機系列 High Speed Dryer





燁品企業有限公司 YE PIN CO., LTD

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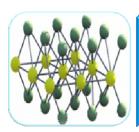
# 功能特色--4大提升 Features—4 Up



- 提高產品的抗拉性、抗破性、透光率、耐久性
- Increasing tensile resistance, fracture resistance, transparency, durability



- 提高成型品的良率及品質
- Increasing product validity and quality



- 提高份子之間的連結
- · Increasing molecule combination



- 提高生產的稼動率
- Increasing production mobility

# 功能特色--6大降低 Features--6 Downs



- 減少一半的烘料時間
- · shorten half time of drying



- 降低含水率200 ppm以下
- · Reducing water contain rate under 200ppm



- 降低烘料成本, 節省電費40%以上
- Reducing electricity bill more than 40%



- 減少模具清洗的次數 (PA46,PPS)
- Reducing cleaning frequency of mold(PA46,PPS)



- 減少乾燥不完全所產生的不良(流紋、氣泡..等)
- Reducing defects of incomplete drying (such as streak, bubble....etc.)



- 降低原料成型時,經過料管高溫混煉的所產生的氣體
- Reducing the generation of gas during the injection molding

# 7大優勢結構

### 7 Structures





不用接冷卻水 No cooling water



不銹鋼外殼易保養 Easy maintenance for stainless steel case



集塵器 Dust Collector



LED微電腦式控制面板 LED microprocessor controlled panel



功能均用燈號顯示 Light display function



機台可移動 Moveable



外罩式過濾器清理容易 Easy clean for outer filters

- 多功能快速乾燥機搭配專利截料閥,使輸送管內的塑料不殘留,無塑料回潮的問題。
- Multi-function high speed dryer device is equipped with patented valve to completely clean the plastic residue such that there will be no plastic material re-dampening problem.

#### 專利截料閥 Patented Valve





已申請多國專利結構

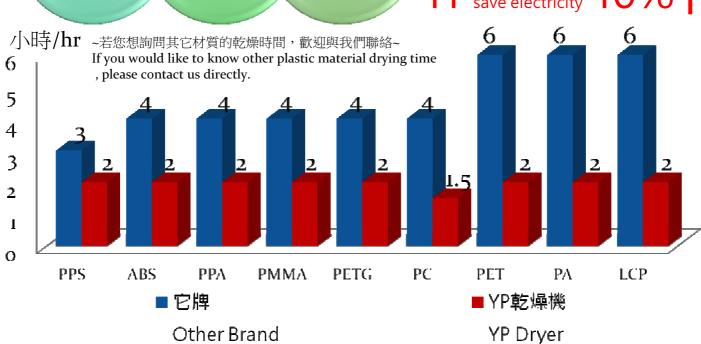
Multi-national patent application structure

# 乾燥效率比較

## **Compare drying efficiency**



| 放率性 | 速度快 | 節能 | YP 節省電費 40% ↑ | Fificiency | Speed | Saving | YP save electricity 40% ↑ |



乾燥時間/小時 Drying Time / Hr	PPS	ABS	PPA	PMMA	PETG	PC	PET	PA	LCP
它牌 Other Brand	3	4	4	4	4	4	6	6	6
YP乾燥機 YP Dryer	2	2	2	2	2	1.5	2	2	2

# 含水率太高,對塑料之破壞

Water content rate is too high, it will be damage to plastic

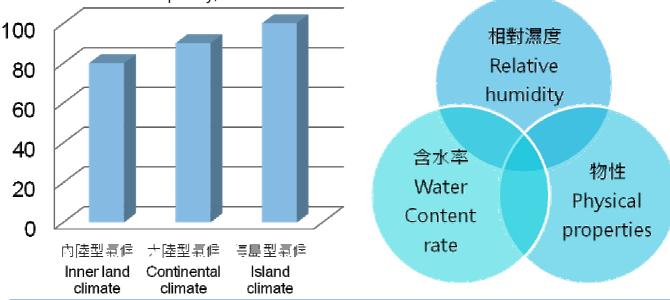
氣泡 起瘡 Bubble 銀線 Rough Sliver line bubble 衝擊性差 尺寸不穩 Bad **Unstable** durability Size 製品碎裂 黏度不佳 Product Bad **Splintering** adhesive 水解 龜裂 Hydrolysis Creaking 流痕 Streak

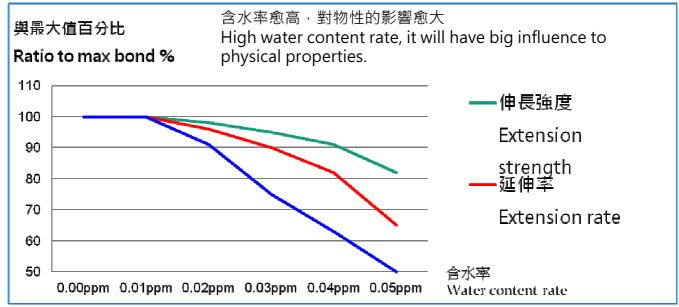
若要生產高質量的塑膠製品必須先注意到 <u>"前端塑料的乾燥處理"</u> If you would like to produce high quality plastics, you must be aware of "drying process before injection molding".

#### 相對濕度、含水率、物性相互關係

Relationship between Relative humidity, Water content rate, Physical properties

相對濕度% Relative humidity% 空氣中相對對濕度過高時,塑料就會快速吸濕,使塑料的含水率增加 Relative humidity is too high in the air, plastic will humidify quickly, it will increase water content rate.







## 作動原理?

## What's principle?

低氣壓使水的沸點降低 Low pressure makes boiling point of water lower.







在喜馬拉亞山水的沸點是73°C Boiling point of water in the Himalayas is 73°C .

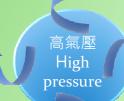


在高山水的沸點是80°C~90°C Boiling point of water in high mountain is 80°C~90°C.



在平地水的沸點是100°C Boiling point of water on the ground is 100°C.





燁品的快速乾燥機的乾燥原理,是用物理原理,非化學吸附。簡易的說:快速乾燥機將空氣吸入,產生低壓的氣漩經過加熱,將乾燥的熱風打入料桶,將塑料中的水份子蒸發,(使露點的溫度達-40°以下)。

Our High speed dryer uses "physical principle", not chemical absorbing. Let me explain to you: Air had been sucked by our high speed dryer, producing low pressure air, the low pressure air through heater. It becomes drying hot air into hopper to make moisture of plastic to vaporize.(reach dew point under  $-40^{\circ}$ C)



# 化學吸附乾燥機

Chemical adsorption dryer

VS YP乾燥機

VS YP Dryer







# 決戰三回合 Three round battle

# 第一回,省錢,省時,省電

Round One, Save Time, Money, Electricity

化學吸附乾燥機 Chemical adsorption dryer







額外的工程費用 Additional project costs

要接水管 Link water pipe



無 No



要維持室內恆溫, 冷氣需持續的運作 In order to maintain the indoor temperature, airconditioning needs to continue operations

冷氣費用 Air-conditioning costs



無 No



耗 材 費 用 Consumables cost

高 High



低 Low



# 第一回,省錢,省時,省電

Round One, Save Time, Money, Electricity

化學吸附乾燥機 Chemical adsorption dryer







乾燥時間 Clean room

如: PC要<sub>3~4</sub>小時 LCP要6~8小時

For example:
PC needs about 3~4
hours of drying time.
LCP needs about 6~8
hours of drying time.



如: PC要2小時 LCP要2小時

For example:
PC needs about 2 hours
of drying time.
LCP needs about 2 hours of
drying time.

耗 電 量 Power consumption

高耗電量

High power Consumption.



低耗電量,約化學 吸附乾燥機的一半



Low power consumption, power consumption is about one half of chemical adsorption dryer.

# 第二回,結構

# Round Two, Structure

化學吸附乾燥機 Chemical adsorption dryer







要接冷卻水 It need to link cooling water.





不接冷卻水 No cooling water



白鐵烤漆,易掉漆生鏽 Painted iron, easy to peel off and get rusty.

外 殼 Outer Case



SUS<sub>304</sub>不銹鋼,耐久不生鏽 SUS<sub>304</sub> stainless steel, durable and not easy to rust.



如:烘PA會出油,蜂巢和分子篩會阻塞 For example: Drying PA Will be out of oil. Honeycomb and molecular sieve will be clogged.

分子篩 <u>Molecular</u> sieve



沒有分子篩, 具有專利機芯 結構,沒有阻 塞的疑慮



No molecular sieve, dryer is equipped with patented cassette mechanism structure, no doubt for clogging.

# 第三回 , 環境 Round Three, Environment



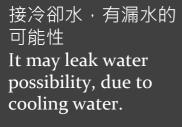
機

化學吸附乾燥機 Chemical adsorption dryer



YP 乾燥機 YP dryer

#### 潔淨的無塵室 Clean room





適用,無漏水的 可能性 Suitable, no leaking water possibility.



熱 氣 排 放 Exhausting hot air





無 No exhausting hot air.



# 多功能快速乾燥機 Multi-function High Speed Dryer

多功能乾燥機具有 如下特點:

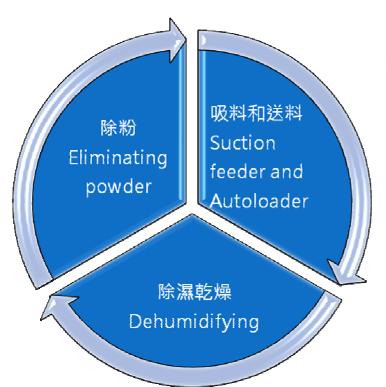
- 1.吸料和送料
- 2.除濕乾燥
- 3.除粉

Multi- function dryer has below features:

1. Suction feeder and Autoloader

2.Dehumidifying

3.Eliminating powder





- \*除粉,是指將顆粒的塑料經碰撞所產生的粉末,加以去除\*
- \*Eliminating powder , means powder produced by the plastic pellet collision\*

# 光學級快速乾燥機

# Optics High Speed Dryer



光學級乾燥機具有如下特點:

- 1.吸料和送料
- 2.除濕乾燥

Optics Dryer has below features:

- 1. Suction feeder and Autoloader
- 2. Dehumidifying

除濕乾燥 Dehumidifying

> 吸料和送料 Suction Feeder And Autoloader

光學級快速乾燥機適用在高精密的工程塑料如:光學級PC,光學級PET,光學級PMMA, ....等。 Optics high speed dryer is suitable for engineering plastics of high precision. Such as PET, PMMA, PC of optics....ext.

## BD微電腦快速乾燥機

#### **BD Microprocessor Controlled High Speed Dryer**



BD 微電腦快速乾燥機適用如下:

- 1.射出量大的生產
- 2.押出量大的生產
- 3.經常性換料生產

BD microprocessor controlled high speed dryer is suitable for below items.

- 1.Big injection molding production.
- 2.Big extruding production.
- 3. Frequently changing plastic production



# LD微電腦快速乾燥機

#### LD Microprocessor Controlled High Speed Dryer



LD 微電腦快速乾燥機適用如下:

1.射出量小的生產

2.押出量小的生產

3.經常性換料生產



LD microprocessor controlled high speed dryer is suitable for below items.

- 1.Small injection molding production.
- 2.Small extruding production.
- 3. Frequently changing plastic production

# YP 快速乾燥機 YP High Speed Dryer

省錢 Save Money 快速 High Speed 節能 Save Energy

燁品企業有限公司

電話:+886-3-409-0577 傳真:+886-3-409-3381 網址:www.ye-pin.com.tw

國內聯絡e-mail: yepin.com@msa.hinet.net 國外聯絡e-mail: service@ye-pin.com.tw YE PIN CO., LTD.

TEL:+886-3-409-0577 FAX:+886-3-409-3381

Website:www.ye-pin.com.tw

Domestic contact e-mail: yepin.com@msa.hinet.net Foreign contact e-mail: service@ye-pin.com.tw