大紀産業株式会社

所在地:日本 岡山県 創業:1948年

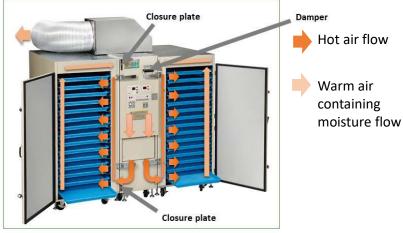




CO2排出ゼロで環境に優しく 安心・安全な食品加工用電気乾燥機

大紀産業株式会社は、乾燥野菜やドライフルーツが簡単に作れる食品乾燥機の日本国内のシェア30%強を誇るトップメーカーで、自社で設計から製造・出荷に至るまで一貫生産しています。2008年に開発した業界初の業務用電気乾燥機は、『安全かつ効率的な電気式』『家庭用電源で使用可能』という2つの画期的な特長が評価され大ヒット、変形品や傷モノの規格外品の農産物が廃棄されず乾物として生まれ変わり、日本中の農産物直売所で乾物商品が並ぶきっかけとなりました。特に1回の処理が100kgを超える大型電気乾燥機は国内で競合がない、オンリーワン商品です。





製品の特長

1回の処理量が多くなるほど乾燥の難易度が高くなります。省電力化やムラなく乾燥させる技術、停電が起きても停電直前のプログラムを記憶したまま自動復帰する技術など、独自の制御アルゴリズムが強みです。さらにこの部分は基板化しています。特に処理量が100kgを超える大型電気乾燥機は、電気式乾燥機として日本国内最大の処理量を誇っています。電気乾燥機は、灯油を熱源とした乾燥機に比べ、CO2排出ゼロ、低ランニングコスト、定期メンテナンス不要などのメリットに加え、石油を使用するボイラー乾燥機よりも故障が格段に少ないなど数多くのメリットがあります。

競合製品との比較優位性

競合メーカーは中国製・韓国製の製品になりますが、これらの製品は内部循環風量が2~4割程度少ないです。そのため乾燥にムラがあり、かつ水分排出量が少ない。さらに、海外メーカーは弊社の電気乾燥機に比べ、乾燥時間が2割程度余分にかかります。(消費電力も2割程度アップ)このように、海外メーカー製品製と比較した場合、性能面で大きな優位性があります。日本国内の競合メーカーの電気乾燥機は小型機種しかなく、差別化が図れています。

日本国内競合メーカーとは、灯油バーナーを熱源としたボイラー式乾燥機と比較されることが多いですが、電気乾燥機は煙突が不要で廃熱ロスがない為、熱効率が20~30%高い、定期メンテナンスが不要、故障が少ないことが大きな特徴です。

製品性能 乾燥温度 乾燥時間 ダンパー



※以下に表示した温度はテスト例です
※乾燥時間は、トレイの数とテスト品の厚さによって異なります。

※実際に乾燥させる材料で温度・乾燥時間を調整して下さい。

Eggplant Mushroom Total 24 hours Total 16 hours SET SET Process Process 40°C→50°C Temperature Temperature Hour $11h \rightarrow 13h$ Hour 12 hours Damper Full Open (1) Full Open (1) Damper ※ Quantity about 4kg per tray ※ Cut into 1/4 inches, Quantity about 4kg per tray Tomato Orange Total 20 hours Total 20 hours Process SET Process SET Temperature 45°C→55°C Temperature 50°C→60°C 16h → 4h $6h \rightarrow 14h$ Hour Hour Damper Full Open (1) Damper 1/2 Open (3) Cut into 3-5mm XSliced into 1/4 inches Pineapple (Sliced) Strawberry (Sliced) Total 16 hours Total 20 hours Process SET Process 45°C 45°C→50°C Temperature Temperature 16 hours 5h → 15h Hour Hour Damper Full Open (1) Damper Full Open (1) Mango Grape (Raisins) Total 20 hours Total 48 hours SET Process SET Process 45°C→50°C 60°C Temperature Temperature Hour 5h → 15h Hour 48 hours 3/4 Open (2) 1/4 Open (4) Damper Damper ※ 100 pieces per tray Potato Onion Total 20 hours Process SET Total 12 hours 40°C Process SET Temperature Hour 20hours Temperature 70 °C Damper (Automatic) 1/4 Open(4) 10hours Hour 🔆 Steamed Potato, peeled and cut Damper (Automatic) 1/2 Open(3) ※ Quantity is about 2kg per tray * Quantity about 4kg per tray before drying and 0.5kg per tray before drying and 0.2kg per after drying tray after drying

TAIKI SANGYO CO., LTD.

Address: Okayama, Japan Established in 1948



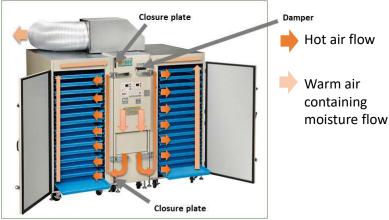


Eco-friendly with Zero CO2 emission, Safe and Secure Electric Dryer for Food Processing

TAIKI SANGYO CO., LTD. is a top manufacturer of food dryers with a market share of over 30% in Japan, making it easy to produce dried vegetables and fruits. The industry's first commercial electric dryer, developed in 2008, was a huge hit because of its two innovative features: safe and efficient operation derived from electric type, and availability to household power supply.

Non-specified agricultural products such as wounds and deformation can be reborn as dry products instead of being discarded, triggering the lineup of dry products at direct sales outlets of agricultural products throughout japan.





Major Features and Advantages

The greater volume a dryer has in one batch, the more difficult drying process will become. Our technology saves power and ensures uniform drying. In addition, even if a power outage occurs, the original control algorithm automatically restores the program just before the power outage is stored. This sequence is printed into circuit boards. In particular, large dryers with a throughput of over 100 kg boast the largest among electric dryers in Japan. Electric dryers have many advantages over boiler dryers that use kerosene or gas as a heat source; zero CO2 emissions with electricity derived from renewable energy, low running costs, no periodic maintenance and significantly fewer failures.

Competitive Advantage

Competing manufacturers are Chinese and Korean products. Compared to our electric dryers, products from the two countries have by 20 to 40% less air volume for the internal circulation. Therefore, there is drying unevenness, and the amount of discharged water is small. As overseas products take about 20% extra drying time, our electric dryers can advantageously reduce power consumption by about 20%.

In Japan, there are not so many competitive dryers. Compared with boiler dryers of potential competitors using kerosene or gas burners as a heat source, electric dryers do not require a chimney and have no waste heat loss. Major feature electric dryers are that there is no maintenance and there are few failures.

Performance

Table of the Drying Temperature & Time



The following temperature is just an example/standard.
Drying time depends on the quantity on the tray and thickness of the row material.
Please record the real data. and create your own table.

Mushroom			Eggplant		
		Total 24 hours			Total 16 hours
	Process	SET		Process	SET
	Temperature	40°C→50°C		Temperature	45°C
	Hour	11h → 13h		Hour	12 hours
	Damper	Full Open (1)		Damper	Full Open (1)
	※ Quantity about 4kg per tray		A STATE OF THE STA	※ Cut into 1/4 inches, Quantity about	
				4kg per tray	
Orange			Tomato		
		Total 20 hours			Total 20 hour
	Process	SET		Process	SET
	Temperature	45°C→55°C		Temperature	50°C→60°C
	Hour	16h → 4h		Hour	6h → 14h
	Damper	Full Open (1)		Damper	1/2 Open (3)
	* Cut into 3-5mm			Sliced into 1/4 inches	
Strawberry (Sliced)			Pineapple (Sliced)		
		Total 16 hours			Total 20 hours
	Process	SET		Process	SET
	Temperature	45°C		Temperature	45°C→50°C
	Hour	16 hours		Hour	5h → 15h
	Damper	Full Open (1)	Market State	Damper	Full Open (1)
	* Cut into 5-10mm				
Mango			Grape (Raisins)		
		Total 20 hours			Total 48 hours
	Process	SET		Process	SET
	Temperature	45°C→50°C		Temperature	60°C
	Hour	5h → 15h		Hour	48 hours
	Damper	3/4 Open (2)		Damper	1/4 Open (4)
	※ 100 pieces per tray			%Quantity about 4kg	
Pototo			Onion		
Potato		Total 20 hours	Onion		
	Process	SET			Total 12 hour
	Temperature	40°C		Process	SET
	Hour	20hours		Temperature	70 °C
	Damper (Automatic)	1/4 Open(4)		Hour	10hours
	100/			(CHICADOCON)	0510007/400-RC78(3) /
				Damper (Automatic)	1/2 Open(3)
	7/7/10/20/20/20/20/20/20/20/20/20/20/20/20/20			* Quantity about 4kg per tray	
	Quantity is about 2kg per tray				
-	before drying and 0.5kg per tray			before drying and 0.	zkg per
	after drying			tray after drying	