

# **Drytech** Heat pump dryer

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Drytech(Guangzhou) Technology Co., Ltd is a professional manufacturer focus on development and production of heat pump dryers. The factory has nearly 3000 square meters, has first-class production workshop, production equipment, and advanced simulated climate testing laboratory. It's one of the largest production base of heat pump dryers in China.



Since its inception, Drytech introduced advanced heat pump production and management technology, produced heat pump dryers with excellent quality and superior performance.

Based on many years' experience, the company has won many patents and honor, its product have passed the CCC, ISO, and CE certificates. Drytech always insist on "Credibility first & Customer first" principle, provided professional solutions and good after-sales service to create premium service experience for customers.

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### <u>Cases</u>

Project Customers visit Drytech Shipment



# What is heat pump dryer

Heat Pump Dryer is an energy-saving and environment-friendly drying equipment, it works based on reverse Carnot cycle, which has high heating efficient to save energy.

Various Drying Energy Economy Comparison Table							
Heating Mode	Electric Heating	Coal Boiler	Oil Fired Boiler	Gas Boiler	Biomass Stove	Heat Pump Dryer	
Remove 1kg of water required heat energy							
Fuel type	Electric	Coal	Diesel	Gas	Biomass	Electric	
Heat value	3600kj/kg	23027kj/kg	33494kj/kg	36006kj/kg	17459kj/kg	3600kj/kg	
Thermal efficiency	95%	30%	85%	85%	90%	400%	
Effective thermal value	3420kj/kg	6906kj/kg	28469kj/kg	30605kj/kg	15713kj/kg	14400kj/kg	
Fuel price	0.1\$/kwh	0.1\$/kg	1.2\$/L	0.8\$/m³	0.2\$/kg	0.1\$/kwh	
Fuel consumption	1.42kwh	0.7kg	0.17L	0.159m³	0.375kg	0.337kwh	
Fuel consumption(\$)	0.142	0.007	0.204	0.127	0.075	0.034	
Labor management, warehousing costs	Higher	High	High	High	Low	Low	
Safter performance	Unsafe	Unsafe	Unsafe	Unsafe	Safe	Safe	
Environmental pollution	None	Very serious	More serious	More serious	Light pollution	None	
Life of equipment	5-8 years	6-9 years	6-9 years	6-9 years	8-12 years	10-15 years	



# Working principle

Heat pump dryer absorbs heat from ambient air, then the compressor make it to high temperature and high pressure gas. The high temperature and high humidity resistant internal circulating fans transfer the heat from condenser to drying room, and forming a circulating hot air in drying room to evaporate the moisture from raw materials, the water vapor is discharged by moisture exhaust system.





# Components

Heat pump drying machine is main consisted of heat pump dryer, drying room, fans, trolleys, trays, and so on.





### Features

### Environmental protection »

Use environmentally friendly R134a refrigerant, no discharge of poisonous gas, low noise.

### Intelligent control temperature and humidity »

PLC+Touch screen, running stable, operating easily. Have sensors to track temperature and humidity conditions, have 10 periods to set different temperature and time, the middle and low temperature drying can reduce the loss of nutrients and physical damage risk, so the quality of material dried with heat pump dryer is better.

### High efficiency >>

Adopt multi-stage heat recovery units, which discharges moisture and reuse waste heat at the same time, reducing heat loss caused by exhausting moisture, save energy more than 40%.

### Lower operating cost »

Heat Pump Dryer allows unattended operation, the operation cost and labor cost are lower than traditional drying equipment.



Usually there has three working mode: H-Dry: Heating Drying HDry+Mois: Heating Drying + Discharge Mositure C-Dry: Cooling Drying



# Application

So far, Drytech's heat pump dryer has been widely used for drying fruits, vegetables, herbs, seafoods, meat, noodles, incense, wood, sludge and some industrial materials, etc.





### **Drytech product series**

At present, Drytech has horizontal blowing series and top blowing series. We provide open-loop or close-loop dryers for warm regions, and close-loop dryers for cold regions.

Horizontal blowing heat pump dyer







Top blowing heat pump dyer





# Horizontal blowing series

Model	Power Supply	Power Input (KW)	Chamber Size	Trolleys Q'ty	Trays Q'ty	Remarks
DT100H	220V/1PH, 50/60HZ	1.75	L1655xW1585xH1500mm	1 trolley	36	Trolley size: L1280xW810xH1300mm
DT300H Integrated machine	220V/1PH, 50/60HZ 380V/3PH, 50/60HZ	5.5	L2200xW1950xH2200mm	1 trolley	100	Trolley size: L1710xW1210xH1800mm
DT300H		5.5	L3200xW2190xH2200mm	6 trolleys	96	
DT300HD		11	L7050xW2190xH2200mm	16 trolleys	256	
DT600H	380V/3PH/50HZ 460-480V/3PH/60HZ	9.5	L6150xW2190xH2200mm	12 trolleys	192	Trolleys size: L870xW610xH1750mm
DT600HD		19.8	L10100xW2190xH2200mm	24 trolleys	384	One trolley with 16 trays
DT1200H		19.4	L6350xW3230xH2200mm	20 trolleys	320	Trays size: L800xW600xH50mm
DT1200HD		40	L11860xW3230xH2200mm	40 trolleys	640	
DT1500HD		56.8	L13930xW4670xH2200mm	72 trolleys	1152	







DT\*\*\*H series: one dryer



DT\*\*\*HD series: double dryers



Among horizontal blowing series, DT100H and DT300H Integrated machine are assembled and tested before delivery, they can be used directly after receive it.



About bigger machines, dryers are finished and tested before delivery, we provide installation video, drawing and online service to support customers assemble drying room. Below are packages for shipping:





3D drawing of horizontal blowing machines





# Project of horizontal blowing machines





# Top blowing series

Model	Unit	DT600T	DT1000T	DT1200T		
Power input	KW	6.8	13.5	15.0		
Power supply	V/PH/HZ		380V/3PH, 50/60HZ			
Rated current	А	17.0	27.0	30.0		
Heating capacity	KW	21.0	35.0	42.0		
Cooling capacity	KW	18.0	25.0	32.0		
Dehumidify	L/H	25.0	42.0	50.0		
Max. temperature	°C	≤75	≤75	≤75		
Working condition	°C	0-43	0-43 0-43			
Electric shock protection grade	/	1 1		1		
Max. exhause pressure	Mpa	3.0	3.0 3.0			
Noise	dB(A)	≤75	≤75	≤75		
Power consumption/H	KWH	8.5	13.5	15.0		
Electric heater	KW	6 9		12		
Blowing type	/	Top blowing				
Dimension of dryer	MM	L1790xW1060xH1660 L2180xW1360xH1990				
Weight	KG	350 480		500		



# 3D drawing of top blowing machines





# Close loop series

We provide close loop drying machine for cold regions, which drying room's temperature not influenced by environment cold air. For warm regions, if need dry material with low temperature, close loop dryer will be a good choice.

Model	Power Supply	Power Input (KW)	Chamber Size	Trolleys Q'ty	Trays Q'ty	Remarks
DT300H	220V/1PH, 50/60HZ	5.5	L3200xW2190xH2200mm	6 trolleys	96	
DT300HD	380V/3PH, 50/60HZ	11	L7050xW2190xH2200mm	16 trolleys	256	
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# Close loop heat pump dyer



# Project of close loop drying machine





## Cases

# Projects

Drying Panax pseudo-ginseng a best a



Drying worm grass flowers

### Drying maca



Drying aniseed



#### **Drying Morinda officinalis**



#### Drying chayote slice





### Drying Chinese wolfberry



### Drying red date



#### Drying rhizoma gastrodiae



### Drying white fungus



### Drying Chinese yam



#### Drying ginger



#### Drying dendrobe



#### Drying fig



### Drying Purple yam



#### Drying orange peel



#### Drying ginger







### Drying balsam pear



#### Drying bamboo shoot



### Drying okra



### Drying honeysuckle flower



### Drying red chilli



### Drying bamboo shoot



### Drying sweet potato slice



### Drying chrysanthemum flower



### Drying dragon fruit flower



### Drying mushroom



### Drying edible fungus



### Drying brown sugar



### Drying noodle



### Drying rice noodle



### Drying mushroom



### Drying dried beancurd stick



### Drying noodle



### Drying noodle



### Drying rice noodle





### Drying rice noodle



### Drying sweet potato noodle



### Drying fish



#### Drying shrimp



Drying longan



Drying sweet potato noodle



### Drying sweet potato noodle



### Drying fish



### Drying shrimp



### Drying mongo



### Drying mango



### Drying mulberry





### Drying sausage



#### Drying sausage



### Drying lemon



### Drying persimmon



### Drying sausage



### Drying sausage



#### Drying sausage





Drying sausage





Drying tobacco leaves



Drying wood



### Drying redwood



Drying wood



### Drying chicken foot



### Drying tea



Drying furniture



### Drying redwood



### Drying rubber glove



Drying incense



### Drying incense



### Drying incense



### Drying sludge



### Drying sludge



#### **Drying incense**



### Drying incense



### Drying incense



### Drying sludge



### Drying paper tube





Drying rice noodle



rying suldge



Drying chicken



Drying chrysanthemum flower



Drying Morinda officinalis



Drying white fungus



Drying vegetable



Drying wood



### Drying redwood



### **Drying Citrus tea**



Drying rice noodles



### **Drying Pineapple**





### **Drying pineapple**



### Drying apricot kernel



### Drying incense



### **Drying Pineapple**



### Drying orange peel



### Drying rose



Drying cigar





**Drying Ginger** 



Red tangerine peel, Huazhou



Paper tube, Zhongshan



Jasmine flower, Tengxian, Guangxi





Oil tea seed, Yunfu



Sheepskin, Jiangmen



Solid waste, Zhejiang



Sweet potato, Guangzhou



Sweet potatoes

Orange peel

Longan

Persimmon







Mushroom









Walnut





Chilli, YunNan





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Sea fish, Zhanjinag



Incense, Jiangmen



Wood board, Hunan



Fish, Fujian







Paper tube, Guizhou



Incense, Guizhou



Waste solid, Suzhou



Rose, Hunan



Waxberry, Fujian



Paper tube, Guangdong



Paper tube, Fujian



Buleberry, Guizhou



Mushroom, Yunnan



Pumpking, South America



Paper tube, Hunan



Paper tube, Guangdong



Pumpking, Honduras





# Customers visit Drytech





# Shipment





# Shipment

