



DRYING MACHINES





HEAT PUMP DRYING MACHINE

An epoch-making product for the industrialization of air energy technology and energy-saving application

INTRODUCTION

With global society's constantly attention to energy and environmental protection consciousness, also the impact of the global economic environment, all kinds of enterprises are under a increasing pressure with energy saving, consumption reducing and environment protection. Especially for the enterprises which the production mode need drying process such as food, tea, saffron, tobacco and so on, are facing a huge challenge with the traditional high energy consumption, seriously polluted drying method. Some areas even began to enforce mandatory closure or replacement of some high energy consumption drying equipments .In recent years, the air energy heat pump technology in drying process gain more and more attention.

With the continuous deepening application of the energy-saving technology of air energy heat pump, our team, which originated from updated science and technology, pioneered applied the air energy heat pump and multi-stage targeted dehumidification technology to air energy drying, greatly expanded the application field of high temperature heat pump. Drying equipment, the whole body with stainless steel structure, the most advanced titanium gold heat exchange fins are used for heat pump condensation and evaporation, no harmful substances in the process of drying. The most important is 70% energy consumption will be saved compared with the traditional boiler or electric heat drying methods. These will gain huge benefits with energy saving and environmental protection.

Drying equipment adopts special process and refrigerant, to apply a good working condition for compressor with $-20 \sim 60^{\circ}\text{C}$ dry air. Wide range of use, according to different optimal drying temperature, to ensure the drying object freshness requirements and achieve the best drying effect .Especially for food drying, this kind of drying method is mild, drying parameters are easily to control, and the preservation capacity of nutrients in the whole drying process is greatly improved compared with the traditional method. Drying equipment, due to its advantages of advanced technology, small initial investment and low operating cost, it has been widely used in marine products, tea, saffron, tobacco, paper, wood, grain, seeds, edible fungi, medicinal materials and other agricultural and industrial fields.



TOP 4 ADVANTAGES TO CREATE THE WORLD'S MOST COMPETITIVE AIR SOURCE APPLICATIONS AND PRODUCTS



THE FOREFRONT OF TECHNOLOGY APPLICATION

- More than twenty patent application, among them, the patents for invention or utility model are more than ten.
- Compared to the traditional way of drying, it can save energy about 70%, the drying time is shortened by 30%. Unit realizes the most efficient combined application of the Copeland heat pump special compressor and the titanium fin, far exceeding the industry level of energy efficiency.
- PNF researchers have the most comprehensive control logic and database of drying temperature and humidity for drying different materials, during more than two years experiments and data analysis.
- The unit can produce 85 high temperature heat, that is a new breakthrough in the research field of air-source.
- Drying is faster and more uniform, the intelligent control of temperature and humidity, which can fully replace the boiler, electric heating drying equipment of high energy consumption.



THE HIGHEST STANDARD OF MATERIALS TO USE

- The machine adopts stainless steel, such as sheet metal, screw etc.. After carefully manufacturing, even the machines are exposed to wind and rain, 15 years can be used to keep the same character, more time to use, more money to save.
- Full titanium heat exchanger fin, greatly enhances the condensation and evaporation heat transfer efficiency, it adapts all kinds of extreme environment, greatly prolongs the service life..
- The electric control box is a totally enclosed stainless steel type for rainproof, moisture-proof, shock proof, it can protect greatly the brain of the machine - the core control chip and component.



THE MOST COMPLETE PRODUCT LINE

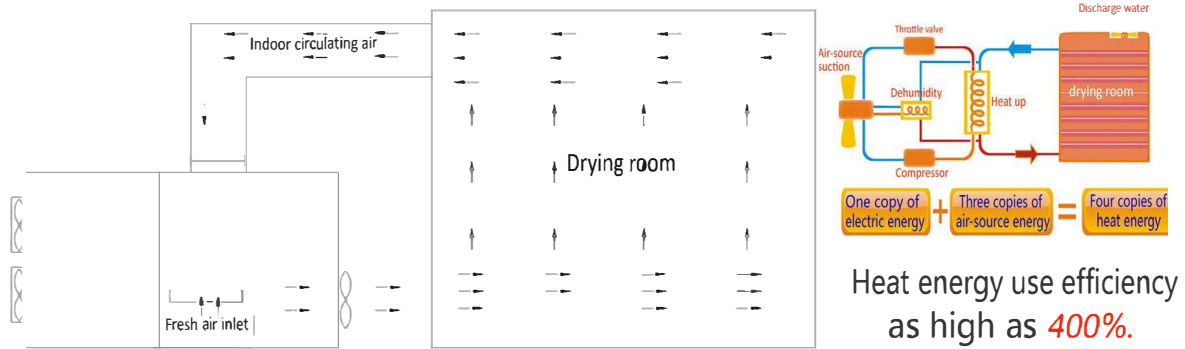
- According to the different drying application fields, the PNF has 3 categories, 6 series, 28 models air-source drying products that can fully meet the drying requirements of meat, fish, plants, and inorganic raw materials.
- According to the drying and freshness requirements, the drying products have two types, one is normal temperature drying, and another is high temperature drying.
- According to the different way of drying, clients can flexibly select split type drying or integral type drying products.
- According to the drying time requirements, customers can flexibly choose pure heating type drying or heating and dehumidification dual-purpose drying.



THE MOST STRICT QUALITY ASSURANCE

- Stainless steel machine body without any paint spraying and chemical residues, it ensures that the high temperature drying room space have 100% non pollution, satisfy the drying object, especially the most strict quality requirements for food drying.
- From the Australian advanced production and quality management system, to achieve full control from raw materials procurement to production process without dead angle, ensure that each production chain can satisfy the quality requirements.
- The idea of management is quality zero tolerance, the quality culture is deeply rooted in the hearts of the people.
- Professional installation and service team let customers get the best products and experience.

PRINCIPLE

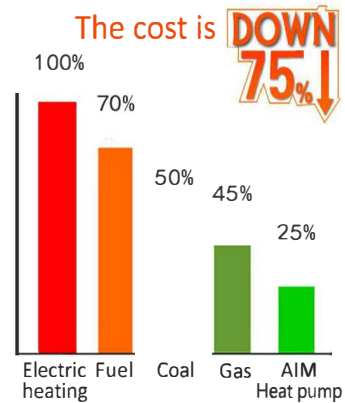


CONTROL Independent property rights operation system

Intelligent constant temperature, better effect of drying

| CRAFT 1 | Section 1 | Section 2 | Section 3 | Section 4 |
|----------------|-------------|-------------|------------|-------------|
| Mode | Intelligent | Closed-loop | Thermostat | Intelligent |
| Temp (°C) | 65 | 65 | 65 | 65 |
| Humidity (%) | 30 | 25 | 10 | 5 |
| Time (h) | 3 | 3 | 3 | 3 |
| Hydrofuge (m) | 8 | 8 | 5 | 5 |
| Stop hydro (m) | 5 | 5 | 5 | 8 |

Return Craft select Reset Sterilize set Auxi-heat Next



SAMPLE PROJECTS

National Subsidies Agricultural Machine Products

