

# Design and Implementation of Main Control System for Distributed Wood Drying Control System

The advancement of far infrared drying technology is mainly embodied in the characteristics of technology. Specifically, compared with the traditional drying process, the characteristics of this new technology are mainly embodied in the following three aspects:

## [The latest technology highly praised bits of wood drying machine](#)

An axial-flow fan is added to the interior of the drying furnace, so that the forced infinite circulation under closed environment can be realized. While reducing the variation of temperature difference in the drying furnace, the convective heat transfer between the media can also be strengthened, which makes the wood drying more uniform and the drying effect more obvious.

## [Microwave drying machinery and equipment](#)

In the constant temperature stage of drying process, heating elements are used alternately for power supply, which can ensure that heating elements have a very full heating time. In a relatively short time, heating elements can reach the drying standard surface temperature, invisibly strengthening the far infrared emission effect, further improving the drying effect of wood.

Using far-infrared wood drying technology, the intermittent fluctuation drying method is usually used during the constant temperature period, which can save electricity to a certain extent and reduce the cost of the whole process.

In the drying process, we should always pay attention to controlling the air temperature in the furnace. Thick plates generally adopt the stage heating method, thin plates can directly adopt the heating method.

At the beginning of the constant temperature, we should try to keep the oven at high temperature for 3-4 hours, and in this process, we should turn on the fan properly, so that the air in the furnace can circulate and make the temperature more uniform. Under the condition of high temperature and humidity, wood is permeable due to internal heat.

There will be no hardening of the surface. In addition, in the process of cutting off the power supply and dehumidifying, once the temperature drop reaches about 10 C, turn on the power supply for heating, so repeatedly, after that, it can enter the constant temperature drying stage, and pay attention to proper dehumidification work, so as to better promote wood evaporation to the outside.

In this case, because of the interaction of high temperature and far infrared ray, the interior of wood is in a state of heat permeability, forming a temperature gradient. In addition, the lower temperature in the oven, wine can accelerate the continuous evaporation of water and ensure

the quality of wood drying.

