

The Design of Duct and Nozzle of Dry Oven

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ABSTRACT

By designing and experiment, change air duct geometric form, simple to seek structure, gas is its flow speed even air nozzle to gush out, apply to the air nozzle of the dry oven. When the dry oven is in production operation, the velocity of flow of air that the air nozzle exports is average, it is even to heat the heat absorbed of object, in order to reach and improve heat energy service efficiency, achieve and reduce the manufacturing cost of the equipment and purpose to raise user's production efficiency. Design the activity type and draw back the air diversion board and make the adjustment of the angle in the air duct, make use of adjust the angle of draw back the air diversion board, is it contract air shed to contract size more and more dish gradually to change. Every 50mm position gradually and disposing the air diversion board in nozzle, disposes two slices of air diversion boards and there is no air diversion board. With three different air pressure terms, and air diversion board adjust for turn on, not half-open all, all close three kinds of different positions at the experiment, quantity examines the wind speed of the nozzle, the air pressure in one that quantity examines the air and air duct. Observe the wind speed of the nozzle and air pressure in the air duct under the influence, about the three kinds of air nozzle that every 50mm position gradually and disposing the air diversion board in nozzle, disposes two slices of air diversion boards and there is no air diversion board in nozzle, on different air pressure of supplying with different angle gradually of air duct.

Keywords : nozzle, flow duct, dry oven

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