Research Progress of Rice Drying Technology

ABSTRACT: The achievements of <u>microwave drying equipment</u> and technology for rice drying and the research of rice drying quality were summarized, and the relationship between drying technology and rice drying quality was discussed in order to provide reference for the research of rice drying technology.

Key words: rice microwave drying; quality



The rice should be dried in time after harvest, otherwise it will have an important impact on the subsequent rice production, processing and preservation. According to the estimates of relevant departments, more than 5 million tons of cereals are lost every year because they cannot be dried in time. Therefore, timely drying and precipitation of rice is of great significance to rice production and processing.

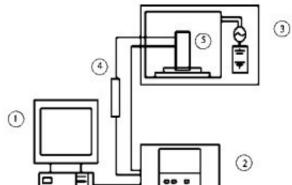
Drying technology is an indispensable technology in modern industrial and agricultural production. The drying effect will directly affect the quality and shape of products. Drying technology includes complex mechanism of mass transfer and heat transfer, which involves a wide range of disciplines and is closely related to the characteristics of drying materials.

At present, with the improvement of living standards, people pay more and more attention to the quality of rice, which forces people to improve drying technology and drying technology. How to measure the quality of dried rice varies.

Many researchers have tried various evaluation methods and studied the factors affecting the quality of dry rice.

This paper summarized and discussed the research progress of rice drying technology and technology, rice drying quality, in order to provide reference for the research of rice drying technology.

In summary, at present, mainly considering the cost and technical issues, hot air drying is still the most commonly used drying method in large-scale grain drying.



In the future, based on the two major difficulties of energy consumption and quality control in grain drying, a new rice drying technology was developed to study the related factors affecting the drying quality, the mechanism of heat and mass transfer and vitrification control, the control law of temperature-changing and soothing process in the process of rice drying, in order to find more objective and comprehensive parameters reflecting the quality of rice, and to establish a heat and mass transfer model. Type.

It will be the development direction of rice drying technology in the future to clarify the quantitative relationship between variable temperature drying conditions, slow sulphur control parameters and drying mechanism, accumulate the data of synergistic relationship between drying process parameters and quality parameters, develop combined drying technology, and achieve the goal of energy saving, environmental protection, stability and high efficiency of rice drying technology.