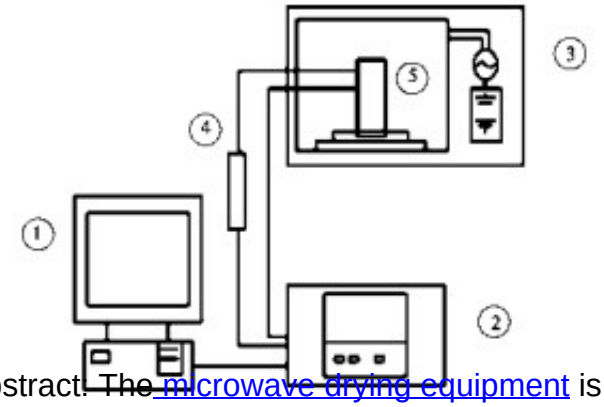
Study on Microwave Drying Process of Yunnan Pu'er Tea



Abstract: The microwave drying equipment is used as a heat source to dry the processing technology of Pu'er tea. It follows the traditional processing principle of Pu'er tea to ensure that the Pu'er tea produced maintains the original style in appearance and taste color. The traditional process has high drying efficiency, less production site occupation, clean production process, and is beneficial to the environmental protection of the production area. It is a new type of Pu'er tea drying processing technology that is efficient, feasible, clean and energy-saving.

Key words : Yunnan; Pu'er tea microwave drying

In recent years, Yunnan Pu'er Tea has become a popular tea market with its unique health care function, drinking value and rich cultural connotation. The Pu'er tea industry has developed rapidly. A large number of clinical experience and scientific experiments have confirmed that Pu'er Tea has the functions of health and fitness. Deep processing and industrial development have broad prospects.

The Pu'er tea industry has sprung up everywhere, and its development momentum is good. However, it must be clearly realized that there are still some problems in the cultivation, processing and sales of Pu'er tea. From the processing point of view, most of the Pu'er tea processing enterprises in our province are especially the primary production institutes. Factory) equipment is poor, process technology is backward, lack of investment capital, coupled with irregular production management, poor product quality stability, quality is difficult to improve; product deep processing development is slow, product added value is low.

The traditional Pu'er tea drying process, burning wood or coal for heating and drying, burning coal or firewood will pollute the surrounding environment, and will cause tea to inhale CO2, CO, SO2 and other harmful gases; sun drying stage open-air operation Production occupies a large area and is subject to weather constraints. At the same time, it is easy to contaminate various dust and harmful bacteria.

In addition, the heating method of the material is external heat type, the heat is conducted inward from the outer layer of the material, and the moisture inside the material diffuses from the inside to the outside, since the heat transfer is opposite to the direction of water diffusion,

when the secondary outer layer is heated, The inner layer of water can only escape through the lowermost outer layer of water, so that the outermost layer of the dried layer has the effect of rehydration; with the further dehydration of the outermost layer of the material and the gradual formation of the hard shell layer, During the drying process, the heat transfer to the inner layer and the diffusion rate of moisture to the outer layer are gradually slowed down, which causes the heating and drying of the material core to be affected.

In short, the traditional Pu'er tea drying process is basically carried out in a simple production mode, the production efficiency is low, the production process is very likely to cause environmental pollution and the product quality is reduced, and it is not conducive to high efficiency, centralized cleaning. Production. To realize the scientific development of Pu'er tea, under the premise of paying attention to protecting the traditional fermentation process, it is necessary to transform the backward processes and methods, and adhere to the high technology content, good product quality, low resource consumption and less environmental pollution. The road to innovation in which human resources are fully utilized.