

Present situation and development of microwave drying and baking equipment

1 roasted peanut with shell



Peanut is rich in fat and protein. It is an important source of edible vegetable oil and protein in China. In China, 55% of peanuts are used for oil production, 30% for export and 10% for edible processing. The baking processing volume of shelled peanuts accounts for about 30% of the total edible processing volume. The processing of products is mainly concentrated in the Yangtze River Basin and the southern region, with Shandong Province as the representative in the north, accounting for 10% to 15% of the total output.

Although baked peanut with shell is a popular traditional snack food, there are few studies on its new clean and energy-saving processing technology, [microwave heating machinery](#) and equipment development, product antioxidant technology, breeding of special processing varieties and construction of product quality evaluation standards. The author combines with shell flower for more than 10 years. Based on the experience of breeding and popularization of raw baking processing varieties, development of new processing technology, equipment design and product antioxidant technology research, the current processing status of shelled peanut baking in China was analyzed, and its development trend was prospected.

2 [microwave drying and baking equipment](#), shell peanut processing technology status

2.1 the development of processing technology of shell peanut roasting in China has gone through 3 stages.

Stage 1: Workshop type, manual cleaning, cooking in pot, slow drying in drying bed, using wood and dried cow dung as fuel, baking for 3-5 days. Now the technology has been basically eliminated.

Stage 2: After soaking and semi-mechanized cleaning, the raw materials are boiled in the pot with a hanging basket and dried in the drying pool with a trolley crane. The pyrogen is mainly anthracite and coke, and the baking time is 1.5-3.0.