

Design of a new meat cutting machine



Nowadays, all the [new meat cutters](#) in the market can only cut slices of fixed thickness, and they are limited to meat cutters. If you want to cut meat slices of different thicknesses, but also can cut other things, the current meat cutter is not enough. To solve this problem, we designed a new type of [microwave drying machine](#) to solve this problem. This meat cutter has the characteristics of centralized function: it can cut meat and vegetables as well as meat (or vegetables) of different thicknesses according to specific requirements. Functional diversity will lead to the complexity of the operation, but this meat cutting device can avoid the trouble caused by this part, the operation is relatively simple and easy to use.

The knife is fixed on the cross bar, and the cross bar can slide on the two oblique bars parallel to the frame to realize the vertical movement of the knife. At the same time, in order to facilitate cutting, the knife has a lateral movement relative to the meat, which is why the guide oblique bar is obliquely placed. The sliding of the transverse bar is realized by pulling the transmission plate fixed on it and rotated around the fixed pin. The other end of the transmission plate is fixed on the lower disc in the same way, so that when the disc rotates, the transverse bar can be driven to move in the vertical direction. The disc is fixed on the manual rotating shaft and does not rotate relative to the rotating shaft. When the hand-swing device is used, the active shaft can rotate together with the rotating disc, and then the cross bar is driven to slide along the guide oblique bar through the transmission plate, so that the cutter moves obliquely in the vertical plane and cuts the meat.

When the knife drops and the cutting is completed, the meat is still to complete the cutting movement. When

the knife is lifted up, the meat needs to be fed forward to ensure the cutting continues. This is an intermittent feeding mechanism. First, there is a gear at the front end of the drive shaft. At the edge of the gear, we fix a drive plate with pins. The drive plate can rotate around the pins. The other end of the drive plate is fixed on the rocker in the same way. That is, the gear, the drive plate and the rocker constitute a crank-rocker mechanism, which can realize the rocker to swing in the range of 60 degrees. The rocker can rotate around the feed shaft, and there is a through hole at the other end of the rocker. There is a screw with a slightly smaller diameter inside. The balance difference, total difference and relative error of ratchet machine are evaluated together with gears and flange caps. According to the water balance equation, the balance difference between the total compensation and the total drainage is through the variable of groundwater storage. Now it is balanced. Strictly speaking, the equilibrium difference and water storage variables should be generally consistent or basically convergent.

But in practice, there is always a quantitative difference, that is total difference. In different calculation zones, the total difference has positive and negative, and the total difference and relative error (compared with the total difference) are the important criteria and basis to measure the relative accuracy of the calculation results of the total compensation and drainage and to determine the natural groundwater resources of that year. If the relative error is within the range of + 10%, the result is acceptable. The groundwater monitoring network is relatively perfect. The observation logging group selected for the calculation of livestock variables is consistent with the zoning of hydrogeological conditions, and the area used is not inappropriate. The calculation results of groundwater storage variables can be confirmed. At this time, if the total error still exceeds the control error, the reasons should be found and analyzed again in the calculation of the total complement and the total row, so as to correct the calculation results.

As a practical appliance in family utensils, meat cutter has been widely used in most families and restaurants. The traditional meat cutter specializes the function of the meat cutter, but fails to give full play to the function of the meat cutter. The meat cutter designed by us fully and appropriately exerts the function of the meat cutter, which is conducive to promoting the wider push of the meat cutter.