Processing of Baked Corn Flakes and Extruded Corn Flour

Processing of Baked Corn Flakes Corn Chip Processing Equipment

Baked cornflakes are popular instant cereals in the world. Hard horsetooth corn is the best raw material for processing cornflakes because of its high content of keratin endosperm, high transparency after starch gelatinization and good appearance. Microwave Heating Machinery and Equipment

Corn contains a large number of embryos. Corn germ will affect starch gelatinization and the morphology of cornflakes, which will bring inconvenience to the processing operation. Therefore, cornflakes are mostly produced from dehulled and Degerminated corn dumplings.

(1) Technological process: Corn dumplings Pressure cooking Drying Conditioning Rolling Baking Seasoning Packaging. (2) Operating points: (1) Heating and cooking, feeding corn dumplings with grain size about 1/3 of corn grains after embryo into rotary drum type high pressure cooking pot, adding seasonings such as sugar and salt, and adding water to make corn dumplings water content up to 35%~45%, cooking with 174 kPa steam for 1 h~2 h, until corn dumplings are completely gelatinized, judging the gelatinization process. Visual observation can be used to observe whether the degree is up to or not, that is, when the corn glutinous rice dumplings are translucent, they meet the requirements.

(2) Drying and tempering, reducing the pressure of the steaming pot after cooking, throwing the corn dumplings out of the net outlet through centrifugation, and dispersing the bonded corn dumplings in the cooking process. Then the corn glutinous rice dumplings are sent to the dryer

through the conveyor belt for drying, so that the moisture content can be reduced to about 20%.

(3) Corn grits are cooled to 30 ~40 C and sent to the mill to be pressed into thin sheets. The mill consists of a pair of stainless steel smooth rollers. The rotational speed of the rollers is 180 r/min~200 r/min, and the thickness of the corn grits is 0.7 mm~1 mm. (4) Baking, the rolled cornflakes are sent to the oven for baking, and baked at 302, 50 s or 288, 2-min~3 min to make water.

When the score is less than 3%, spray oil with drum condiment machine and stick a layer of condiment powder on it while it is hot. After cooling, the product is packed. Baked cornflakes are golden in color, crisp in taste and have the unique roasting flavor of corn.

2. Processing of Extruded Corn Flour Puffed corn flour is puffed corn flour after puffing and grinding. Its preparation usually needs to remove the embryo and skin first, crush the corn kernels further, add other ingredients or intensifiers, can be prepared into a variety of color products, after expansion and grinding, after sieving 60 meshes, the expanded corn flour can be obtained.

Extruded corn flour can be used in combination with wheat flour and soybean flour. For example, when corn flour, wheat flour and soybean flour are mixed in a ratio of 1:1:1, their nutritional value will be greatly improved. Vitamins, amino acids or minerals can be used as fortifiers.