

Introduction about corn flakes production line

Although there are many different varieties of corn, dent corn, also known as field corn, is the most widely used corn when making cornflakes. The traditional method involves mixing the coarse flaking-grade corn grits with the other ingredients, cooking and drying them to about [21%](#) of moisture, tempering, and then rolling them into flakes before toasting (final moisture range 1-3%).

Nowadays, corn flakes are made by extrusion cooking, however. The extrusion process begins by cleaning and milling dent corn into cornmeal often using a twin screw extruder. The cornmeal is then transferred onto a feeding conveyor that loads it into a sifter and then into an extruder. Then, extrusion takes place: a process that combines mixing, cooking, kneading and forming.

The ingredients are fed into the extruder barrel and subjected to [heating, compression and mixing](#). The raw material comes out of the extruder in form of strands that are then cut to form the pellets. After drying, pellets are flaked using a flaking roller and toasted

After extrusion, the semi-finished cooked mass is formed into pellets. They have a water content of approximately [22-24%](#) that interacts with starch, making them sticky and viscous which is why they are transferred onto a vibrating feeder that prevents sticking.



The vibrating conveyor belt then brings the pellets into a flattening machine where they are flaked with steel rollers. The rollers' surface is heated to 43-48 °C to avoid sticking or overheating of the mass. The delicate balance between heat and

moisture is paramount for flaking- too much heat and the mass becomes too sticky and clings to the rollers and if the moisture is lower than 10%, the mass must be steamed so that flaking can be successful.

When the flakes are formed, they are put into an [industrial dryer](#). High-temperature drying ensures that the water that still remains in the flakes evaporates before they are transferred to a baking sheet and put into an oven at 215 °C to receive their golden color. Once this process is finished, the cornflakes are transported to the cooling drum.



Feature Of corn flakes production line

1. High degree of automation: It has a very high degree of automation, which can well meet the needs of customers and fully meet the needs of various enterprises.
2. Large output: It can realize multiple batch processing, thus avoiding problems such as equipment downtime and long downtime due to different batches. The output of the equipment is large, thus ensuring the production efficiency and quality. At the same time, the production speed of the equipment is fast, and the output can be adjusted at any time according to the output needs of different users.
3. Low energy consumption: It can effectively reduce the utilization rate of energy and achieve the purpose of saving costs.
4. Sanitation and cleaning: The equipment adopts a new type of dust removal equipment, which can well avoid dust pollution to the surrounding environment and ensure environmental hygiene. In the process of processing, a certain amount of dust will be generated. If the dust is not effectively removed, the dust will cause harm to the health of the workers.
5. Easy to operate: The device is easy to operate and easy

to use, whether it is a small-scale enterprise or a large-scale enterprise, it can be easily used.

The above are the characteristics of the corns flaks production line. This equipment has the advantages of large output, high efficiency and low energy consumption, and can meet the needs of various customers.

