Microwave Thawing Equipment for Frozen Pork

China has been leading other countries in pork consumption for years. At present, the main meat in China is mainly pork, pork consumption is one of the highest. According to statistics, the average Chinese eats nearly 60 kilograms of pork each year.

Microwave thawing equipment for frozen pork is an advanced industrial thawing machine, which can significantly improve the quality of frozen meat and reduce the production cost.
Leader Microwave Equipment Company research and development of frozen pork Microwave Thawing Equipment:

At present, meat used by meat processing enterprises can be roughly divided into cold meat, hot meat and frozen meat.

Chilled meat has many advantages, but the production of chilled meat should be made up of advanced equipment, reasonable plant planning, large-scale refrigeration conditions, strict inspection procedures, effective distribution tools, safe sales forms and a complete set of operation methods.

The environmental temperature and workplace hygiene requirements are very strict, and there should be strict control points. For example, when the sauce is cooled, the bacteria must be kept at 103-104 per square centimetre.

If more than that, it will deteriorate faster in the process of segmentation, storage and transportation. The temperature should be reduced from 38 °C to 0-4 °C in a very short time, and the temperature should be maintained in the future partition transportation without interruption of the cold chain, so that the quality can be maintained for more than a week. Without a certain size and strength of the enterprise is difficult to combine.

Hot meat is traditionally slaughtered and sold on the market without any process, with a shelf life of 1-2 days.

Freezing brings the temperature of the meat below the freezing point. At this time, the water in the microorganism and its surrounding medium is frozen,
and the water inside the cell freezes to form ice crystals, which disturb the colloidal state of protoplasm and cause mechanical damage to the structure of protoplasm membrane and cell wall. These changes in internal and external environment lead to the disturbance or death of microbial metabolism.

Frozen meat has the advantages of long shelf life, convenient transportation and preservation, lower transportation cost and price, and has been widely used in meat processing enterprises. However, frozen and thawed meat is generally considered inferior to fresh meat. Microwave thawing equipment for pork can solve this problem.

**Microwave thawing equipment for frozen pork helps maintain the quality of meat:**

1. The loss rate of microwave defrosting and cooking of frozen pork was significantly lower than that of frozen defrosted meat. The thawing loss of microwave thawing frozen pork equipment is lower than that of frozen thawing and room temperature thawing.

Frozen thawing will occur when the upper layer of meat has been thawed and the juices flow to the lower layer and the cold meat turns into ice, which will damage the muscle tissue of the lower layer, leading to uneven thawing and large amount of gravy loss. The rapid thawing of Frozen Pork Microwave Thawing Equipment can effectively alleviate the damage of ice crystals to cell walls during thawing process, which is beneficial to the preservation of moisture in muscle tissues.

2. Meat color is also important to consumers. The defrosting process causes the meat to lose its luster, but the color of frozen pork thawed by microwave meat defrosting equipment is closer to that of fresh meat.

3. Tenderness is a very important index of meat consumption, and the tenderness of meat is usually negatively correlated with meat shear force, the smaller the shear force, the better the meat.

Microwave pork defrosting equipment defrosting meat shear force is the lowest, the best tenderness. At the same time, the shearing force of thawed meat
samples was significantly lower than that of fresh meat.

In a word, the microwave defrosting equipment of frozen pork defrosts quickly, with the lowest defrosting loss rate, the highest water holding capacity and the best meat tenderness.

The evaluation indexes of microwave thawed meat are closer to fresh meat. Therefore, compared with frozen thawing, microwave thawing can effectively inhibit the deterioration of meat quality during the thawing process, and microwave thawing equipment for frozen pork can better maintain the edible quality of pork.

**Parameters of microwave thawing equipment for frozen pork:**

<table>
<thead>
<tr>
<th>Model</th>
<th>DL-6</th>
<th>DL-10</th>
<th>DL-16</th>
<th>Customize</th>
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<td>Heating method</td>
<td>electrical energy</td>
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**Disadvantages of natural thawing:**

1. The loss of blood following the thawing process results in weight loss, between 5 and 10 percent, and loss of natural juices and proteins in the blood.
2. It takes a long time to thaw. Natural thaw is usually done in 2-3 days. Insufficient and excessive thawing will occur, which will affect the subsequent processing. Meanwhile, the inventory will be increased, and it is inconvenient to adjust the production.
3. The quality of meat products is reduced. The loss of blood and juices leads to a reduction in meat adhesion, paler taste, paler color, and drier texture.
4. Natural thawing inevitably exposes the meat to the air, allowing bacteria to grow and contaminate the surface. From the inside, the slow thawing leads to the meat being placed below the freezing point for a long time, and the enzyme activity in the meat is strong between -8 °C and -3°C, which is the catalyst for the change. This temperature segment forms a rapid deterioration zone, and the bacteria grow up to accelerate the deterioration of the meat.
5. Natural thawing makes the whole plant have blood and water, and drains the blood and water containing natural juice and protein into the sewer, which will also increase the burden of sewage treatment system and increase the sewage fee, causing serious environmental pollution.

**Defrosting involves putting meat into water to warm it up. The disadvantages are:**

1. The blood juices and proteins in meat dissolve in water, which also reduces weight. The effect of thawing with water on the quantity and quality of meat is
a big problem that cannot be ignored.

2. As with natural thawing, hydrolyzed frozen meat will have the problem of bacterial multiplication and cross contamination. And the high water consumption increases the cost of sewage treatment.

3. Defrosting also requires the removal of packaging, which can cause cross-contamination in water. So some countries have strict controls on thawing water.

**How about the price of microwave defrosting equipment for frozen pork?**

The price of our Leader’s frozen pork microwave defrosting machinery and microwave sterilization equipment is competitive and cost-effective.

1. Continuous absorption of microwave thawing equipment development and manufacturing experience, reduce the manufacturing cost. Our elite engineers have been spending a lot of time researching and developing new models. Now, we can build whole machines faster.

2. Our price is lower on the premise of the same quality. As we all know, price and quality are interrelated. You can’t just think about the price of the
equipment.

The price of Leader’s frozen pork microwave defrosting equipment and microwave sterilization equipment may not be the cheapest, but we promise you that our machines have better service experience and longer service life.

So far, we have successfully exported and installed microwave thawing equipment for frozen pork in many countries, such as Indonesia, South Africa, uzbekistan, Jordan, Brazil and so on. We look forward to working with more customers to provide top products and services. Welcome to contact us!