

TECHNOLOGICAL SCHEME OF BOILED SAUSAGES PRODUCTION

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The article is devoted to the technological scheme of boiled sausages production. It is important to examine the machine and hardware circuits and the production technology of cooked sausages in order to produce the quality of products.

Key words: boiled sausage, machine and instrumental diagram, process flow diagram, raw meat.

ТЕХНОЛОГИЧЕСКАЯ СХЕМА ПРОИЗВОДСТВА ВАРЕННЫХ КОЛБАС

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Статья посвящена технологической схеме производства вареных колбас. Важно изучить машинно-аппаратурную схему и технологию производства вареных колбас для того, чтобы выпускать качественную продукцию.

Ключевые слова: Вареные колбасы, машинно-аппаратурная схема, технологическая схема, мясное сырье.

Use of sausages as a processed meat product and a food component has been identified with different and diverse cultures around the world dating back many centuries. In British society sausage consumption has been traditional and will continue to be popular for a long time as shoppers buy sausages as a single item or as a meal component. Meat and Poultry News published a survey indicating that 82% of consumers said a full English breakfast would not be complete without a sausage. The 2007 estimated total retail volume of UK pork sausages and beef sausages was 197 000 tones. Estimated household expenditure on pork sausages in 2003 was £289 million, a figure that increased to £392 million in 2008.

Passion for sausage consumption is not only traditional among the British and the rest of Europe, but also among the Americans, with an estimated seven billion hot dogs consumed in the USA in summer 2010. The increasing trend in consumption and popularity of sausages in Europe and America is just a reflection of a global consumer interest in these processed meat products.

Sausage manufacture is a simple process of allowing meat to undergo series of controlled structural and chemical changes. These are basic to all cultures but the changes rely on varied methods of preparation and spicing to achieve desired distinctive characteristics. Even though the size and scope of operation have undergone a remarkable level of change the principles and idea behind modern day

sausage manufacture in achieving products of high organoleptic value and improved shelf life remain the same [4].

The uses of sausages as a meal and sandwich component have been well explored by the manufacturers. Grocery shop shelves are full not just of sausages of different types and forms but also ready meals made with cooked sausages of different flavors, types and dimensions. There is still a great potential in the cooked range, which has recently led to a change in the process among some manufacturers to accommodate an increasing demand for cooked sausages in the sandwich and ready meal sector. Equally on the increase are the organic, low salt, gourmet and low fat ranges of sausages in various forms, taste and dimensions.

Like any other successful item in the food market, sausage manufacture and survival have been customer- and consumer - driven. The proliferation of new types and ranges of sausages made possible by advances and greater understanding of meat science and technology, and by casing technology coupled with the experience of the key players in the sector, point to the endorsement of these products by consumers. The sausage manufacturing process is flexible and amenable to consumers' needs and increasing requirements [1].

Traditional technological scheme of sausage production and preparation of minced meat for sausages have a scheme similar for mixing mince for cooked sausages. Raw meat is beforehand boned and then its trimming is made, or frozen raw material is ground in a frozen block cutter, then grinded (minced) using 2-6 mm hole or 16-25 mm holes. To reduce the cost of the product the mechanically deboned meat, obtained in the Bone separator, can be used. Minced meat cooked in the cutter, where the total duration of treatment is 8-12 minutes depending on the chopper. If there is the higher cutting speed, so there is the shorter duration of treatment. Ice generator or cool water is used to reduce the temperature of meat flake, their volume determined depending on the type of cutter, grinding duration, material temperature and other factors. Bacon is cut into a special machine for cutting - fat slicer [2].

For filling sausage casings with minced meat are used vacuum fillers with automatic twister or sausage lines for filling, portioning, twisting and hanging on hooks.

Heat treatment of sausages is produced in universal chambers with continuous automatic monitoring and controlling of the temperature and humidity, and includes drying, roasting and brewing.

After cooking, the sausage product is cooled by cold water shower or in intensive cooling chambers.

Then ready sausages are packed under vacuum in packages marked with the label and placed in a corrugated packing. The finished product is stored in a refrigerator at a temperature +2 ... +8 ° C and relative humidity 75 ... 85%.

Traditional machines are not only expensive, but also require the extra costs due to space requirements, additional clean up costs and power consumption. Another factor is the cost of personnel expenses. Furthermore, as shown by tests, any failure

of the production process, resulting from any infringement of product delivery from machine to machine, significantly affects the quality of products [3].

It is necessary to seek more favorable raw material suppliers to improve the production and marketing efficiency, look for opportunities to replace expensive raw materials cheaper, while maintaining the quality. Expenditures for maintenance and production equipment can be reduced by installing a more productive and cost-effective equipment. Administrative and general expenses can be reduced by strict adherence to the staffing and proper compliance with the number of main and auxiliary workers.

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