DEVELOPMENT OF APARATURE DECORATION FOR THE PRODUCTION OF CONCENTRATES FROM NON-FAT DAIRY RAW MATERIALS

G. Deynichenko, V. Guzenko, Z. Mazniak, V. Perekrest, S. Burhar

The article is devoted to the development of technical equipment for the production of concentrates from non-fat dairy raw materials. The information on the modern development of the equipment for processing the processing of secondary dairy raw materials using installations for concentrating non-fat dairy raw materials is given and their main drawbacks that can be eliminated using membrane equipment are identified. The urgency of the development of new technological lines for the implementation of processes for the production of dry concentrates of non-fat dairy raw materials (buttermilk, skimmed milk, cheese whey), which include the improved membrane equipment, the correct use of which will improve quality of the original product, increase energy saving and the intensity of membrane processing. New designs of membrane equipment are developed, in particular, for the implementation of the process of concentrating low-fat dairy raw materials using the means of completely or partially removing the gel layer from the membrane surface, which will enhance efficiency of the membrane processing of food liquids. The ways for the improvement of the equipment and hardware design with the aim of developing energy-efficient technologies for processing low-fat dairy raw materials (buttermilk, skimmed milk, cheese whey) are proposed. Technological (equipment) lines have been developed for carrying out the processing of low-fat dairy raw materials (buttermilk, skimmed milk, cheese whey) using advanced equipment for membrane processing of food liquids of animal origin. The device of the proposed lines for the processing of non-fat dairy raw materials and the phased principle of their work are described. The advantages of the proposed schemes of technological lines for the production of concentrates from non-fat dairy raw materials are specified.

Keywords: milk, material, process, membrane, equipment, line.