

Economic features of rational internal shape design of sports shoes

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Analytical review of the methods of rational design of internal shape of sports shoes is carried out in this article with the definition of the economic features of the process for developing efficient design of shoes for children athletes with improved functional and performance properties. The most famous systems of three-plane analysis of movements and bio-energy function of athletes' feet as the main factor for the development of science-based rational design of sports shoes are considered.

One of the conditions for the light industry development is the creation of high-performance and cost-effective manufacturing processes of competitive products.

Maximum matching of shoes to feet of athletes is formed in the process of designing a new model by meeting anthropometric, physiological and functional requirements, which is ultimately reflected in the shape and size of lasts, product design, material properties of top and bottom,

manufacturing technology. Therefore, the study of bio-energetic function of athletes' feet as the main factor for the development of science-based rational design of sports shoes is actual scientific and practical task.

Analytical review of the methods of rational design of internal shape of sports shoes is carried out in this article with the definition of the economic features of the process for developing efficient design of shoes for children athletes with the improved functional and performance properties.

The basis of creation of rational internal shape of footwear is the transformation of forms-size of foot in the shoe last.

The best known systems of three-plane analysis of movements are considered, which makes it possible to perform a wide range of mathematical and statistical procedures to monitor and digitize the movement of biological links of human body on the basis of special software.