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**PACKAGING FROM FLEXIBLE MATERIALS
(METHODOLOGY GROUNDING OF INTERNAL VOLUME RESEARCH)**

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***Research Methodology.*** *The dual integration of mathematical expressions has been used to study the main volume of packaging from flexible packaging material and the volume of external pockets in the form of conoids. The useful volume of packaging is given as the difference between the main volume and the volume of its total external empty pocket.*

***Results****. The study of the design of packaging from the flexible material has estab­li­shed that its axial sections with mutually perpendicular planes are an ellipse and its component. Mathematical expressions have been obtained for the search of the main volume of packaging and the volume of external pockets in the form of conoids, the size of the packaging medium has been averaged in the length. The useful volume of packaging from flexible packaging materials has been mathematically expressed.*

***Novelty.*** *Mathematical dependences for the substantiation of the useful volume of packaging from a flexible packaging material, with axial intersections of mutually perpendicular planes which is an ellipse and its component have been obtained. The formation of the conoid surface of the external pockets has been analyzed analytically.*

***Practical Significance.*** *The important stage in the search for its rational design has been developed by the mathematical reasoning of the method for calculating the internal volume of packaging from flexible packaging materials, as far as the direction of minimization in the use of materials, energy resources for the production of packaging per unit of packaged products, is the most important today.*