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2. Denomination
Efficiency of the gasaerosol control flows in industrial ventilating systems
3. Specialty
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Luhansk state institute of housing and communal services and building
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<p>Thesis is devoted to solution of an actual problem - increasing of efficiency of the gasaerosol control flows in industrial ventilating systems on the basis of mathematical simulation.</p> <p>The survey of typical schemes and methods of calculation of industrial ventilation systems shows, that now the universal methods of calculation of performances of the arbitrary ventilating systems, permitting reliably to forecast their emission practically are absent. In this connection in dissertational operation methods of calculation of performances gasaerosol flows in the industrial ventilation systems are offered, permitted to improve ventilating systems, and also to forecast their emission.</p> <p>Experimentally adequacy of the generalized mathematical model of mass transfer in a flow on a basis of $k-\varepsilon$ turbulence models, adapted for channels of ventilation systems is approved.</p> <p>With the purpose of estimation of a residual radio-activity of the aerosols containing radioactive iodine, the procedure of determination of transit time for discrete particles in a tract of the ventilation systems is developed.</p> <p>In the capacity of practical realization of research results the recommendations on accommodation of control devices in channels of ventilation systems are developed.</p> <p>Keywords: forecasting, an aerosol, s emission, a diffusion, similitude parameters, a mathematical model, adequacy.</p>