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Energy saving at heat-mass exchange processes of industrial objects' reject purification
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Dissertation is devoted to the decline of power expenses at the pneumatic and pneumomassage airing in the systems of cleaning of harmful extrass from industrial objects.

The analysis of existent methods of cleaning of harmful extrass of liquid of industrial objects and methods of airing are carried out. It is set that at the pneumatic airing it is impossible to save the rational structure of motion of interactive streams of water, cut-in air in the conditions of permanent serve and taking of flows. The necessity of the use of vehicles with mixers is conditioned by the increase of intensification of process of interfusion of water for prevention of its besieging, providing of dissolution of air in water and transmission of mass of air to the increase of index of degree of the use of air.

It is discovered as a result of researches of processes of heat exchange and mass-transfer, that the change of temperature of water influences on the parameters of process of cleaning of harmful extrass from industrial objects with the use of water and water solutions through of water treatment due to a density and coefficient of surface-tension of water.

The executed researches and created methods of calculation of ecological and power descriptions of the systems of cleaning of extrass from industrial objects allowed to define the rational areas of the use of the pneumatic and pneumomassage airing for providing of energy-savings.

Keywords: hydrodynamic characteristics, thermophysical characteristics, hydrodynamic processes, heat and mass exchange processes, power charges.