

This invention relates to the area of non-traditional and renewable energy sources, it can be used at operation of powerful industrial ventilation installations. In the basis of the invention there is technical problem of improving method for utilizing energy of man-made air flow, in which working zone is formed, with unidirectional air flow with given kinetic energy, with its following utilization by means of wind wheel; this makes it possible to increase efficiency of energy transformation of the air flow, and to decrease cost of the utilization process due to decrease of the material consumption of the unit and of maintenance expenses. The problem set forth is solved by forming near the industrial fan working zone of the windmill, through effecting by unidirectional air flow with given kinetic energy, determined from the relationship

$$E = \frac{\rho V^3 F \xi}{2} > En,$$

with forming area of action of high and constant stock of kinetic energy of air flow with constant velocity and direction of motion; wind wheel is installed in it for utilizing energy of air flow and for giving it to drive unit for different purposes.