

Construction of Mechanic Regulation of Turbine Ventilator using Half-Flap

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An article deals with a definition, concept, development, calculation and construction of a prototype solution of a mechanical regulation of a turbine ventilator using a half-flap eliminating an amount of ventilated air. The whole mechanical regulation solution lies in a central shaft. When a rotation nozzle is spun to high revolutions, a flap closes gradually and eliminates air flowing. This prototype of the mechanical regulation may be used for classic concepts of turbine ventilators, where the rotation nozzle stays in one position and only rotates around its own axis.

The article describes individual development stages from the concept up to construction, including a final visualization of the prototype solution of the mechanical regulation of the turbine ventilator using the half-flap.

The mentioned innovative solution of the mechanical regulation is very up-to-date thanks to its simplicity and non-service operation. It is just the matter of time when one of the producers would be interested in the turbine ventilator solution and it would be introduced into a market space.

Keywords: Turbine Ventilator, Mechanical regulation, Half-flap, Drained Air, Flap, Suction Capacity

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