

The invention relates to the plants for wind power conversion into mechanical energy, in particular to a wind-driven plant for sewage water aeration and may be used at the small and medium-sized treatment plants.

The plant consists of a windmill (1) with vertical axis of rotation (3), fixed into a skeleton frame (2), coupled with a pumping device equipped with inlet (8) and outlet (10', 10'') branch pipes, at the same time the windmill (1) is made in the form of spiral airflow converter, the upper part thereof, having a greater diameter, is equipped with a rotation speed transducer (4), fixed onto the vertical axle (3), and the lower part of the converter, made of conic form, is placed into a spherical airflow concentrator (9) joined with the inlet of the pumping device, consisted of a centrifugal fan (6) with the rotor (5) installed onto the axle of the mill (3), kinematically joined with an eccentric mechanism (7), and the outlet branch pipes (10', 10'') of the fan (6) are joined with the supply manifolds (11', 11''), made in the form of Venturi tube, into the inner lower part of which there are installed hydraulic valves (12', 12'') and aeration systems (13', 13''), submerged into an aerobic bioreactor (14).

At the same time, the rotation speed transducer (4) is joined with the electric motor of an air blower with the possibility of setting thereof in action for bioreactor aeration in the absence of the wind.

Claims: 2

Fig.: 2

