

The invention relates to the hydraulic power engineering, namely to the hydraulic stations with vertical rotor and is meant for conversion of river water flow kinetic energy into the electric energy.

The hydraulic station includes a rotor with blades 8 placed vertically, kinematically joined with a step-up gear and an electric generator, installed onto a platform 1, mounted onto a floating body, placed between the rotor and, articulately coupled with it, a metal frame 4, by means of which it is joined with the anchor poles 3, placed on the coast. Onto the platform 1 there is rigidly fixed a bar 23, the ends of which are joined by two cables placed in parallel with one of the anchor poles 3. Novelty consists in that the floating body contains two floats 2, fixed onto the longitudinal side of the platform 1, symmetrically about the mounting of the metal frame 4. The rotor's blades 8 are made hollow. The rotor is rigidly joined with the input shaft of the step-up gear, including a spherical bush, fixed onto the input shaft and kinematically joined by means of balls, placed into the grooves, made onto its lateral side, with the, mounted onto the input shaft of the step-up gear, satellite gear wheel, meshing with the central gear-wheel, rigidly installed into the cover of the step-up gear. On the opposite side onto the hub of the satellite gear wheel there is made an annular groove wherein there are placed solids of revolution, by means of which it is kinematically joined with the oblique flange of the freely installed central gear-wheel, the teeth of which mesh with the teeth of another satellite gear wheel, freely mounted onto the crank of the output shaft.

Claims: 1

Fig.: 3

