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Results of field tests of the pumping station of the Karshi main Canal

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This article presents the results of tests of pumping units and structures of pumping station 6 of the Karshi main canal in various operating modes. The purpose of the research is to identify hydrodynamic regularities that consider the peculiarities of the hydraulic operating conditions of the water supply complex and pumping units, which were determined as a result of testing the supply for permissible minimum water levels downstream of the station. The average flow calculated for the four units participating in the tests was 32.2 m³/s, and the total station flow at the time of the tests was 128.8 m³/s. The maximum shaft runout value of the first pump unit is 0.061 mm; the third is 0.228 mm; the fifth is 0.483 mm. Considering the complexity and versatility of determining the parameters of the units, specific energy consumption was used as a comparable indicator of the quality of operation and energy efficiency of pumping equipment.

Topics

Energy consumption, Energy efficiency

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