

As a result done work have got the simplified model mathematical calculation that vastly shortens the expenses of time for calculation. By means of electronic modeling have got the more exact calculations, as well as reporting in the manner of graph, on which immediately possible define the place to designs, where will occur most and least loading power and do the findings about designs given device.

On report inventor has got the small difference in load on full tilt between formulating by calculation and calculation in generator component gross that once again confirms the field exact accounting actions program. She takes into account all that required for accuracy of the output ready, correct answer. In report possible to notice that is there specified the most necessary got importances.

Literature:

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INCREASING TO TECHNICAL-ECONOMIC EFFICIENCY OF THE PUMPING INSTALLATION TPP AND APP

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The much of the consumption to energy on own necessities power station (before 20-30%) goes on drive pumping and ventilator installation. So exactly in this direction follows to search for the significant reserves energy-saved on TPP and APP. Energy-capacity pumping installation is defined by feature to hydraulic network, on which they work.

In turn, feature to network is defined by necessary consumption worker ambiances, as well as geometric parameter to network, factor local and linear losses.

As a rule, consumption worker ambiances on pipe line is defined by power of the consumer (turbine installation, capacitor) or need of support current technological processes (condensate-wire, oil-wire, drainage pipe lines). The linear sizes pipe line are

limited by arrangement main and accessory in main building or on general plan power stations.

Thereby, variable can be a geometric sizes pipe line the main from which is their internal diameter, as well as factors local and linear resistances. In the course of performing the studies is organized analysis of the influence of the technical features of the pumping installation and pipe-line systems on economy power station. Accounting correlations are received for determination of the best values diameter pipe line on criterion of the minimum of the total cost most pipe line and expenseses to powers on issue of the liquids with provision for restrictions, superimposed on velocities of the motion.

The designed principles of the choice optimum state of working pump, providing maximum general coefficient of efficiency (KE) pumping installation with provision for features of the pipe-line systems. The Executed benchmark analysis of the influence of the ways of the regulation of the superchargers on economic factors hydraulic and aerodynamic networks. The designed algorithm of the optimum regulation of the frequency of the rotation of the superchargers, providing maximum importance general KE network.

The offered algorithm of the determination of the required frequency of the rotation of the pump provides transition on new state of working with minimum loss of the powers since regulation to capacity of the pump by change the frequency of the rotation is an more economical way in contrast with throttle regulation (the regulation by means of bolt). Use the offered methods to optimization of the pumping installation on TPP and APP can provide annual spare beside 3 mlrd. hrn to account of the reduction of the consupcion to energy on own necessities power station.