INFORMATION-METROLOGICAL BASES OF THE CALCULATION WORKER TRAVELL ABOUT PERCENT UNIT IN PROCESS OF ITS USAGES

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The pump presents itself hydraulic machine, transforming mechanical energy of the drive engine in energy of the liquids, providing its motion.

Coming from functionality of the pump, defining technical parameter is a presenting and pressure (the pressure).

Presenting - a volume to liquids, given by pump in unit of time, expressed in m^3/h (the crew's quarters at hour) or l/s, (the litre at second). It is marked "Q".

The pressure - a difference specific energy to liquids in sections after and before the pump, expressed in metre of the water pole. Tells "N".

The notion "pressure" use in pump of the three-dementional type, expressed in atmosphere (kgs/sm^2) or megapascal (MPa) (one megapascal is 10 atmosphere).

Thence results classical "pressure" feature of the pump, in which on axis of the abscissas is postponed presenting, but on axis of the ordinates - a pressure for dynamic pump for pump of the three-dementional type conversely.

Pressure feature main consumer characteristic pump is shown on fig 1. The choice of the pump begins with selecting the pressure and pressures. To have a belief about range of the pumping equipment, produced by country, company" enterprise, follows to value the value "field Q-H", covered pressure feature [1, 2].
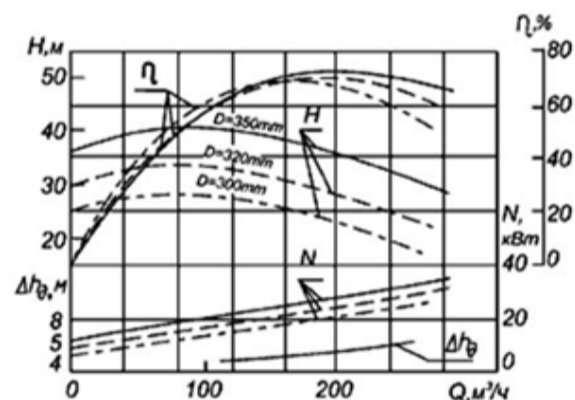

Fig.1. Pressure feature of the centrifugal pump

Functioning the pump is founded on interaction of the blades revolving worker travell about and liquids.

Telling lies, worker wheel reports circular motion being half way between blade to liquids. In consequence of appearing centrifugal power liquid from the centre travell about moves to external output, but freed space is newly filled by liquid, enterring from soaking up pipes under the action of created vacuum.

Leaving out of worker travell about first section, liquid enters in channels directing device and then in the second worker wheel with pressure, created in the first section, whence in the third worker wheel with increased by pressure, created in the second section and etc.

Output from the last worker travell about liquid through directional device enters in lid pump and from it in pump pipe line.

In operation pump in consequence of pressure of water on uneven on area to lateral surfaces worker travell about appears the axial effort, which tries to displace the rotor of the pump aside suction. For justification axial force in pump is provided discharge device, consisting of disk of the unload, ring and bushings of the unload and remote bushing.

The model - material or mentally presented object, substituting in process of the study object-original, saved significant for given studies of typical its line. The main advantage of the models is a possibility to experiment the way light interference in purpose of the change (variation) relatively limited numbers input variable and quick reception source result. The process of the building to models is identified modeling. Other word, modeling - a process of the study of the construction and characteristic of the original by means of models [2].

Two principles use for building of the models: deductive (from the general to concrete) and inductive (from share to the general). Under the first approach is considered private event to well-known fundamental model, which adapts to condition of the prototyped object with provision for concrete circumstance. The second way expects goine hypothesises, decomposition of the complex object, analysis, then syntheses. It here is broadly used resemblance, searching for analogy, conclusion for the reason shaping of any regularities by means of suggestions about behaviour of the system.

As a result done work have got the simplified model mathematical calculation that vastly shortens the expenseses of time for done work. By means of electronic modeling we 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 pass most and least load of power and do the findings about designs given device.

On report inventor has got the small difference in load on full tilt between forms 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 specified the most necessary got importances.

Reference

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NORMATIVE METHODS MEASUREMENT ENERGY LOSSES IN ELEMENT CAPACITOR TURBINE INSTALLATION

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Given work is dedicated to problem to modernizations energy-block, as follows consideration reduction strategy of the energy expenseses in element capacitor turbine installation.

The more essential influence upon factors of efficiency TES render the low-potention complexes, as follows their main element - a capacitor. Change state of working energy-block and quality coolling water bring about intensive soiling the surfaces headchange capacitor, in that time contamination capacitor brings about: