

Study of the dynamics in information content marked pumps with international standards ACCOUNT

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In the article the study of the dynamics in filling the information signs vidtsenrovyh pumps, taking into account including the International standards and its impact on the design of pumps moderhizatsiyu.

Vidtsetrovyy pump design pumps, suction port, parametric notation pumps, feed, pressure.

Relevance of research. Widely used in water supply system were cantilever pumps because of their reliability and ease of operation. The console is specific pump type centrifugal na-sosu, whose working body - the impeller. It consists of 2 x ~ discs between them, combining them into a single structure znahodyatsya blade gently bent in the opposite napryam-ku rotation of the wheel.

The group cantilever pumps include centrifugal pumps and single-sided with a supply of liquid to robochoho wheel. The wheel of the pump is placed at the end of the shaft (console) fixed in the bearings of the pump housing. Material flow components of the cantilever pumps - gray cast iron. Structurally pumps have the following performance; K - horizontal cantilever-supported case of pryvo-dom from the engine via elastic coupling;

KM - cantilever monoblock. The impeller is installed on the end of an elongated shaft of the electric motor. These pumps are manufactured to the same working conditions and with limited work area preferred vyko-nannyu KM, which tend to have 30% shorter. Material flow components of the cantilever pumps - gray cast iron.

The purpose of research: to reveal information dynamics in the designation vidtsenrovyh pumps, taking into account international standards and its impact on the design of pumps moderhizatsiyu

Materials and methods research. Technical and analytical analysis in the designation pumps, centrifugal console as an example, for the periods: before 1982, from 1982 do 1990 g., And from 1990 to the present.

Results. In the notation pumps traditionally laid many in-formatsiyi. By 1982, the designation was nastupnym cantilever pumps: for example 4K-6, where "4" - diameter suction pipe in mm, reduced 25 times; "K" - console; "6" - factor rapidity pump 10 times smaller and rounded. More speed pumps have a relatively low pressure. This designation reflects a greater extent structural and dimensional characteristics of pumps.

In 1982 he was introduced parametric notation naso-siv. The same pump denoted K 90/85, where "90" - supply, m³ / h, "85" - the pressure of - at maksimalnomu efficiency;

This designation reflects the increasingly consumer vlas-tyvosti pump.

Since 1990, introduce the notation pumps in accordance with international standards such as ISO 2853. International European standard If the previous designation changed without significant design change, the introduction of international European standard requires significantly change konstruktsiyu in accordance with the requirements of this standard. The same pump affects K100-65-250aB-SD, where "100" - diameter suction pipe, mm; "65" - diameter discharge pipe, mm; "250" - the nominal diameter of the impeller, mm., "A" - index obtochky impeller. Typically more than two obtochok not happen, so refer to impose "a" and "b" (if the wheel without obhochky - the index is not), "B" - performance by the flow of material.

In connection with the large number perekachuyemyh liquids naso-sah consumes significant amounts of material for which vvedeni following notation:

A - carbon steel; B - iron, including cast iron (usually this stuff is not specified); B

- Bronze; K - chromium-nickel steel; S - aluminum alloy; P - plastic; P - rubber coating; F - pottery, porcelain; "CD" - performance by type of seal; C - Single gland seal (without Sealing fluid supply); SD - double gland seal (with delivery zatvornoyi liquid).

Preliminary designation changed without significant change konstruktsiyi. Last update required significant modification according to international standard.

The main advantage of cancellation and design vidtsentrovyh pumps (visovym entrance of fluid in the impeller) rozroblenyh in accordance with international standards, is that dismantling the pump may be done without pressure and suction vid'yednuvannya pipelines. This piping attached to the housing and the impeller is removed from the side of the electric motor, provided design couplings between the pump and motor.

Conclusions.

Based on the technical and analytical analysis in the designation pumps, centrifugal console for example, found that for the period up to 1982 in the notation displayed a greater extent structural and dimensional characteristics of pumps, namely the suction pipe diameter and geometric dimensions of the impeller; 1982 introduced parametric years do 1990 designation pumps, reflecting the value of feed pressure at maximum efficiency and from 1990 to the present main advantage cancellation and design vidtsentrovyh pumps (visovym entrance of fluid in the impeller) rozroblenyh in accordance with international standards, is that dismantling the pump may be done without pressure and suction vid'yednuvannya pipelines.

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Anotatsiya

In the article the study of the dynamics in the information designation vidtsenrovyh pumps incl miizhnarodnyh European standards and its impact on the design moderhizatsiyu pumps.

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