

OF WATER IN AGRICULTURE AND THEIR EQUIPMENT TECHNOLOGY

VE Vasilenkov, PhD., Associate Professor

In the article the water supply in agriculture and studied their technological equipment. Based on the technical and analytical analysis of water systems to their technological equipment on the example of air-water boiler, found that in these boilers is relatively small supply of water, so at high hourly cost of water increases the frequency vmykan-nya pump unit, which can lead to overheating and elektro-dvyhuna its failure. The increase in boiler significantly increases the cost of it, because at high hourly cost vyko-rystovuyut water tower pumping devices. Water tanks with control of the water level in a water tank can be carried out using float or electrode level sensor and electric gauges. Float level sensors are nyz-ku reliability due to the presence of moving mechanical parts.

Water supply, Pumping Station, centrifugal pump, water tower, air-water boiler.

Relevance of the research. Water supply systems are designed for extraction, purification and distribution of water for technical and economic needs. Automatic control systems of water supply pumping stations intended to automatically start and stop the pump at a certain proh-ramoyu, automatic adjustment of the pump, switch re-zervnoho pump, electric protection, signaling ro-boty normal and emergency stops, measurements of pressure and water level forces current consumed by the electric motor and voltage. Manual labor for water supply in livestock farms make up 30% of all work, and the use of automated electric drive increases the productivity of these operations in 18-20 times.

In rural areas using centralized and decentralized water supply system.

The purpose of research: to reveal the technological equipment of agricultural water supply facilities.

Materials and methods of research. Technical and analytical analysis of the water with their technological equipment.

Results. To agricultural water consumers mainly served through a water boiler or a water tank, using centrifugal pumps, which are driven asynchronous *elektrovyhuzhnyy*. Directly from the pump to the water distribution network serves in open irrigation systems-driven asynchronous or synchronous motors. For the withdrawal of water from open reservoirs, as well as mine wells and wells with dynamic water level in them deeply 5-7 m. From the ground, mostly used types of centrifugal pumps K, KM and WSP and vortex pump types B, VC and SCR . With deep shaft wells and water wells using lift devices *vodostrumnyh* HV and submersible electric pumps types *ЭТSV, ЭPN, ЭPL, AP, APV* and *APVM*.

With reliable electricity supply and small hourly costs (1.6 ... 36 m³ / h) can be used on farms pumping devices of the air-water boilers, submersible, blade or *vyhruzhnyy* pump and control station type clause.

Submersible pumps, usually delivered with control stations and relay-contact elements or PET gap semiconductor devices (logical elements, chips) type *SHЭP* and "Cascade", which also differ in power controlled engine and made two dimensions Engine power 10 .. 12 kW and 16 ... 65 kW. The first two stations out of production, but households still used.

Conclusions.

Based on the technical and analytical analysis of water systems to their technological equipment on the example of air-water boiler, found that

in these boilers is relatively small supply of water, so at high hourly cost of water increases the frequency *vmykaniya* pump unit, which can lead to overheating and *elektrovyhuna* its failure. The increase in boiler significantly increases the cost of it, because at high hourly cost *vykorystovuyut* water tower pumping devices Water tanks with control of the water level in a water tank can be

carried out using float or electrode level sensor and electric gauges. Float level sensors are nyz-ku reliability due to the presence of moving mechanical parts.

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