

TO MEASURE THE SPEED OF WATER FLOW IN OPEN CHANNELS.

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Abstract. *The topic of the article measuring the velocity of flow of water in open channels those techniques include the necessity of determining the flow of water in it, control, measuring station, measuring water consumption and water flow of the formula for measuring the different metho.*

Keywords: *flow speed, the measuring station, periodic measurement of the vertical point average flow velocity, channel, five-point hydraulic structure, metho volumetric velocity field metho.*

ДЛЯ ИЗМЕРЕНИЯ СКОРОСТИ ВОДНОГО ПОТОКА В ОТКРЫТЫХ КАНАЛАХ.

Аннотация. *К теме измерения скорости потока воды в открытых каналах этими методами относятся необходимость определения расхода воды в нем, контрольно-измерительная станция, измерение расхода воды и формулы расхода воды для измерения различными методами.*

Ключевые слова: *скорость потока, измерительная станция, периодическое измерение средней скорости потока в вертикальной точке, канал, пятиточечное гидротехническое сооружение, метод метообъемного поля скорости.*

To enter. In recent years, as the development of the water resources sector in uzbekistan paid special attention to all areas. In the republic efficient use of land and water resources, improvement of water resources management system, consistent reforms are being implemented on the modernization and development of water resources engineering. In particular, 2019-2020-regulating the sphere of water resources over the years to a total of more than 30 laws, decrees and decisions adopted. The president's 2020-in accordance with the decree on 10 June of the year is a clear example of the concept thus approved. To eliminate the existing problems in the sphere of the concept on the development of water resources and includes topical and prioritizing tasks.

THE MAIN PART. Syrdarya and Amudarya of the aral sea basin water resources are limited in that if the total 120 billion. makes up cubic meters. That occurs in the territory of the republic of uzbekistan in the amount of 10 percent. As water resources get more than 90 percent of the water source from agricultural use in part, this is first and foremost in order to ensure the food security of the population are used in the cultivation of agricultural crops.

To measure the speed of water flow in open channels. The flow of water to measure the water flow in the organization of water resources is used for measuring and control of periodic measurement stations in the balance. Depending on the task, can be made by various methods to measure the flow of water. So, the main method with two vertical at the point, i.e. at a depth of 0.2 h and 0.8 h of the primary measure the speed of the flow are set. Flow is to the depth of 0.5 m in the case that the flow speed at a point on the water from the bottom of the channel at a distance of 0.4 0,6 h or h can be measured.

Measuring station to measure the flow of water in the five checks the computer's initial with dots is performed in the order in full. 1-the various methods of measuring the flow of water in the picture to set the vertical point of the image is shown.

The depth of water in the channel and the task given to him, depending on water management in organizations with three or five dots gidrometrlar you can use the method for measuring the flow of water.

In this case, the average speed on the vertical, for example, with two dots is carried out by measuring the flow speed:

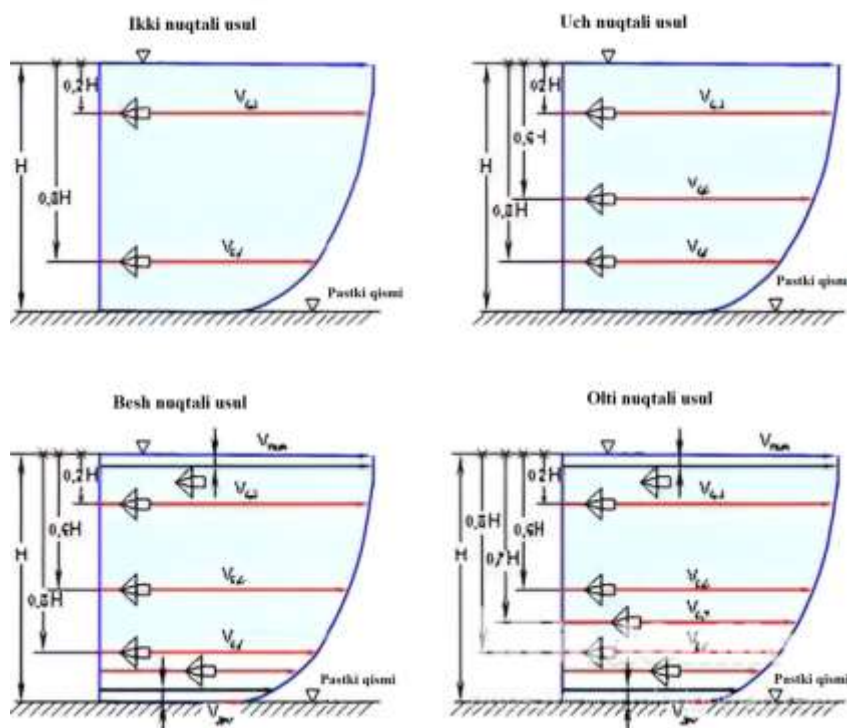
$$V_{\text{physical hazard}} = (V_{0.2h} + V_{h(0.8)})/2$$

here: $V_{0.2h}$ - 0.2 h a depth of speed, $V_{0.8h}$ - 0.8 h a depth of speed.

Measuring the flow of water at the measurement station station plot (S) of the area of the incision to the average flow rate (V) is determined by way of increasing:

$$Q = (C \times V) \text{ m}^3/\text{s}$$

Basically the technical check of the measuring station and measuring the speed of water flow with dots apply the methods of five and seven.



1-picture. The various methods of measuring the flow of water along the channel for the vertical transverse incisions of the location of the point on the diagram.

The following methods of water consumption measurement in open channels are divided into two groups:

Volume method: in this method, we will go on the basis of certain measurements of the water plan. As a result, water consumption daily, monthly, annual, perennial is determined by the amount. With this characteristic are referred to as a big name as well as discharge. Detected for a certain time spent on the water from the river flowing on the basis of the average value of the amount of water passing in the same time - will determine the size of the flow.

Velocity-area method: in this method the river cross-qirqim his in-depth measure. Then the vertical speed of a choice, is a measure of the speed of water leaks in them. In-depth information on the basis of the fundamental forces of physics-intermediate landing. Vertical landing speed while passing qismiy flowing from the fundamental forces of physics with limited water consumption is calculated with the following expression:

CONCLUSION. The main hydrological characteristics of the water flow of any water flow required in the design of various hydraulic structures is the reason of it; hydro power stations - for the calculation of their capacity; irrigation systems - know the actual area of irrigated land; water resources management and operational services from agriculture on the distribution between water users and others.

To measure the speed of water flow in the channel because it is the management and use of water resources is of great importance. The method used in the measurement of the speed of the channel, water leaks and should be chosen depending on the type of the variable.

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