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MEASURING WATER CONSUMPTION IN FITTINGS

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Abstrakt

A person uses drinking water throughout his life for various extents. The lack of clean drinking water is considered one of the most relevant in the world. Therefore, it is necessary to use clean drinking water wisely and save on it. In apartments, clean drinking water is used for household extents. As an example, things like seeding, seeding, etc., if the sovning is large enough, then it's a waste of rumors. With the help of a reduction valve, it is possible to reduce and adjust the pressure of drinking water in the apartments themselves to the desired level. This greatly reduces the waste of drinking water.

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INTRODUCTION.

In many developed countries of the world, today there are problems with the provision of clean drinking water. As a result of the lack of clean drinking water, the protection of Water Resources has become an urgent issue all over the world. With an improvement in the standard of living of a person than with Statistics, his extirpation for water increases. According to the modern turarar-Joi binolarin, suva provided a rise. Clear ichimlic suvini tejash ish chiqish ENG important biridir development methodology.

The importance of drinking water in human life is great. The consumption of water in the national economy exceeds other total resources and products. We can see this in the following example:

1 ton for oil production - 10 м^3 water;

For 1 ton of steel – 100 м^3 water;

For 1 ton of paper – 250 м^3 water;

For 1 ton of acetate silk – 2600 м^3 water;

1 kilogram for growing vegetables – 50 литр water;

To grow 1 kilogram of bread product – 500 liters of water will be needed.

The waste of drinking water is occurring in the satisfaction of household extents by consumers.

Table 1. Use of drinking water in apartments

Potable water extents	Amount of drinking water use %
for the toilet	31 %
for bathing and showering	31 %
for washing clothes	14 %
for face and hand	6 %
to drink	8 %
to clean	3 %
for machine washing	3 %
to spray water on the yard	4 %

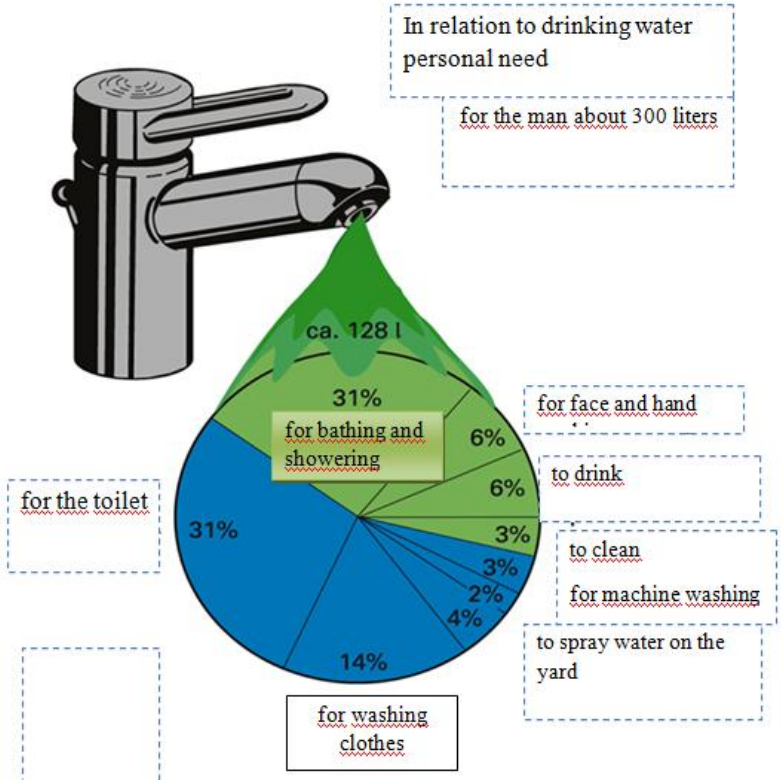

Figure 1. Water extensibility for one person

METHODS

The pressure of the water being transferred to the population should usually not exceed 0.6 MPa in front of the fittings. The consumer uses drinking water for various purposes. For example: used for washing, cooking, washing and other purposes. Since the high water pressure in the intake fittings has a great influence on the high consumption of water. The greater the pressure of the water, the greater its consumption per unit of time. Due to the fact that there is currently a significant need to improve the quality of products. To do this, it will be advisable to use a water pressure adjuster (reduction valve).

Reduction valve The reduction valve reduces the pressure at the entrance of the water pipe to the specified value of the building and maintains this pressure in a fixed (proportional) position. It seals the water away when the pressure is too high and opens it when the pressure decreases. the increase in pressure from the network is caused by the normative uneven distribution of water consumption per hour.

Table 2. The distribution of the daily water consumption norm by hours will be as follows

Clock distribution	%	Clock distribution	%
0-1	0,6	12-13	3,5
1-2	0,6	13-14	3,5
2-3	1,2	14-15	2,7
3-4	2	15-16	6,2
4-5	3,5	16-17	10,4
5-6	3,5	17-18	9,4
6-7	4,5	18-19	7,3
7-8	10,2	19-20	1,6
8-9	8,8	20-21	1,6
9-10	6,5	21-22	1
10-11	5,1	22-23	0,6
11-12	5,1	23-24	0,6
		total	100

As can be seen from the table, from 7 to 8 am and from 16 to 17 pm consume the maximum amount of water. The pressure of the water is taken at maximum pressure.

We explain the principle of operation of the reduction valve according to the following scheme.

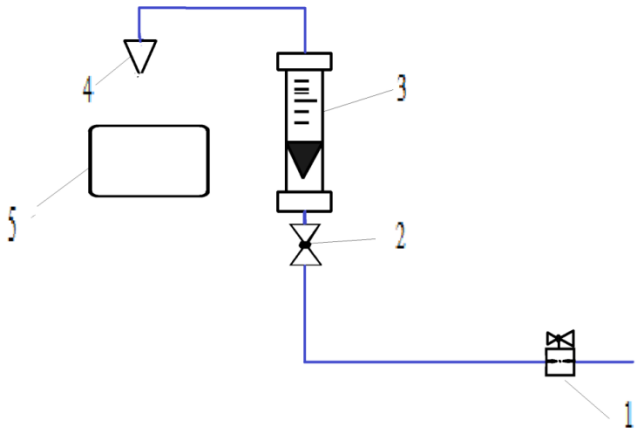

Figura 2. Connection of a water dish to the House

1- valve reduction, 2 - open-close crane, 3 – consumerist, 4 – water intake crane, 5 – rocavina

RESULT AND DISCUSSION

Based on population extirpation, the pressure of the water using a reduction valve can be adjusted to 0.5 MPA, 0.4 MPA, 0.3 MPA, 0.2 MPA, 0.1 MPA.

Using the training Stand "Water supply fittings details " (Figure 3), we tested the waste of water in an experiment that depends on the pressure.

In the experiment, we found that the greater the pressure of water, the greater its consumption per unit of time. We conducted the experimental work on a 2-lever armature and had the following results.

RESULTS

Table 1

	P_X 0,6 бар		P_X 4,5 бар		P_X 3 бар		P_X 2 бар		P_X 1 бар	
	V L/min	P бар	V L/min	P бар	V L/min	P бар	V L/min	P бар	V L/min	P бар
2 handle fittings	35	1	35	1	32	1	25	0,6	16	0,3

There are short interruptions in water supply on one network when water consumption increases on the

other. The use of a reduction valve, on the other hand, prevents short circuits and reduces water consumption.

CONCLUSION

There are a number of problems in the system of supplying akholini with drinking water. From the unevenness of the water consumption norm, the pressure of water in the network causes a decrease in certain times. As can be seen from the table, from 7 to 8 am and from 16 to 17 pm consume the maximum amount of water. The pressure of the water is taken at maximum pressure. the minimum water consumption norm is from 22:00 to 23:00, from 23:00 to 24:00, from 00:00 to 1:00 and from 1:00 to 2:00. By reducing the consumption of water in apartments using a reduction valve, it is possible to prevent pressure drops in the network.

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