

PREVENTION OF ACCIDENT INCIDENTS IN GAS SUPPLY SYSTEMS AND IMPROVING PERFORMANCE

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Annotation: This article provides information on the creation of a system of their design and use and the laying of gas pipelines in determining the strength of gas supply networks.

Keywords: Gas Networks, pipeline, pipes, voltages, corrosion

ПРЕДОТВРАЩЕНИЕ АВАРИЙНЫХ СИТУАЦИЙ В СИСТЕМАХ ГАЗОСНАБЖЕНИЯ И ПОВЫШЕНИЕ ПРОИЗВОДИТЕЛЬНОСТИ

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Аннотация: В данной статье представлена информация о создании системы их проектирования и использования и прокладке газопроводов при определении прочности сетей газоснабжения.

Ключевые слова: Газовые сети, трубопровод, трубы, напряжения, коррозия

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Currently, in the implementation of economic reforms in the continuous quality supply of the population with gas, gas and water, the main priority of this area is established [1].

Gas supply is a large branch of the national economy. The consumption of natural gas among primary energy resources is the first in the Republic of Uzbekistan (83%).

The total length of the gas networks currently in use in Nukus is 793.9 km, including the length of the low-pressure pipelines is 482.4 km, the middle pressure is 248.8 km and the high pressure is 62.7 km. During the period of use of gas pipelines, they are subject to an accident, the reason for which includes corrosion (absorption) of pipes during the use of pipes, disconnection from welded seams, mechanical damage to pipes.

The reliable operation of network gas supply systems is determined by the full supply of the amount of gas consumption supplied to consumers through pipelines. When the reliable operation of the gas supply system is not fully carried out, the failure of the pipes to an accident state, not only economic and moral damage to consumers can harm [2].

Reliable operation of gas supply systems of urban networks is of social and economic importance. When assessing the reliable operation of a gas supply system on the basis of the strength theory of technical devices, their operation without an accident during the time (t) and unit is determined by $P(t)$. The volume of the internal capacity of the pipeline in urban Gas Networks is at most 3-4% at the gas pressure in each step, 10-12% of the total charge. The connection between the transmission of gas in the urban gas network and the reception of gas from consumers from the network has a very tight connection in practice [3].

When determining the strength of gas supply networks, it is necessary to create a system for their design and use. Taking into account the conditions for laying gas pipelines, engineering communications carried out in a horizontal and vertical direction around the pipeline, as well as the requirements of current building standards and regulations (QMQ) when determining distances in relation to buildings, structures, natural and artificial barriers;

Strength and stability calculations of the construction of gas pipelines, as well as hydraulic calculations of gas pipelines, carry out in accordance with the relevant documents;

When calculating the voltages that affect the pipeline, take into account the weight of the pipe and fittings, the state of the pipeline under the initial voltage, sudden temperature changes, the effect of additional voltages in landslides and precipitation;

When passing gas pipes between the walls, it is necessary to transfer them between steel sheaths. The inner diameter of the heap should not be higher than 10 mm in the diameter of the gas pipeline, however, taking into account the deformation of buildings and structures. Tightening of the gap between the gas pipes and the heatsink with elastic materials [3].

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