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APPLICATION OF NEW ROAD CONSTRUCTION COMPOSITE MATERIALS IN THE DESIGN OF ROAD OVERFLOW STRUCTURES

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Abstract: The main and additional materials used in the production of geonets are basalt and its application to our roads. Passing the basalt geogrid through the laboratory, determining the levels of traffic loading, studying the characteristics of testing the geogrid’s resistance to stretching, and its application and use areas.

Keywords: Geogrid, basalt, mineral binders, binder of administrative centers, infrastructure, composition, fields of application, polymer.

The main part: Social and economic aspects of the road industry that it is highly important is its important feature.

The general development of the economy, the quality of life of all layers of the population depends on the effective functioning of this system.

Administrative centers of regions and districts during the years of independence connecting broadband transport links and safe interstate road transport infrastructure aimed at providing transportation large-scale development works have been carried out.

The purpose and objectives of the research. General about the geogrid information and its areas of application, laying process and basalt fiber Geogrid acquisition methods are the main goal of the research.

To achieve this goal, the following tasks were set:

- researching the fields of application of the geogrid;
- passing the geogrid through the laboratory;
- determination of traffic load levels;
- checking the tensile strength of the geogrid;
- methods of obtaining geonet from basalt fiber;
- economical construction of asphalt concrete pavements using geogrid efficiency;
- development of conclusions and recommendations.

In particular, in our Republic, A-373 "M-39 highway Gulistan-Bo‘kaAngren-Ko‘kan and Andijan-Osh highway" is 5 km long Reinforcement using "Geosetka" produced in the Russian Federation work has been done.

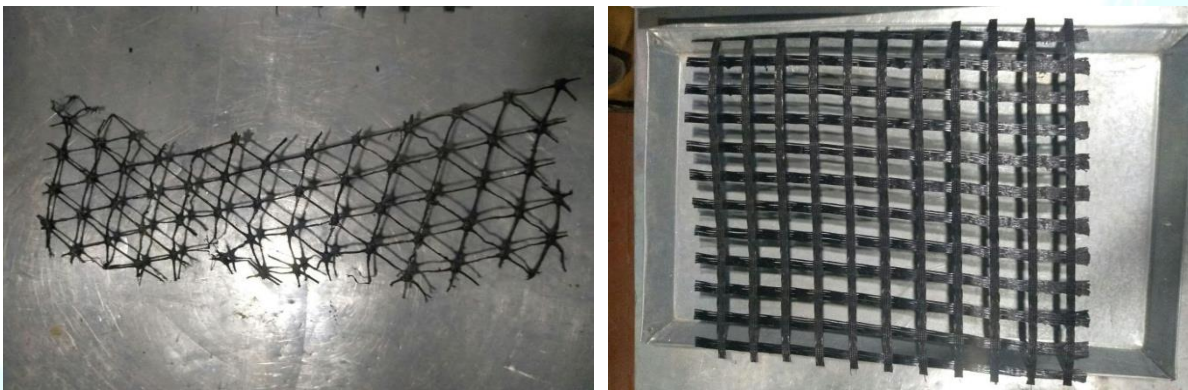


Figure 1.1. A-373 "M-39 highway Guliston-Bo‘ka-Angren-through Ko‘kan and Andijan-Osh highway" 5 km

Geonetka is the latest special synthetic (polymer) building material in the years to strengthen the foundations of roads and railways is being used more and more. In the Russian Federation, this is relatively recent known, but it is successful because it is landscape and road works allows you to perform faster and better.

Properties of glass fiber - chemical composition, heat resistance, electricity electrical conductivity, low thermal conductivity, thermal expansion with a small coefficient, chemical resistance and mechanical precision is determined. Fiberglass for glass plastics in today's technology as a reinforcing (reinforcing) material, in filtration and electrical engineering used as an insulating material. Glass is baked at 1400-1450 °C, It is clarified and homogenized at 1460-1500°C, at 1200-1300°C is cooled. Glass is isotropic, that is, its physical properties (reflect light refractive index, thermal conductivity, etc.) in different directions is the same when measured by. The structural form of the geogrid



Synthetic made from a solution of polyamide fiber-polyamides fibers To obtain polyamide fibers, usually mol. 15000 to 30000 linear polyamides are used Polyamide fibers are mature, very strap, non-spreading, resistant to the effects of many chemicals, self-adhesive takes paint.

Application of geogrid. Asphalt-concrete roads are often deformed under the influence of external forces. As a result, displacements, cracks and pits appear in the deformed areas over time. To eliminate such negative defects, it is recommended to use a geogrid.



Figure 1.3. The result of using geogrid

Reduction of cracking, deformation and displacement of road and airfield pavement during active operation

Strengthening of structural layers of road and airfield pavements. Flat geogrids are characterized by high mechanical characteristics and are used to create a reinforcing

layer. The area of application of the constructive solution is the repair of the asphalt concrete pavement in the absence of the pushing load due to the impact of vehicles. Geonets usually consist of cells with a length of $5 \div 40$ mm. The presence and size of the cell, the thickness of the element determine the mechanical characteristics of the material and the degree of connection of the material with the layer on which it is laid.

Summary

When talking about the main properties of asphalt concrete, its mechanical properties (compression, elongation, bending, impact, sliding and friction), the long-term resistance of the material, the ability to deform, as well as the friction properties of the coating (cold or hot) with the surface of car tires it should be assumed that he has Plastic compounds have moderate shear properties and are compacted by rollers. Hard compounds have high internal friction, that is, low shear properties. This can include hot and cold asphalt concrete mixes. Porosity and sliding properties of asphalt concrete mixtures depend on their structure, amount of bitumen and quality of mineral powders. Mixtures made of crushed mineral materials have low slip compared to gravel and natural sand mixes.

The shear strength of asphalt binders is greater than that of asphalt concrete. Asphalt concrete contains up to 50 percent of crushed stone, it forms a spatial framework and is resistant to displacement.

Long-term wetting of asphalt-concrete pavements leads to the weakening of their structural bonds, the disintegration of mineral particles and, as a result, the destruction of the pavement. Water is a polar liquid and it moistens all kinds of mineral materials well, therefore it creates an opportunity for water absorption in the layer of mineral particles treated with bitumen. In this case, mineral materials with a positive charge on the surface (calcium, dolomite, limestone) have a negative potential on the surface. compared to quartz, granite, andesites, which have a bitumen layer is more resistant to water washing. In winter, water in the pores of asphalt concrete turns into ice, its volume expands by 8-9%, as a result, the pressure increases to 20 MPa. In autumn and

spring, the processes that occur as a result of frequent freezing and thawing of asphalt concrete pavement lead to the deterioration of asphalt concrete. Asphalt composed of basic rocks (dense limestone). Asphalt-concrete pavement wears out under the influence of the frictional force between the car wheel and the pavement.

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