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THE EFFECT OF A CHEMICAL ADDITIVE ON THE PROPERTIES OF A CONCRETE MIX

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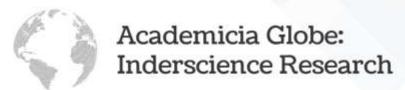
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Annotation

To date, concrete is one of the most widely used materials in modern construction practice. Concrete and reinforced concrete are the main materials in modern construction, and various additives are used to improve their properties. Control of technological parameters of concrete with the help of additives is considered to be one of the modern ways to improve the rheological and operational properties. The use of additives allows to reduce construction costs, for example, reduce the cost of construction, save cement and quality concrete.

Introduction

The purpose of the article. Study of the effect of Chryso Delta6325s superplasticizer on the physical and mechanical properties of cement and concrete. Chryso Delta 6325s superplasticizer - a new generation superplasticizer based on polycorbaxylate [10] is recommended for obtaining high-strength concrete, which ensures the mobility of the concrete mix. Chryso Delta 6325s allows to produce concrete with low water-cement ratio. Increases the waterproofing of concrete. Used in the production of high-strength precast and monolithic concrete structures. Increases the water resistance and longterm durability of concrete. has become one of the most widely used materials in practice. Architects and builders use concrete to create a variety of antique, beautiful, and durable buildings and structures are building and occupying new areas of construction. According to experts, the annual production of concrete in the world is more than 2 billion m3. Concrete and reinforced concrete are the main materials in modern construction, and various additives are used to improve their properties. To date, chemical additives have become one of the mandatory components of concrete mixes, such as binders, fillers, water [3]. Control of technological parameters of concrete with the help of additives is considered to be one of the modern ways to improve the rheological and operational properties. The use of additives allows to reduce construction costs, for example, reduce the cost of construction, save cement and quality concrete. Increasing the mobility of concrete mixes leads to a reduction in labor costs while maintaining water demand, reducing energy consumption and reducing the duration of compaction of concrete mixes [4]. "Chryso Delta6325s superplasticizer increases the mobility of the concrete mix when applied to the concrete mix, does not pour the mixture until it is delivered to the construction site, increases the water resistance of the concrete. Chryso Delta6325s is a high-quality superplasticizer that is highly effective in the production of concrete in hot climates. Applying the Chryso Delta6325s superplasticizer to the concrete mix increases the mobility of the concrete mix and reduces porosity in the concrete. It is important to reduce the water-cement ratio in concrete mixes,



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because if too much water is added to the concrete, there will be as many pores in the structure of the hardened concrete. These pores reduce the strength and frost resistance of the concrete. This is due to the fact that in winter, when water enters the pores and freezes (water expands by about 9% during freezing), it leads to the destruction of the overall structure [5]. In world construction practice, it is impossible to imagine the construction of solid cast-in-place buildings made of concrete without the addition of superplasticizers. For example, in the Russian Federation, builders use about 40,000 tons of superplasticizers per year. In many countries, the use of superplasticizers on construction sites is very effective

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