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ВАЖНОСТЬ ГИПСОВЫХ СТРОИТЕЛЬНЫХ ИЗДЕЛИЙ

***Аннотация:** Одним из важнейших и нерешенных вопросов на сегодняшний день является производство малозатратных материалов, позволяющих снизить расход материалов, используемых в производстве, энергоемкость, трудозатраты при возведении зданий и сооружений.*

***Ключевые слова:** фосфогипс, борогипс, флюорогипс, хлорогипс, энергозатраты*

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Importance of gypsum construction products

***Annotation:** One of the most important and unresolved issues to date is the production of low-cost materials that reduce the consumption of materials used in production, energy consumption, labor costs in the construction of buildings and structures.*

***Key words:** phosphogyps, borogips, fluorogyps, chlorogips, energy consumption*

One of the most important and unresolved issues to date is the production of low-cost materials that reduce the consumption of materials used in production, energy consumption, labor costs in the construction of buildings and structures. As before, the main binder in the production of building products and structures is clinker cement, while for the production of silicate wall materials - lime. Technological processes of cement and lime production are more expensive and require a lot of energy, a lot of money, and therefore, today, finding cheaper

building materials and energy-saving technologies in their production remains an important task. Among the building materials, gypsum binders and products based on them, which have good fire resistance, sound insulation ability, hygienic, wide range of strength properties and low thermal conductivity, occupy a worthy place. At the same time, in the production of gypsum binders, the relative capital costs are 2 times lower than the production of clinker cements, and energy costs are 4 times lower. However, despite a slight increase in the consumption of gypsum decorative materials in recent years, the production of gypsum building materials and products has declined in recent decades (mainly foreign production) and this negative trend continues. It should be noted that in addition to the common causes of objective and subjective nature associated with the hypertrophic development of precast concrete, the reduction of energy prices has two unresolved major problems in the production of gypsum and its products, both domestic and partly foreign. The first problem is related to the condition of the gypsum industry raw material base. Despite the large reserves of gypsum raw materials across the country, there are also areas where there are no natural gypsum deposits. In particular, the regions of Western and Eastern Siberia and the Far East are forced to use gypsum raw materials imported from afar. Even in areas where natural gypsum reserves are adequately available, they are generally underutilized, and their development is associated with large capital and operating costs. Therefore, the development of the raw material base of the gypsum industry, the use of gypsum-based wastes and by-products in various industries is an important task. The second problem is primarily related to the outdated technology of production of gypsum construction products, which is still used in many construction companies. For example, a comparison on an important indicator such as the specific consumption of the binder in the volume of the raw mix for the production of construction products, it should be noted that with the casting technology used in the absolute majority of gypsum plants it is 70% or more. For modern technological lines for the production of vibropressive concrete products on the basis of cement, this figure is 15-20%. Therefore, first of all, the most expensive

component is the improvement of existing technological schemes and the development of new, more efficient ones, which will significantly reduce the cost of gypsum binder and increase the overall feasibility of production of gypsum materials and products. In the chemical industry, as a by-product, large amounts of waste containing calcium sulfate (phosphogypsum, borogyps, fluorogyps, chlorogyps, etc.) are generated. Phosphogypsum, which is used in the manufacture of building materials, with a content of calcium sulfate dihydrate of 80 ... 95%, is of great importance. Today, the main way to remove phosphogypsum is to dispose of it in landfills that have a detrimental effect on the environment. Atmospheric precipitation pollutes atmospheric air, groundwater and surface water, soil and vegetation with harmful substances resulting from washing and pollination.

Referenses

1. Абдукаримов Б. А. и др. Способы снижения аэродинамического сопротивления калориферов в системе воздушного отопления ткацких производств и вопросы расчета их тепловых характеристик //Достижения науки и образования. – 2019. – №. 2 (43).
2. Бахромов М. М., Отакулов Б. А., Рахимов Э. Х. У. Определение сил негативного трения при оттаивании околосвайного грунта //European science. – 2019. – №. 1 (43).
3. Юсупов А. Р. и др. К расчёту неравнопрочных термogrунтовых тел на сдвигающие нагрузки //Достижения науки и образования. – 2019. – №. 2 (43).
4. Мирзажонов М. А., Отакулов Б. А. Влияние на прочность контактной зоны рабочего стыка времени выдержки нового бетона //XLIII INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE" INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION". – 2018. – С. 22-24.

5. Мирзажонов М. А., Отакулов Б. А. Восстановление разрушенных частей бетонных и железобетонных конструкций //Достижения науки и образования. – 2018. – №. 13 (35). – С. 13-14.
6. Xalimjon o'gli S. J. Influence on durability of contact zone of working joint time of the endurance of a new concrete //EPRA International Journal of Environmental Economics, Commerce and Educational Management. – 2021. – Т. 8. – №. 5. – С. 1-2.
7. Abobakirovich A. B. et al. Increasing the efficiency of solar air heaters in free convection conditions //Достижения науки и образования. – 2019. – №. 2 (43).
8. Otakulov B. A., Karimova M. I. Q., Abdullayev I. A. Use of mineral wool and its products in the construction of buildings and structures //Scientific progress. – 2021. – Т. 2. – №. 6. – С. 1880-1882.
9. Otakulov B. A., Abdullayev I. A., Sulstonov K. S. O. RAW MATERIAL BASE OF CONSTRUCTION MATERIALS AND USE OF INDUSTRIAL WASTE //Scientific progress. – 2021. – Т. 2. – №. 6. – С. 1609-1612.
10. Tulaganov A. et al. Festigkeitsbeschreibung des schwerbetons auf alkalischlacken–bindemittel //The Scientific-Practice Journal of Architecture, Construction and Design. – 2021. – Т. 1. – №. 1. – С. 5.
11. Otakulov B. A., Abdullayev I. A., Toshpulatov J. O. O. IMPORTANCE OF HEAT-RESISTANT CONCRETE IN CONSTRUCTION //Scientific progress. – 2021. – Т. 2. – №. 6. – С. 1613-1616.
12. Otakulov B. A., Isoyev Y. A., Salimjonov J. H. O. G. L. ABOUT MONOLITHIC REINFORCED CONCRETE STRUCTURES IN CONSTRUCTION //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 722-724.
13. Otakulov B. A., Isoyev Y. A., Salimjonov J. H. O. G. L. THE SCIENCE OF BUILDING MATERIALS TAKES PLACE IN ARCHITECTURE //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 725-727.

14. Otakulov B. A., Isoyev Y. A., Salimjonov J. H. O. G. L. WAYS TO SAVE CERAMICS AND FIRE BUILDING MATERIALS //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 718-721.
15. Otakulov B. A., Isoyev Y. A., Sailimjonov J. X. O. G. L. IMPROVING THE EARTHQUAKE RESISTANCE AND HEAT RESISTANCE OF BUILDINGS BUILT OF MODERN ENERGY-SAVING MATERIALS //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 117-120.
16. Otakulov B. A., Karimova M. I. Q., Abdullayev I. A. Improving the durability of asphalt-concrete //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 121-124.
17. Adhamovich O. B., Saydi-axmadovich Y. B. EFFECT OF POLYMERY MONOMORES ON THE STRENGTH OF OLD AND CONCRETE CONCRETES.
18. Adhamovich O. B., Nabijonovich A. N. M., Madaminova R. G. Q. THE ROLE OF MONOLITHIC REINFORCED CONCRETE CONSTRUCTION IN MODERN CONSTRUCTION //Scientific progress. – 2021. – Т. 2. – №. 8. – С. 735-739.
19. Otakulov B. A. et al. WORKING JOINTS OF MONOLITHIC AND PREFABRICATED STRUCTURES AND METHODS OF OVERCOMING THEIR NEGATIVE CONSEQUENCES //Scientific progress. – 2021. – Т. 2. – №. 8. – С. 731-734
20. Мирзаев Б. К., Собирова Д. Т., Умирдинов И. О. Методы Повышения Физико-Механических Свойств Вермикулитного Бетона //CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES. – 2021. – Т. 2. – №. 12. – С. 293-297.