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THE IMPORTANCE OF POLYMER MATERIALS IN THE CONSTRUCTION INDUSTRY

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ABSTRACT

This article will talk about the importance of polymer materials in the construction industry. The author relied on chemical data and written sources, introduced clarifications to the problem on the basis of existing scientific and historical literature, and provided detailed information on the importance of polymer materials in the construction industry.

Keyword: Turkish Empire, Government, Young Turks, Parliament, domestic policy, World War II, Western countries.

INTRODUCTION

The use of polymers in construction is also quite extensive. They began to be used relatively recently, about 50-60 years ago. Currently, a large part of the building materials are produced with the help of polymers.

MAIN DIRECTIONS

- Production of various types of construction and constructions;
- Glue and foam;
- Engineering communications production;
- Heat and waterproof materials;
- Self-leveling upholstery;
- Various finishing materials.

MAIN PART

In the field of coating and construction facilities it is polymer-concrete, composite fittings and beams, frames for double-glazed windows, polycarbonate, fiberglass and other materials of the same type. All polymer-based products have high strength properties, long service life and resistance to adverse natural phenomena.

The adhesives are moisture resistant and have excellent adhesion. They are used for gluing various materials and have a high viscosity. Foam is an ideal solution for sealing joints. They have high heat-saving properties and a large number of varieties with different qualities.

The use of polymer materials in the production of Engineering Communications is one of the most widely covered areas. They are used in water supply, power supply, heat storage, sewage, ventilation and heating systems.

Thermal insulation materials have excellent heat-saving properties, low weight and affordable price. Gidroisolation is characterized by a high degree of gidroisolation and can be produced in a variety of forms (roll products, powder or liquid mixtures).

Polymer upholstery-a special material that allows you to create a perfectly flat surface on a rough basis, without requiring much time. This technology is used in both domestic and industrial construction.

Modern industry produces a wide range of polymer-based finishing materials. They can have a different structure and form of release, but in terms of characteristics they always exceed the natural coating and have a much lower price.

In recent years, ready-made elements of structures, in which polymer materials predominate, are increasingly used. Low weight will benefit during transportation and installation. High light transmittance, the ability to paint a material of any color, low operating costs - these are the defining characteristics of new materials.

RESULTS AND DISCUSSIONS

The properties of salt thermal insulation also excite the minds of architects and builders, especially foam plastics. Transparent domes provide shade-free lighting. Made of the usual fiberglass plastic, non-deformable transparent elements replace conventional reinforced glass structures. In such flues, the thickness of which does not exceed 2 mm, it is possible to glue the spacers to each other up to 12 m in width, for example, in the construction of greenhouses, because they do not undergo corrosion. humid atmosphere and additionally light conductive. Many other examples of the use of polymers for internal coating can be cited. In order to put the stadiums on top of each other, panels are already being used, in which elements with a large area are installed.

Known plastic structures with a diameter of up to 43 m and a height of up to 36 m serve to protect radar devices from atmospheric influences. (High-frequency radiation passes through the glass fiber glass, almost does not lose its strength.) Impressive dimensions of the structure emphasize the capabilities of polymeric materials. It is also necessary to consider the rollers installed at the height of the head rotation, which protects the antenna of the TV tower from freezing (63).

In recent years, multi-storey light construction elements have been introduced into the floor (64). Sandwich structures consist of layers of aluminum, asbestos-cement or hard-fiber fabric-based coatings, which are combined with hard polyurethane foam or expanded polystyrene. Depending on the system of coating layers, the thickness of the elements is from 50 to 80 mm, the surface mass is from 6 to 25 kg / m2. The operating temperature range rises to 100 ° C.

More than 30% of the produced plastics are used in the construction of machinery and equipment as building materials. In Mechanical Engineering, of course, attention is paid to the economic efficiency of the production of constructive elements. Various types of seals, axle and gear gears, disc wedges, axle and radial wheels, clutch elements, ordinary bearings, gear rolls and other profile parts have been proven to be very effective in performance. High rigidity, ability to hold fixed dimensions accurately, good sliding and wear resistance are advantages that the included polymeric materials are versatile.

CONCLUSION

In addition to the large number of plastics (press masses based on solid polyamides, phenolic resins), which have been used so far in mechanical engineering, it is possible to find new areas of application today, first of all glass fiber plastics based on thermoplastic fasteners. If the mass content of glass fiber reaches 30%, the tensile strength is 2-3 times higher than that of non-reinforced polymer, and the elasticity module is even 3-4 times higher. On the contrary, the

thermal linear kengay is from 1/4 to x/s of the initial value, the length at break is only equal to 1/20. In addition, the tendency to tear decreases, which also indicates an increase in the performance indicators of the polymer.

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