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METROLOGICAL TESTING IN THE BUILDING MATERIALS INDUSTRY AND TASKS OF ACRETIDATED TESTING LABORATORIES

Annotation: construction laboratories test materials, structures, objects and details, prepare documents for representatives of technical control offices, establish laboratory control over construction processes.

Key cocks: material, construction, testing, strength, time

Introduction

Testing is the determination of the values and quality indicators of product parameters in an experiment, in the process of operation or in conditions that are approximated to working conditions. As test objects can be materials, nodes, structures, buildings and structures, whole-headed technical systems [1].

Materials and methods

This includes empirical methods such as modeling, fact, experiment, description and observation, as well as theoretical methods such as logical and historical methods, abstraction, deduction, induction, synthesis and analysis. The research materials are: scientific facts, the results of previous observations, surveys, experiments and tests; means of idealization and rationalization of the scientific approach.

In addition to nature tests, tests are also carried out on reduced or enlarged mockups made using a theory of similarity or in the size of the natura specially prepared from one material or another.

In the process of testing, the item is subjected to one or more effects. Thanks to this, the properties of interest in the study, details, parameters or quality indicators of the item are determined. When testing various materials and structures, it is common to study properties such as strength, stiffness, resistance to cold and heat, stagnation under the influence of aggressive environments, enveloping predisposition, fatigue, irritability, as well as cracking, water, air, heat and soundproofing]2].

Results and discussion:

In terms of types of testing, each country has its own standards, which define the methods and conditions of testing, modes, shapes and sizes of samples.

Tests are divided into control and research tests on their objects.

Control tests are said to be tests performed only in natural samples, for control purposes in the production, use and storage process of product quality [3,4,5,6,7].

Research tests are said to be tests that take place with the aim of studying the parameters, properties and quality indicators of a product. These tests can be performed in natura or mockups [1].

In research tests, operational (use) tests of the finished product occupy a special place.

Conclusion:

Construction laboratories test materials, structures, objects and details, prepare documents for representatives of technical control offices, establish laboratory control over construction processes.

The following obligations are charged to the construction laboratories:

- control compliance with these recipes in the preparation of building mixtures, concretions, water protection compositions, anti-corrosion coatings, selection of compositions for finishing and roof coatings, composition of recipes and composition;

- testing of structures prepared at the enterprises of the Trust (Association) in accordance with norms, technical conditions and other regulatory and technical documents;

- taking samples of materials, concretions, mixtures, water protection compositions, paints used on construction sites and testing them;

- testing the grunt under the foundation;

- participation in the work of the board to determine the reasons for the poor quality of construction and installation work and the falakat that occurred in the construction;

- preparation of the necessary documents on the results of laboratory tests carried out to provide advertising when low-quality building material, items and structures arrive at the construction;

- control the heating mode of concrete and reinforced concrete structures laid in the winter season;

- Organization of systematic-based verification of measuring and testing instruments;

- to verify compliance with the requirements of the state standard in the procedure for using, servicing and maintaining measuring instruments;

- preparation of conclusions on inventions and proposals for rationalization, sending to the appropriate courts;

- study of the quality of industrial waste, the properties of materials intended for use in construction [1].

State sanitary control and state fire control check the fulfillment of the relevant requirements during the construction period, compliance of projects of new structures with sanitary and oil safety requirements [2].

References:

1. Tojiyev R.J., Yusupov A.R., Rajabova N.R. Qurilishda metrologiya, standartlash va sertifikatlashtirish [Matn]: darslik / R.J. Tojiyev, A.R. Yusupov, N.R. Rajabova. – Toshkent: «Yosh avlod matbaa», 2022. – 464 b.
2. Tojiyev R.J., Yusupov A.R.. Metrologiya, standartlashtirish va sifat nazorati. O`quv qo`llanma. Farg`ona.: FarPI,«Texnika» noshirlik bo`limi. 2003-328 bet
3. O’z DST ISO 9000-2002 «Asosiy qoidalar va lug`at».
4. O’z DST ISO 9001-2002 «Sifat menejmenti tizimlari. Talablar».
5. O’z DST ISO 9004 «Sifat menejmenti tizimlari faoliyatini yaxshilash bo`yicha tavsiyalar».

6. O’z D1S0 90012. Ulchash vositalarining sifatini ta’minlaydigan talablar.
7. O’z DST ISO 14011 - Sifat menejmenti tizimlari va atrof-muhitni himoya qilish tizimini audit o`tkazish bo`yicha qo`llanma.