

STATIC AND DYNAMIC TESTING OF ROAD BRIDGE SUPRASTRUCTURES

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Rezumat: Această lucrare prezintă testul static și dinamic cu acțiunile eșantion ale suprastructurii de poduri din ultimii ani. Testele au fost efectuate în conformitate cu proiectul de testare și STAS 12.504-86 "Testarea suprastructurilor cu acțiuni de eșantionare".

Abstract: This paper presents the static and dynamic test with sample actions of the bridges overstructure in recent years. The tests have been performed in accordance with the testing design and STAS 12.504-86 "Testing of superstructures with sample actions".

Keywords: Road bridges; Static test, Dynamic test, Vehicle convoy, Superstructure of bridges.

1. INTRODUCTION

Permanent growth of road traffic leads to the development of new ways of communication, namely highways, national roads and the rehabilitation of existing ones. Achieving an efficient transport infrastructure favors economic development and contributes to European integration.

In this context, the bridges and viaducts that ensure the crossing of natural obstacles are of great importance. The main objective to be met by new bridges and those in operation is to ensure traffic safety.

From the design phase of new bridges or bridges that are rehabilitated, the calculation assumptions must be compared with the behavior of the bridge structure under the action of loading loads. Currently, the standard setting the principles and conditions for testing of bridge superstructures is STAS 12504-1986, „Railway Bridge, Road and Passage Bridges. testing the superstructure with sample actions.” The standard sets out the requirements for new bridges and those in operation to test them.

This paper presents the main aspects taken into account when statically and dynamically testing the road bridges with all the steps to be followed and the equipment necessary to carry out these tests.

2. STATIC ATTEMPT OF BRIDGES

The static attempt of the bridges consists in requesting them with sample actions. Static test actions are carried out using vehicle convoys loaded with the tonnage provided by the

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