METHOD OF CALCULATING THE STRESS-STRAIN STATE OF FRAME STRUCTURES OF THE TRACTOR TRAILERS AT VARIOUS EXTERNAL INFLUENCES

ANVAR A. TOGAEV ¹, ABDULAZIZ A. SHERMUHKAMEDOV ²

ABSTRACT

In the article on an example of the tractor-trailer, a load-carrying capacity of 4 tons considers the technique for calculating the stress-strain state of the trailer frame. The comparative analysis of the results of theoretical and experimental researches is given. The calculations take into account the specific road conditions of the cotton-producing countries, which occupy four categories of road sections. The proposed method of calculation of the stress-strain state of the frame gives a good agreement with the experimental data (maximum values of stress in the range 11%) and can be used in justifying the strength parameters of tractor-trailers.

Keywords: Tractor-trailer, frame, numerical calculation, road conditions, strength, stress-strain state.

AUTHOR AFFILIATION

¹PhD, Docent, Head of department Road-building machines and equipment, Tashkent Institute of design, construction and maintenance of automobile roads, Tashkent, Uzbekistan

²Doctor of Technical Sciences, Professor of department Road-building machines and equipment, Tashkent Institute of design, construction and maintenance of automobile roads, Tashkent, Uzbekistan

CORRESPONDENCE

Anvar A. Togaev
PhD, Docent, Head of department Road-building machines and equipment, Tashkent Institute of design, construction and maintenance of automobile roads, Tashkent, Uzbekistan
Email: anvar237@gmail.com

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