

GEODESIC MONITORING OF LARGE-SPAN CONSTRUCTIONS WITH SPATIAL METAL STRUCTURE

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The article draws the estimation of geodetic measurement results and conclusions, obtained at observation of deformations during the construction and exploitation of large span structure with bridging of space shell type, located on the territory with hazardous natural and seismic processes and hot climate. On the basis of measurement results of the vertical and horizontal deformation constituents the analysis of actual behavior of the constructions in these conditions was performed. Estimating the deformations on different stages and environmental parameters one can set critical parameters and tolerance for the behavior of a real spatial metal structure. The article draws the data of three observation cycles carried out during the construction process and three ones performed after the start of operation. The observations allowed making a conclusion that the structure undergoes little appropriate deformations, which correspond to the designed ones.

Key words: spatial construction, monitoring, deformation, geodetic measurements, large span structure, calculated model, load, building load, environmental parameters.

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