

ИЗСЛЕДВАНЕ НА ВЛИЯНИЕТО НА КОРОЗИЯТА ВРЪХУ ДЕФОРМАЦИОННОТО И НАПРЕГНАТО СЪСТОЯНИЕ НА ФЕРМА

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SURVEY OF THE INFLUENCE OF CORROSION ON DEFORMATION AND STRAIN SHAPE IN TRUSS STRUCTURES

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Abstract:

In building structures, one of the most modern and most effective computational methods is the finite element method (FEM). With its help, it is possible to calculate complicated structures and elements subjected to impacts.

In the stiffness matrix, the basic characteristics of the elements are laid, but under the influence of corrosion the characteristics change, which leads to the necessity of a theoretical study of the change of the matrix. It is known that corrosion indicates its effect on mechanical properties, geometric characteristics and structural changes in the material, which influences the calculation of the deformation and strain shape.

A study of the strain and deformation shape of truss structures with corrosion impact was carried out, and the realization was carried out by numerical experiment on FEM.

Keywords:

FEM, Corrosion, Stiffness Matrix, Strain Shape, Truss Structures.

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