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Investigation of the Corroded Steel Beam

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Abstract: Corrosion in steel structures is one of the most important issues that should be considered in designing and constructing. Corrosion reduces the cross section and load capacity of element and leads to costly damage of structures. In this paper, the corrosion has been modeled for moment stresses. Moreover, the steel beam has been modeled using ABAQUS advanced finite element software. The conclusions of this study demonstrated that the displacement of the analyzed composite steel girder bridge might increase.

Keywords: Abaqus, Corrosion, deformation, Steel Beam

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