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Impact-Load-Based Damage Identification in Joints of Skeletal Structures

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The nodal connections in the standard analysis of frame structures are idealized assuming either pinned or fully rigid joints. State of such structural connections is highly important for safe operation of skeletal structures. In this work, the authors propose modeling, detection and identification of semi-rigid joints, i.e. nodal connections covering the range between pinned and fully rigid joints. The presented approach is based on the Virtual Distortion Method (VDM) and dedicated to statically or dynamically loaded two-dimensional frame structures.

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Ключевые слова:

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