

عنوان مقاله:

Analysis of Plane Frames Through Minimization of Total Potential Energy

محل انتشار:

دومین کنگره ملی مهندسی عمران (سال: 1384)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Analysis of frames through minimization of total potential energy is presented. Explicit expressions for computation of potential energy of frames are derived. An optimization technique for the minimization of the total potential energy is introduced. Through analysis of typical structures the presented algorithm is verified. It is found that the method can be used in place of slope deflection method of structural analysis, albeit now for frames, trusses, and their combinations, moreover analysis of structures by an optimization procedure is an excellent job

کلمات کلیدی:

Structural analysis, optimization, minimization, total potential energy, frames

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