عنوان مقاله:

Geometric Non-Linear Finite Strip Analysis of Thin Flat Plates Under End Shortening

محل انتشار:

چهاردهمین کنفرانس سالانه مهندسی مکانیک (سال: 1385)

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خلاصه مقاله:

Two finite strip methods, namely semi-analytical (S-a) and Spline, are developed for predicting the geometrically non-linear response of rectangular thin plates with simply supported ends when subjected to uniform end shortening in their plane. The formulation of the aforementioned finite strip is based on the concept of the Full-energy approach. In these methods, all the displacements are postulated by the appropriate shape functions. The developed finite strip methods are then applied to analyze the post-local-buckling behavior of a representative thin flat plate for which the results are also obtained through the application of finite element method, employing general purpose MSC/NASTRAN package.

کلمات کلیدی:

Geometric Non-linear - Post-Local-Buckling - Finite Strip

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