عنوان مقاله:

INCREMENTAL NONLINEAR FINITE ELEMENT ANALYSIS OF PLANAR VISCOUS DEFORMATION PROCESS

محل انتشار:

چهاردهمین کنفرانس سالانه مهندسی مکانیک (سال: 1385)

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خلاصه مقاله:

An incremental nonlinear finite element method is presented to analyze the viscous large deformation process considering the kinematical constrain of material incompressibility. Using penalty method, an iterative procedure is developed to solve the presented finite element formulations by which both the calculated nodal deformation and velocity fields satisfy the incompressibility constrain at the end of each increment. The finite element formulations are employed for the planar viscous deformation analysis and the results are compared with the analytical and previous numerical solutions.

کلمات کلیدی:

Finite element- Forming- Viscous- Incompressible

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