

## عنوان مقاله:

Shear Band Initiation in Work Hardening Sands

## محل انتشار:

دومین کنفرانس ملی مکانیک خاک و مهندسی پی (سال: 1394)

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## خلاصه مقاله:

Most sands are believed to obey an elasto-plastic behavior. Such a behavior can be simply described by a work hardening constitutive model such as the famous Lade-Duncan (1975) soil model. Although this model and many others like this are formally developed for a uniform stress-strain response, the onset of shear band and local instabilities can be extracted from the inherent nature of the constitutive model. In this regard, the current research is devoted to investigate the possibility of the formation of the shear band in work hardening sands of both loose and dense states. The well known bifurcation analysis has been made to investigate the possibility of a shear band formation. In particular, the role of the intermediate principal stress is investigated to reveal its influence on the bifurcation point.

## کلمات کلیدی:

Sand, Plasticity, Shear Band, Bifurcation Analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/430870>

