

عنوان مقاله:

Rate Dependent Constitutive Model for Soft Soil Large Strain Creep with Variable Shear Modulus

محل انتشار:

هفتمین کنگره ملی مهندسی عمران (سال: 1392)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Ahad Ouria - Assistant Professor, University of Mohaghegh Ardabili, Iran

Stefan van Baars - Professor, Faculté des Sciences, de la Technologie et de la Communication, University of
.Luxamburg

خلاصه مقاله:

In this paper a rate dependent viscoplastic constitutive model is presented for soft soils. This model is based on the long-term creep tests under hydro static stress conditions. In this model the viscosity considered as shear stress relaxation; therefore viscosity affects only the shear stress or strain. Mohr-Coulomb failure criterion is employed to plastic calculations. Shear modulus is considered as stress, strain and time dependent. Time dependency of the shear modulus is related to the occurred viscoplastic deformations. Numerical calculations show the applicability of the presented model for viscoplastic calculations.

کلمات کلیدی:

Constitutive model, Creep, Soft soil, Shear Modulus

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/216646>

