

1. Record Nr.	UNINA9910828941903321
Autore	Schranz Fabian
Titolo	Applications and developments of Barodesy / / Fabian Schranz
Pubbl/distr/stampa	Berlin : , : Logos Verlag Berlin GmbH, , [2019] ©2019
ISBN	3-8325-8905-8
Descrizione fisica	1 online resource (220 pages)
Collana	Advances in geotechnical engineering and tunnelling ; ; 24
Disciplina	624.15136
Soggetti	Soil mechanics - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	PublicationDate: 20180401
Sommario/riassunto	Long description: Barodesy is a constitutive model for granular materials such as sand and clay. It is based on the asymptotic behaviour of granular media at a constant deformation rate. In this work the existing sand version of Barodesy is improved. For this purpose, the underlying scalar equations are simplified using different concepts from soil mechanics. The improved version is also compared with laboratory tests and different elastoplastic and hypoplastic constitutive relations. Also the stability of slopes and advanced stress paths such as the rotation of the principle stresses are investigated with these models.