

عنوان مقاله:

Estimate of Seismic Displacement of the Hump-Back Block Type Gravity Quay Wall

محل انتشار:

هفتمین سمپوزیوم بین المللی پیشرفتهای علوم و تکنولوژی (سال: 1391)

تعداد صفحات اصل مقاله: 9

نویسندگان:

,Feyzallah Nikzad - *Graduat Student, Faculty of Civil Eng, Islamic Azad University, Central Tehran Branch, Iran*

Asskar Janalizadeh - *Associate Professor, Faculty of Civil Eng, Noshirvani, Bobol, Iran*

Hamidreza Tavakoli - *Assistant Professor, Faculty of Civil Eng, Noshirvani, Bobol, Iran*

خلاصه مقاله:

Quay wall is one of the key elements in harbor facilities and equipment, so collapse or any abrupt movement caused by an earthquake may result in irreparable economic and social losses in national, and even international, level. This type of quay wall has been popular in construction of moorings and ships in transportation industry as well as importation and exportation. In the recent years, there has been a concern about the stability of gravity quay walls in earthquakes of level 2 (MCE), which has changed the concept of design with concentration on performance evaluation. Based on this design, quay wall is allowed to displacement only to a limited extent in this level, so that the wall is changeable and maintains its performance. The present essay first studies the seismic displacement of hump-back block type quay wall in earthquake of level 2. The study has been conducted by using finite element method in numerical manner and behavior of hump-back quay wall has been analyzed in parametric way. The results denote that in cases where the seabed is soft and loose, gravity quay wall show very much settlement and rotation toward the sea and considerable displacement in foundation soil.

کلمات کلیدی:

Quay wall, Hump-back, Seismic displacement, Dynamic analysis

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/205181>

