

عنوان مقاله:

Equivalent Half Pulse (EHP) Method for Vibration Analysis under Regular Wave

محل انتشار:

هفدهمین همایش صنایع دریایی (سال: 1394)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Mohammad Reza Tabeshpour - *Center of Excellence in Hydrodynamics and Dynamics of Marine Vehicles,*
;Mechanical Engineering Department, Sharif University of Technology Tehran, Iran

;Hossein Ebrahimi - *Phd Candidate, Islamic Azad University, Arak*

;Mani Fatemi - *Department of Marine Industries, Science and Research Branch, Islamic Azad University Tehran, Iran*

خلاصه مقاله:

Fully dynamic analysis of offshore structures under random wave loads in time domain is sometimes necessary for calculating structural responses in design issues. Such analyses are very time consuming and therefore simplified methods for estimation of acceptable response of these structures can be very useful in initial design. In this paper an innovative method to obtain response spectrum of fixed offshore structures caused by extreme waves is represented based on concept of impulse response spectrum. For this purpose the structural system is considered as a simple one degree of freedom structure and the different sea states are equalized to different half sinusoidal pulses. Response spectrum of structure is defined as a plot of structural response to these pulses for different periods. By using this method the cost of computations is decreased significantly while the accuracy of results was preserved

کلمات کلیدی:

Response Spectrum, assessment, Vibration Analysis

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/474565>

