عنوان فارسی مقاله:
تجزیه و تحلیل عدید و تجربی بر عملکرد حرکت سندگلس، نوع جدید جسم شناور در مقابل امواج

عنوان انگلیسی مقاله:
Numerical and experimental analysis on motion performance of new sandglass-type floating body in waves

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه اصلی مقاله ترجمه شده کامل با فرمت ورд (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک کنید.
6. Conclusion

In order to solve the performance limitations of traditional ship-type and cylindrical FPSO, this paper presents a new concept FPSO with innovative sandglass-type floating body. Then the hydrodynamic performances of new floating model are studied by the qualitative and quantificational analysis. Furthermore, based on the design scheme and functions of cylindrical FPSO “Sevan Piranema”, a new sandglass-type floating body can be achieved and discussed by numerical and experimental methods. Finally, many useful conclusions can be made as follows.

1. The engineering estimation expressions of heave wave excitation force and frequency corresponding to the minimum heave motion RAO are derived by potential flow theory. Furthermore, the relative error between estimation results and numerical solutions is less than 10%, which shows that the engineering estimation expression can meet the precision requirement of practical engineering and it will be further chosen as a design guideline to control the heave motion performance of sandglass-type floating body.