수중 원통셸의 진동특성 연구

A Study on the Modal Characteristics of Submerged Cylindrical Shell

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Key Words: Cylindrical Shell, Modal Characteristics, Fluid-Structure Interaction, Mode Shape

ABSTRACT

The free vibration characteristics of the cylindrical shell submerged in water is investigated using by FEM and experiment. In the FE analysis, the fluid-structure interaction effect is concerned. The restraint condition is clamped-free. In the results, the natural frequency and mode shape characteristics are evaluated with various water height. This results are compared with those of experiment to verify the validation of the FE analysis. The change of damping ratio is also presented by experiment.