

Effects of Wind Load on the Tank Structures with Various Shapes and Aspect Ratios

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Abstract : There are several wind load provisions to evaluate the wind response on tank structures such as API, Euro-code, etc. the assessment of wind action applying these provisions is made by performing the finite element analysis using both linear bifurcation analysis and geometrically nonlinear analysis. By comparing the pressure patterns obtained from the analysis with the results of wind tunnel test, most appropriate wind load criteria will be recommended.

Keywords : wind load, finite element analysis, linear bifurcation analysis, geometrically nonlinear analysis

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