ABSTRACT:

This paper presents a study in the effect of spalling to dynamic parameters such as natural frequencies and mode shapes. Numerical example of a slab is used as an example in this study. The slab will be modelled using ANSYS 11.0 and various types of spalling are imposed. The changes of vibration parameters are monitored and compared. To compare the sensitivity of modal parameters to spalling is determined using the flexibility method. Based on the results it is found that by incorporating mode shapes using flexibility method, damage location and severity can be obtained.