IMPORTANCE OF UPDATING PARAMETERS IN STRUCTURAL DYNAMICS

C. CHANDRUDU, Y. V. MOHAN REDDY AND K. HEMA CHANDRA REDDY

Abstract

In this present paper structural dynamic modification implies the incorporation, into an existing model, of new information gained either from experimental testing or some other source, which questions or improves the accuracy of the model. The sensitivity approach is based on the prior selection of updating parameters (design variables) in the initial Finite Element model. This paper deals with analysis of the dynamic behavior of twelve node cantilever beam. Distribution of potential and kinetic energy in every finite element is used for analysis. In this study it is shown that structural dynamic modification is important in structural reanalysis.

Keywords: structural dynamics modification, eigenvalues, potential and kinetic energy.

© Ascent Publication House: http://www.ascent-journals.com