International J. of Engg. Research & Indu. Appls. (IJERIA). ISSN 0974-1518, Vol.3, No. IV (November 2010), pp. 307-320

INVESTIGATIONS OF THE EFFECT OF PARAMETERS OF CONSTRAINING LAYER IN CONTROLLING THE VIBRATION OF BEAMS ATTACHED WITH PCLD

K. S. K. SASIKUMAR, K. P. ARULSHRI AND S. SELVAKUMAR

Abstract

This paper deals with the analysis of the effect of the constraining layer parameters in controlling the vibration of beam like structures attached with passive constrained layer treatment with stand-off layer (PSOL). The effectiveness of geometrical and physical parameters in minimizing response of the system is evaluated by replacing different material as constraining layers. Effects of constraining layer parameters are analytically and experimentally examined.

Keywords: passive damping, constrained layer, distributed transfer function method

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