

Recent applications of viscoelastic damping for noise control in automobiles and commercial airplanes

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Received 15 October 2001; accepted 20 October 2002

Abstract

In this paper, the application of passive damping technology using viscoelastic materials to control noise and vibration in vehicles and commercial airplanes is described. Special damped laminates and spray paints suitable for mass production and capable of forming with conventional techniques are now manufactured in a continuous manner using advanced processes. These are widely used in the automotive and aerospace industry in a variety of applications to reduce noise and vibration and to improve interior sound quality. Many of these recent applications are not readily available for dissemination in academe and archival literature. It is hoped that the material presented in this paper will be useful for instruction and further research in developing new and innovative applications in other industries.