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압축 혹은 인장되어 있는 다공 재료 프레임의 동특성 측정 Measurements of the Frame Acoustic Properties of Porous Materials under Compression or Tension

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Key Words : Porous and Granular Material(다공과립재료), Acoustic Property(음향물성치), Transfer Function Methods(전달 함수법)

Abstract : For acoustic materials, the dynamic characteristics of the frame of the porous materials significantly affect the acoustic properties. At low frequency this frame acoustic property has impact on the absorption coefficient and the transmission coefficient. Also, this characteristic has influence on the vibration dissipation capabilities when applied as damping treatments of structures such as airplane fuselages or vehicles. In this study, an experimental method was proposed from which the dynamic characteristics of the frame of porous materials under compressed or tensioned status can be measured.