수직입사 및 랜덤입사 흡음률의 상관관계 고찰

강현주, [†] 김봉기^{*}, 김상렬(KIMM), · 곽윤근**(전주대)

Consideration of correlation between normal and random incidence absorption coefficient

Kang Hyun-Ju, Kim Bong-Ki, Kim Sang-Ryul, and Kwak Yun-Gun

Key Words: sound absorption, angle of incidence

Abstract: In this paper, consideration of correlation between normal and random incidence is made by experiment and theory.

한국소음진동공학회 2002년도 추계학술대회 강연 및 논문 초록집

KSNVE 02F156

다중 다공판 시스템의 흡음계수 계산에 있어서 전기음향등가회로법의 오류

이동훈^{*} (서울산업대학교 기계공학과) · 김 욱*(기술표준원) · 권영필**(숭실대학교 기계공학과)

The Error Involved in the Equivalent Electroacoustic Circuit Approach for the Estimation of the Absorption Coefficient of Multiple Layer Perforated Plate Systems

Dong-Hoon Lee, Wook Kim and Young-Pil Kwon

Key Words: Acoustic Impedance (음향임피던스), Equivalent Electroacoustic Circuit Approach(전기음향등 가회로법), Perforated Plate System(다공판 시스템), Sound Absorption Coefficient(흡음계수)

Abstract: The equivalent electroacoustic circuit approach has been conventionally used for estimating the absorption coefficient of a single layer perforated plate system. When the single layer system is extended to the multiple layer ones, however, it is found that an analogy error has been involved in the equivalent electroacoustic parallel circuit approach proposed by previous researchers. The analogy error is demonstrated by the corrected equivalent electroacoustic circuit approach proposed in this study.