

다목적 실용위성2호 운송컨테이너의 동특성분석

김홍배* · 우성현* · 김영기* · 문상무* · 이상설*(한국항공우주연구원)

Analysis on the Dynamic Characteristics of KOMPSAT-2 Shipping Container

Hong-Bae Kim, Sung-Hyun Woo, Youngkey K. Kim, Sang-Mu Moon, Sang-Seol Lee

Key Words : Satellite, Shipping Container, Modal Analysis, Finite Element Analysis, Shock Isolation.

Abstract : A satellite shipping container must afford the satellite a relatively benign thermal, vibration, and particle environment that is oblivious to the extreme temperatures, sand, dust, vibrations, and shock that can accompany the transportation. Korea Aerospace Research Institute has developed a new shipping container system that will be used to transport KOMPSAT-2(KOrea Multi-Purpose SATellite) from Tae-jon to launch site. To verify the dynamic characteristics, a Finite Element Analysis model and a 1/3 scaled mockup of the container were developed before the fabrication of real one. After fabrication of real shipping container, experimental modal analysis was performed to identify the dynamic characteristics. This paper presents a series of development process of KOMPSAT-2 shipping container.

고속철도소음 특성

강대준* (국립환경연구원)·이덕길*·장성기**

Characteristics of High Speed Railway Noise

Daejoon Kang, D.G. Lee, S.K. JANG

Key Words : High Speed Railway Noise, Prediction

Abstract : Railway noise is one of the main causes of environmental impact. Whenever a new railway line is planned or a housing project near an existing railway is proposed, an estimate of the relevant levels is usually required. For this, it is necessary to quantify those parameters that affect the railway noise. Therefore we investigated the noise and vibration level which 107 high speed trains generated passing through the block of test railway track between Chunan and Chungwon.

This paper presents the status and characteristics of the high speed railway noise and an accurate prediction of the high speed railway noise.