

삼차원 크레인에 의한 질량이송시 잔류진동 제거를 위한 운동연구

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A Study of Motion for the Removal of Residual Vibration during Mass Movements using 3-D Crane

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Key Words : Overhead Crane (천정 크레인), Rotary Crane (회전 크레인),
Residual vibration (잔류진동), Mass Movement (질량운동)

ABSTRACT

The purpose of this work is to study the path of the movement in 3-D crane system without residual vibration. Overhead crane system consists of trolley and girder for plane motion and rope for up-down motion. And rotary crane system consists of crane for rotary motion, boom and rope for up-down motion. For each direction, $(1-\cos \theta)$ type movement has been considered. In each case, it is considered that the system starts at rest and comes to rest in the second position. The force required to move the system in question is determined as well as the maximum value of the force required.

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