

마그네슘 다이캐스팅 공법에 의한 스티어링휠 일체화 기술개발

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The development based on magnesium diecasting of Steering Wheel

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ABSTRACT

This study present the development of an automotive steering wheel using the finite element method. That reduces the number of test repeating times and gives an information about stiffness. During frontal crash of a vehicle, a major part of the driver's kinetic energy is absorbed by the steering wheel and column system. The deformation characteristics of the steering wheel has significant effects on the injury of the driver. The steering wheel is the most common source of serious injury for drivers involved in frontal crashes. Modal analysis, strength analysis and impact analysis in steering wheel were performed to certify requirements of safety regulations.

Key words : Finite element method(유한요소법), Steering wheel(조향핸들), Steering column(조향축), Impact analysis(충격 해석), Strength analysis(강도 해석)

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