轉向系統設計之評估

EVALUATION of STEERING SYSTEMS DESIGN

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摘 要

本研究主要是利用分析層級程序法(AHP)對於車輛之轉向系統進行主客觀條件之評估,並就評估的結果作進一步敏感度分析及與市場趨勢之驗證,比較設計工程師與一般消費者之偏好差異,並檢驗此 AHP 方法在工程評估中的適用情況。操舵力是為最敏感之評估要因,也是主導市場趨勢,而為一般消費者所能認知最主要的轉向性能。

關鍵字:評估、轉向系統、分析層級程序、敏感度分析。

Abstract

In the present study, the analytical hierarchy process (AHP) is applied to the evaluation of automotive steering systems. By comparing the evaluation results of design engineers with those of customers, the sensitivity of the evaluation criteria and market trend are analyzed. According to the quantitative evaluation, steering effort is the most sensitive criterion among all that studied. It is also the most important performance issue that general public can perceive from the steering systems.

Keywords: evaluation, steering systems, analytical hierarchy process (AHP), sensitivity analysis.