

Presented Paper at 2006 JSAE Annual Congress

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1. TITLE

Accurate Simulation for Brake Disc Design with Conventional FEA Methodology

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2. AUTHORS

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3. ABSTRACT

We constructed an original brake disc design system based on the expertise in automotive brake systems and CAE. It brings us precise simulation results by allotting all of the degrees of freedom in FEA only on a brake disc model. Furthermore, we have obtained the knowledge of the causal effects of disc configurations, dimensions, and material properties on the operational aspects of a brake disc, through the accumulation of vast numbers of FEAs and experiments for validation. Now, we can provide the highest design quality at the early stage of the development without a state-of-the-art complex eigenvalue or non-linear analysis.

4. CONTACT

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