Measurement and Evaluation Method of the Dynamic Deformation of the Brake Disk

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The disk brake is mounted on the high speed vehicle from a thermal problem point of view. By the influence of the frictional heat generated remarkably by a higher speed, the braking performance of the disk and the pad is reduced in some cases. Therefore, past researches have been conducted mainly with a focus on the friction surface observed by the high-speed thermo camera. Then, we have established a method of measuring the disk deformation during braking. In this paper, we report on the results of the investigation of the relationship between the deformation and the friction phenomenon executed by dynamo bench tests.