Effect of Vehicle Running Conditions on Stress Frequency Distribution of Welds on Truck Frames

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It is important to obtain the stress frequency distribution caused by service load in order to estimate the fatigue life of welds of vehicle truck frames. Although the stress frequency distribution by service load can be obtained by vehicle running test, it is difficult to estimate the distribution in the stage of design. Accordingly, the characteristics of stress frequency obtained by the past running test data were examined and analyzed together with analysis of the effect of running conditions, which include running distance, speed and payload. The study results will be used to estimate the stress frequency distribution in the stage of design or modification of operating conditions of the vehicle truck frame.