Load Estimation Method of Truck Frame by Measuring Acceleration

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In order to research the simple method of load estimation for strength evaluation of truck frame, we discussed the relationship between loads and acceleration of truck frame using results of vehicle running tests in three railroad lines. As a result of discussion, we found that the coherence value between the load and the vertical acceleration of the truck frame was comparatively high. In this case, the equivalent load of truck frame for strength evaluation has been estimated by measuring the acceleration with the transfer function and the correction coefficient.