

### **Characteristics of Under-Floor Flow of Shinkansen Vehicle**

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It is necessary to make clear the characteristics of the flow between the underside of vehicle and the track surface in order to establish measures to reduce the aerodynamic noise and the aerodynamic drag due to under-floor flow of Shinkansen vehicles. It is expected that the under-floor flow has velocity distribution not only in the vertical direction but also in the railway sleeper direction. In addition, it is expected that the vehicle shapes affect the under-floor flow. We installed hot wire anemometers on the slab track of Shinkansen lines to study the flow in detail, and measured the velocity distribution of the flow in the railway sleeper direction when several kinds of Shinkansen vehicles passed over them. As a result, we clarified the under-floor flow velocity distribution in the railway sleeper direction.