

## **Simple Estimation Method of Buckling Temperature of Continuous Welded Rail Considering Lateral Track Irregularities**

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The control index for buckling of continuous welded rails in Japan is set based on the lowest rail temperature increase that buckling can occur theoretically. However, there is a considerable difference between the index temperature and the buckling temperature at which the actual rail buckling occurs. Therefore, the current buckling control index may have an excessive safety margin for buckling. In order to improve the accuracy of control index, it is necessary to estimate buckling temperature affected by lateral track irregularities. In this study, we have proposed a method for easily estimating the buckling temperature of continuous welded rails considering lateral track irregularities measured by a track inspection car.