

## **Evaluation of the Seismic Load Carrying Capacity and the Hysteresis Model of Cast Iron Bearing**

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It was recognized that many steel structures were damaged at bearings by earthquakes in the past. On the other hand, cast iron bearings are used in a lot of existing steel railway bridges. To evaluate seismic performance of the bridges precisely, it is necessary to model the seismic load carrying capacity and the hysteresis model of cast iron bearing that is considered to be a weak point of the bridge during earthquake. In this study, static monotonic and alternative loading tests using side block of cast iron bearing and sole plate were carried out. Further evaluation method of seismic load carrying capacity and the hysteresis model of the cast iron bearing were investigated.