

## **Retrofit for Preventing Fatigue Crack Initiation at End Stiffener Using Splice Plate with Bearing-type Bolt**

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One of the typical fatigue cracks found in welded girders of railway steel bridges is observed at the bottom of end stiffener. Bearing settlement leads to stress concentration and fatigue cracking at the bottom of end stiffener. Consequently, the necessary retrofits impose a significant maintenance burden. This study proposes a method for retrofitting end stiffener using splice plate with bearing-type bolt for pressing. This paper reports the results of static load test and cyclic load test conducted for evaluating the applicability of the proposed method.