

## A Current Problem for Steel Bridges: Fatigue Assessment of Seams' Repair

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**Abstract :** The paper describes the results from a research project about repair of welds. The repair was carried out by grinding the flawed seams and re-welding them. The main task was to determine the FAT classes of original state and after repair of seams according to the assessment procedures, such as nominal, structural and effective notch stress approach. The first part shows the results of the tests, the second part encloses numerical analysis and evaluation of results to determine the fatigue strength classes according to three assessment procedures.

**Keywords :** cyclic loading, fatigue crack, post-weld treatment, seams' repair

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