

Fakultät Bauingenieurwesen Institut für Massivbau

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## Comparison of Live Load Distribution Methods for Concrete Bridges (according to LRFD and Eurocode) (Vergleich der Lastverteilungsfaktor für Verkehr Methoden einer Beton Brücke (nach LRFD und Eurocode))

Design of concrete bridges usually includes the calculation of load effects produced by trucks and regular traffic which are modeled as moving concentrated loads and uniformly distributed lane loads. As technology evolves, more design options to model live load effects are included in design packages provided by software companies, among them MIDAS Civil, and the LEAP Bridge software suite. Nevertheless, such methods need to be compared and validated against other traditional methods. The purpose of this research is to validate the longitudinal live load analysis capabilities of MIDAS and the LEAP Bridge software suite by comparing its result to results generated using other FEM methods, as well as those calculated using influence line charts. LRFD design vehicles, as well as Eurocode live load model 1 shall be analyzed.

This topic is available only as a Master's Thesis.

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