

鋼構橋樑修護工法評估架構之研究

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摘要

Heavy traffic is one of the key reasons why a bridge is often damaged. The application of steel bridges has been becoming very popular. A lot of researches have been done on the repair, rehabilitation and management of concrete bridges. However, this is not the case for steel bridges. This research, after considering factors such as construction environment, safety, time and cost, etc., intends to investigate how to select from the available rehabilitation methods the proper method that can be applied to the troubled component in a steel bridge superstructure. This is accomplished through literature review, expert interview and questionnaire analysis.

This study first investigates the failure types encountered in steel bridge superstructures and the rehabilitation methods associated with each type. Then the study determines the major and minor factors to be used in the evaluation framework in order to choose the proper rehabilitation method. Furthermore, the Analytic Hierarchical Process (AHP) is used to determine the weighted value for each factor.

關鍵字：Steel Bridges, Rehabilitation, AHP