

DEMOLITION OF FATIGUED BRIDGES WITH MOVABLE SCAFFOLDING SYSTEMS

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SUMMARY

The central European highway-infrastructure of the 1960s and 1970s is characterized by increasing overstraining. Often, repair tasks only allow further usage for a limited amount of time. Deconstruction and replacement, particularly in ecologically sensitive areas and ones with a high amount of intersections, call for a plannable demolition method, which ensures that the interruption of traffic on the affected route section is minimalized.

Keywords: *MSS, movable scaffolding systems, demolition, deconstruction, viaduct, replace.*

1. OVERVIEW ABOUT HIGHWAY BRIDGES IN WESTERN GERMANY

Viaducts of German major roads are about to be renewed. At German major roads, almost 40.000 bridges with 30.812 million square meters of bridge deck exist, 7,3 % of this area fall upon bridges with more than 100 meters of length [10]. Approximately 70% of multi-span bridges in Germany have been constructed as post-tensioned concrete decks. In the western part of Germany, more than 16 million square meters of post-tensioned bridge decks were built between 1960 and 1985 when the introduction of post-tensioning systems in the construction market promised durable concrete decks with long spans in a large scale.



Fig. 1. MSS at deconstruction of Lahntal Bridge near Limburg, Germany, during launching in 68m main span.

<https://doi.org/10.2749/wroclaw.2020.0414>

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