

Overview of Recent Portuguese Research on Fatigue Behaviour of Ancient Portuguese Riveted Steel Bridges

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ABSTRACT

This paper reports experimental work that has been carried out by authors to characterize the fatigue behaviour of Portuguese ancient riveted steel bridges. Four riveted steel bridges have been analysed, namely the Luiz I, Viana, Pinhão and Trezói bridges. A basic material characterization is presented. The fatigue crack propagation behaviour is also characterized and finally the fatigue strength of original single-riveted connections is characterized.