ASSESSMENT OF MASONRY ARCH RAILWAY BRIDGES WITH THE HELP OF IN-SITU DIAGNOSTIC METHODS

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SAŽETAK:

Presentation describes methods of inspection and testing for masonry arch railway bridges. An overview of a selection of available non-destructive, minor-destructive and monitoring methods is given and their efficacy for the assessment of masonry arch bridges is discussed. The principles of in-situ load tests are described and a methodology for the assessment of masonry arch railway bridges is shown through case studies. Results of a testing programme are demonstrated where the efficiency of various non-destructive testing methods has been studied. It is shown that non-destructive investigation and non-destructive insitu load-testing can provide valuable information on the condition of bridges and help verify basic input parameters for structural analysis and assessment.