RAIL EXPANSION JOINTS - THE UNDERESTIMATED TRACK WORK MATERIAL?

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ABSTRACT

Rail Expansion Joints REJ are some time underestimated during the planning and design phase of bridge projects. For operators and maintainers they are than later on the root cause of operating and maintenance troubles. As track work components do, they have to carry and guide wheels. In addition, REJ compensate the length variations of rails and have to allow compensation of longitudinal movements of rails caused by movements of engineering structures such as bridges and viaducts. However in reality this means in details the compensation of the length variations of rails, bridging of the gap of the structures, accommodation of vertical and horizontal rotations of ends of structures and adjustment of the different track resilience at both sides of the RMJ, In some case studies and outlooks it will be shown how REJ have been incorporated into engineering structures built in the past or in the planning stage.