

Numerical Simulation of the Remaining Life of Ramshir Bridge over the Karoon River

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Abstract : The static and corrosion behavior of the bridge using for pipelines in the south of country have been evaluated. The bridge was constructed more than 40 years ago on the Karoon River. Mentioned bridge is located in Khuzestan province and at a distance of 15 km east from the suburbs of Ahwaz. In order to determine the mechanical properties, the experimental tools such as measuring the thickness and static simulations based on the actual load were used. In addition, the metallurgical studies were used to achieve a rate of corrosion of pipes in the river and in the river bed. The aim of this project is to determine the remaining life of the bridge using mechanical and metallurgical studies.

Keywords : FEM, stress, corrosion, bridge

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