

## **Corrosion behavior of pre-rusted rebars after placement in concrete**

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**Abstract:** This paper presents the results of a preliminary study in which the effect of the initial rusting on the corrosion behavior of rebars embedded in concrete has been investigated. Concrete specimens were made with pre-rusted and rust free rebars of different compositions. Two concrete mixes, one with a sodium chloride content of 2 kg/m<sup>3</sup> of concrete and the other without any sodium chloride were used. The reinforced concrete specimens, immersed in potable water and then transferred to 5% NaCl solution, were subjected to corrosion monitoring for a period of 10 months. The test results indicate that the initial rusting does not have an adverse effect on the corrosion resistance of rebars embedded in concrete.