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ELECTROCHEMICAL BEHAVIOR OF STEEL FIBER REINFORCED CONCRETE IN 3.5%NACL SOLUTION

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ABSTRACT

In this paper, potentiodynamic polarization and cyclic anodic polarization measurements were used to investigate the corrosion behavior of four samples of steel fibers, obtained from tyres, with or without addibond 65. The electrochemical tests in aerated 3.5 % NaCl showed that for steel fiber sample with or without concrete, a high amount addibond 65 samples had the lowest corrosion rate as compared to the samples with low and without addibond 65. The results also indicated that the steel fibers corrosion rate decreases with increasing its diameter and the withdraw samples having the lowest corrosion rate.

KEYWORDS: Potentiodynamic, Polarization and Cyclic Anodic