

The Effect of Inhibitors Introduced into Concrete on Corrosion of Concrete Steel Reinforcement

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Abstract: The influence of inhibitors introduced into the concrete on the anodic behavior and corrosion resistance of steels is considered. Using electrochemical methods polarization diagrams were obtained, the analysis of which allowed calculating key indicators of the corrosion rate. A comparative analysis of corrosion rate indicators of reinforced steel in solutions containing various inhibitors was made. The conducted studies and obtained data made it possible to predict the possibility of introducing inhibitors in an aggressive environment, give an idea of the anodic behavior of steel reinforcement in different environments and serve as a basis for clarifying the features of corrosion and ways of its elimination in reinforced concrete.