

# Self-healing Observed for an Artificial Defect in Dry-in-place Chromate Coating

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## Abstract

Tests were made with Zn-12%Ni-coated steels finished with three type of chromates, dried in place up to 85, 200 and 300°C. The corrosion resistance of each was evaluated using a salt spray test. Self-healing effect was examined for the steels with an introduced artificial defect in terms of the time variation of corrosion current measured by the scanning vibrating electrode technique (SVET). Corrosion current at and around the artificial defect did not decrease over time in articles with lower corrosion resistance, while in articles with higher corrosion resistance, since it did decrease down to the value comparable to that on the defect-free surface, the existence of a self-healing effect was verified.

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