

## Evaluation of Cathodic Protection and Stray Current Corrosion on a Floating Dock

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**Abstract:** *In order to evaluate the generation and control of corrosion of the floating dock, tests were carried out to determine the degree of cathodic protection and the effect of stray currents sources. It was found that the cathodic protection is more than adequate and may possibly have caused deterioration to the piers through descaling. It is recommended that this current be reduced to ensure that such deterioration will no longer be possible. It was also found that the rate of deck corrosion is severe and that the probable cause is a combination of natural corrosion due to exposure and to the presence of stray currents due to ac arc welding. It is recommended that the remedial measures already in existence be continued to eliminate stray currents and that the entire pontoon deck be covered with zinc filled paint (CA THA COAT 302). The dock was inspected lately in October and December 1972, and the remedial measures suggested are working perfectly with amount of corrosion below accepted averages even for temperate climates.*

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