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Meeting Paper



Corrosion Mechanisms in Brine

by

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I. ABSTRACT

Corrosion in brine solutions is a major cause of equipment degradation in the brine mining industry. The main cause of corrosion is the presence of dissolved oxygen. Corrosion rates are highest at about 3% salt, falling to lower rates at higher brine concentrations due to reduced oxygen solubility. The most effective method of corrosion control is to deaerate the brine. Anodic inhibitors such as polyphosphate may also be used. Bacteria exist which can live in saturated brine solutions, but research to date has not identified halophilic bacteria known to be corrosive.

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