

## The Effect of Molybdate on Corrosion Behaviour of AISI 316Ti Stainless Steel in Chloride Environment

**Authors :** Viera Zatkaličková, Lenka Markovičová, Aneta Tor-Swiatek

**Abstract :** The effect of molybdate addition to chloride environment on resistance of AISI 316Ti stainless steel to pitting corrosion was studied. Potentiodynamic polarisation tests were performed in 1 M and 0.1 M chloride acidified solutions with various additions of sodium molybdate at room temperature. The presented results compare the effect of molybdate anions on quality of passive film (expressed by the pitting potential) in both chloride solutions. The pitting potential increases with the increase inhibitor concentration. The inhibitive effect of molybdate ions is stronger in chloride solution of lower aggressiveness (0.1M).

**Keywords :** AISI 316Ti steel, molybdate inhibitor, pitting corrosion, pitting potential, potentiodynamic polarisation

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