Correlation between Critical Pitting Temperature and Degree of Sensitization of UNS S32750 Duplex Stainless Steel Corrosion

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This study aims to explore the correlation of critical pitting temperature (CPT) and degree of sensitization (DOS) for UNS S32750 duplex stainless steel after being exposed to different heat conditions. Both the CPT and DOS are strongly dependent on the microstructure. It is also revealed that the pitting resistance heals after prolonging the ageing time, but the degree of sensitization continues to increase.

Keywords: Duplex Stainless Steel, Pitting Corrosion, Intergranular Corrosion, CPT, DOS

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