The effect of tensile loading mode on the stress-corrosion cracking of UNSS31803

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The goal of this study was to examine the changes caused in stress corrosion cracking (SCC) of a UNS S31803 duplex stainless steel due to the presence of precipitades, alpha prime and sigma phases. The steel plates were cold rolled and annealed at 500 °C, 850 °C and 1060 °C . Microstructural variations in the plates were produced by thermal annealing treatments at 500 °C and 850 °C.