

Impact of retained austenite on the corrosion behavior of Martensitic stainless steels.

Wednesday, 26 March 2025 10:10 (20 minutes)

This paper (short communication) reports the impact of retained austenite on the corrosion behavior of plastic molding grades such as Vanax Super Clean, Tyrax ESR, Stavax ESR and Mirrax ESR. For each grade, austenitization at two different temperatures were carried out and samples in as-quenched condition was compared with as-quenched condition with deep cooling. Corrosion behavior was characterized using cyclic potentiodynamic polarization method in 0.1M NaCl solution, and retained austenite content was characterized using XRD. The corrosion behavior response corresponding to retained austenite content was discussed.

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Session Classification: Materials, Properties & Microstructure

Track Classification: Processing: Heat treatment of tool materials