

Alloy Environment System Exhibiting SCC

Alloy	Environment
Carbon steel	Hot nitrate, hydroxide, and carbonate/bicarbonate solutions
High-strength steels	Aqueous electrolytes, particularly when containing H ₂ S
Austenitic stainless steels	Hot, concentrated chloride solutions; chloride-contaminated steam, HTHP demineralised water in presence of oxygen.
Nickel alloys	High-purity steam
Brass	Ammoniacal solutions
Aluminum alloys	Aqueous Cl ⁻ , Br ⁻ , and I ⁻ solutions
Titanium alloys	Aqueous Cl ⁻ , Br ⁻ , and I ⁻ solutions; organic liquids; N ₂ O ₄
Magnesium alloys	Aqueous Cl ⁻ solutions
Zirconium alloys	Aqueous Cl ⁻ solutions; organic liquids; I ₂ at 350 °C

