HASTELLOY® HYBRID-BC1® alloy

Effect of Oxidizing Species

HYBRID-BC1® alloy can tolerate the presence of oxidizing species in many acid solutions. This is a major advantage over the nickel-molybdenum (B-type) alloys. Such species include dissolved oxygen, ferric ions, and cupric ions. In the following graphs, the effects of ferric ions and cupric ions upon the corrosion properties of B-3® and HYBRID-BC1® alloys, in 2.5% hydrochloric acid and 10% sulfuric acid, are compared. At higher concentrations, these effects are diminished, but nevertheless represent a remarkable achievement.