

# HASTELLOY<sup>®</sup> C-4 alloy

## Comparative 0.1 mm/y Line Plots

To compare the performance of HASTELLOY C-4 alloy with that of other materials, it is useful to plot the 0.1 mm/y lines. In the following graphs, the lines for C-4 alloy are compared with those of two popular, austenitic stainless steels (316L and 254SMO), a lower-molybdenum nickel alloy (625), and C-276 alloy in hydrochloric and sulfuric acids. At hydrochloric acid concentrations above about 5%, C-4 alloy provides a quantum improvement over the stainless steels, and offers greater resistance to higher concentrations of both acids than alloy 625. The concentration limit of 20% hydrochloric acid is the azeotrope, beyond which high temperature corrosion tests are less reliable.

