HAYNES® 230® alloy

Hydrogen Embrittlement

Notched tensile tests performed in hydrogen and air reveal that 230® alloy is resistant to hydrogen embrittlement. Tests were performed in MIL-P-27201B grade hydrogen, with a crosshead speed of 0.005 in/min (0.13 mm/min). Specimens were notched with a K_T value of 8.0.

Test Temperature		Hydrogen Pressure		Ratio of Notched Tensile Strength, Hydrogen/Air
°F	°C	psig	MPa	-
70	21	3000	21	0.92
70	21	5000	34	1.07