

HAYNES[®] 242[®] alloy

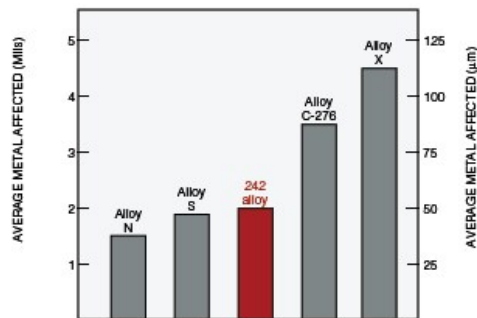
Resistance to High-temperature Fluoride Environments

Research has shown that materials which have high molybdenum content and low chromium content are generally superior to other materials in resisting high-temperature corrosion in fluorine-containing environments. HAYNES[®] 242[®] alloy is in that category, and displays excellent resistance to both fluoride gas and fluoride salt environments.

Comparative Resistance to 70% HF at 1670°F (910°C) for 136 Hours

Alloy	Thickness Loss	
	mils	mm
242 [®]	12.6	0.3
S	15.8	0.4
N	15.8	0.4
625	47.2	1.2
230 [®]	70.9	1.8
C-22 [®]	78.7	2.0
600	141.7	3.6

Comparative Resistance to KCl-KF-NaF Mixed Salts



Samples were exposed to a mixture of KCl-KF-NaF salts for a total of 40 hours in service. Temperature was cycled from 1290 to 1650°F (700-900°C) during the course of the exposure.