

HAYNES[®] 625 alloy

Resistance to Pitting and Crevice Corrosion

HAYNES[®] 625 alloy exhibits good resistance to chloride-induced pitting and crevice attack, forms of corrosion to which some of the austenitic stainless steels are particularly prone. To assess the resistance of alloys to pitting and crevice attack, it is customary to measure their Critical Pitting Temperatures and Critical Crevice Temperatures in acidified 6 wt.% ferric chloride, in accordance with the procedures defined in ASTM Standard G 48. These values represent the lowest temperatures at which pitting and crevice attack are encountered in this solution, within 72 hours.

Alloy	Critical Pitting Temperature		Critical Crevice Temperature	
	in Acidified 6% FeCl ₃		in Acidified 6% FeCl ₃	
	°F	°C	°F	°C
316L	59	15	32	0
254SMO	140	60	86	30
28	113	45	64	17.5
31	163	72.5	109	42.5
G-30[®]	154	67.5	100	37.5
G-35[®]	203	95	113	45
625	212	100	104	40