

# HAYNES<sup>®</sup> HR-160<sup>®</sup> alloy

## Chloridation Resistance

### High-temperature Chloride Vapor Corrosion

Ar-20%O<sub>2</sub>-2%H<sub>2</sub>O-0.05%NaCl (Vol.%) 1830°F (999°C) for 75 hours

Alloy	Total Depth Of Attack	
	mils	mm
214 <sup>®</sup>	11.5	0.29
<b>HR 160<sup>®</sup></b>	<b>12.0</b>	<b>0.31</b>
800H	>62.0 (complete penetration)	

### Exposure to Chloride Vapors at 1600°F (871°C)

Field tests were conducted by exposing specimens to air containing vapors of sodium chloride, potassium chloride and barium chloride at 1600°F (871°C) for 173 hours.

HR-160<sup>®</sup> alloy



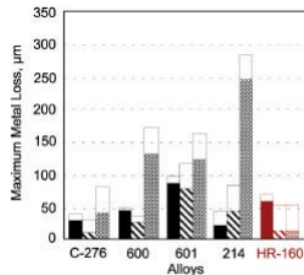
alloy 188



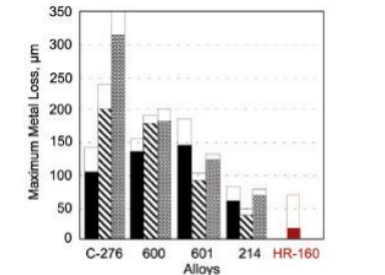
Type 310 SS



## Chlorination Resistance



Maximal loss of sound metal per side. Laboratory tests in chlorinating atmospheres at 1112°F (600°C) for 500 hours.\*



Maximal loss of sound metal per side. Laboratory tests in oxychlorinating atmospheres at 1112°F (600°C) for 500 hours.\*

\*Data from "Corrosion Studies and Recommendation of Alloys for an Incinerator of Glove-Boxes Wastes" by F. Devisme and N. H. Garnier, Presented at the 11th International Incineration Conference 1992, May 11-15, 1992, Albuquerque, New Mexico.