

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

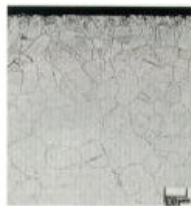
## Carburization Resistance

Laboratory pack carburization testing in graphite at 1800°F (982°C) for 500 hours

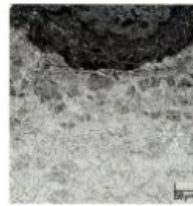
Alloy	Carbon Absorption (mg/cm <sup>2</sup> )	Total Depth Of Attack	
		mils	mm
HR-120 <sup>®</sup>	0.0	0	-
556 <sup>®</sup>	0.0	0	-
HR 160 <sup>®</sup>	<b>0.3</b>	<b>0</b>	-
800HT	0.3	0.9	0.02
601	1.0	0.46	18.0
RA330	1.9	1.79	70.6
310SS	7.7	2.14	84.2
253 MA	11.6	2.34	92.1

### Exposure to Carbon Bed at 1650°F (899°C)

Field tests conducted in a carbon bed  
during manufacturing of activated carbon  
at 1650°F (899°C) for 120 hours



HR-160<sup>®</sup> alloy



Type 316 SS

### Ar-5%H-1%CH (Vol.%) 1800°F (982°C) for 55 hours

Alloy	Carbon Absorption (mg/cm)
HR-160 <sup>®</sup>	<b>2.9</b>
601	3.2
800H	3.6
600	7.3
HR-120 <sup>®</sup>	7.9
556 <sup>®</sup>	7.9
RA330	9.2
253 MA	9.4
310 SS	10.0