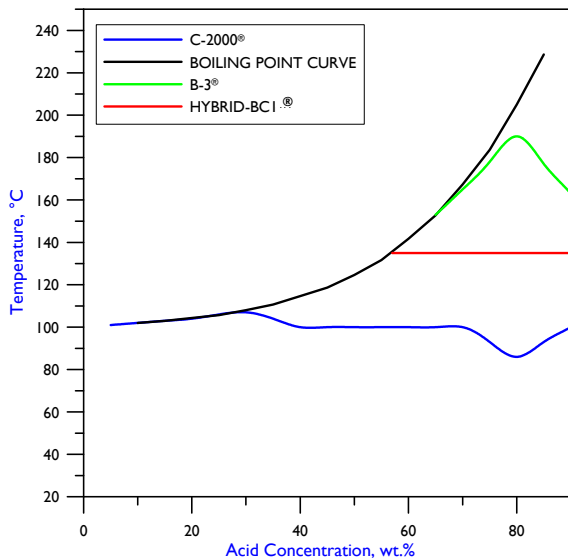


# HASTELLOY® HYBRID-BC1® alloy

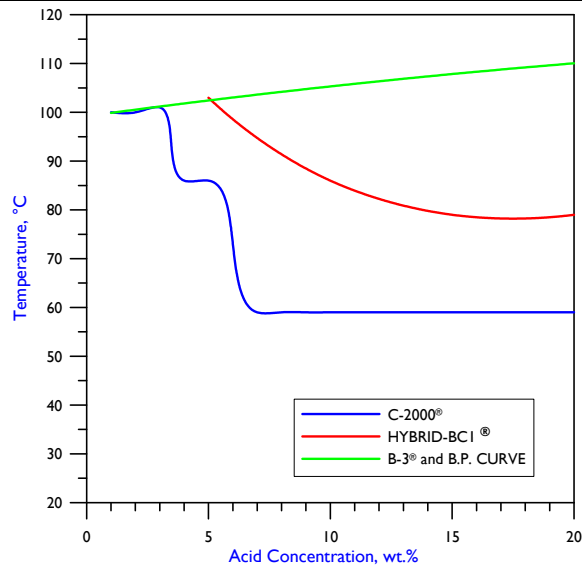
For those who need a nickel alloy with superior resistance to hydrochloric and sulfuric acids, without the drawbacks of the Ni-Mo and Zr materials, we are pleased to announce the development of HASTELLOY® HYBRID-BC1® alloy (Ni-22Mo-17Cr). Its resistance to these key chemicals is much greater than that of the popular Ni-Cr-Mo (C-type) alloys, yet it shares with them outstanding resistance to pitting and crevice attack in chloride salt solutions, and even withstands high levels of oxidizing impurities that the Ni-Mo alloys cannot tolerate. Numerous wrought product forms are available.

<b>Resistance to Crevice Corrosion in 6% Ferric Chloride + 1% Hydrochloric Acid</b>			
<b>80 deg. C Crevice Assembly Attached</b>	<b>HYBRID-BC1®</b>	<b>B-3®</b>	<b>C-2000®</b>
	0.04 mm/y No Crevice Corrosion	30.40 mm/y Gross Attack	<0.01 mm/y Crevice Corrosion

<b>Resistance to Hot 2.5% Hydrochloric Acid</b>			
<b>121 deg. C</b>	<b>HYBRID-BC1®</b>	<b>B-3®</b>	<b>C-2000®</b>
<b>Oxygen Purged</b>	0.46 mm/y	4.58 mm/y	0.02 mm/y
<b>Nitrogen Purged</b>	0.55 mm/y	<0.01 mm/y	3.99 mm/y



Comparison of 0.5 mm/y Lines for B-3®, C-2000®, and HYBRID-BC1® Alloys in Sulfuric Acid



Comparison of 0.5 mm/y Lines for B-3®, C-2000® and HYBRID-BC1® Alloys in Hydrochloric Acid

<b>Available Forms and Sizes</b>	
<b>Sheet</b>	0.6, 1.6, & 3.2 mm (0.024, 0.063, & 0.125 in)
<b>Plate</b>	6.4, 12.7, & 38.1 mm (0.25, 0.50, & 1.50 in)
<b>Bar</b>	25.4 & 63.5 mm (1.0 & 2.5 in)
<b>Wire</b>	3.2 mm (0.125 in) Straight Lengths & 1.1 mm (0.045 in) Layer Wound
<b>Pipe</b>	Available on Request
<b>Tube</b>	Available on Request

Material for small trial applications and welded test coupons are available free of charge from Dr. Paul Manning at 765-456-6099 or [pmanning@haynesintl.com](mailto:pmanning@haynesintl.com).