

HASTELLOY[®] HYBRID-BC1[®] alloy

Principal Features

High Resistance to Hydrochloric Acid, Sulfuric Acid, Pitting, and Crevice Corrosion

HASTELLOY[®] HYBRID-BC1[®] (UNS N10362) alloy possesses much higher resistance to hydrochloric and sulfuric acids than the nickel-chromium-molybdenum (C-type) alloys, and can tolerate the presence of oxidizing species. The alloy also exhibits extremely high resistance to pitting and crevice corrosion.

Applications

HASTELLOY[®] HYBRID-BC1[®] alloy is suitable for the following applications in the chemical processing, pharmaceutical, agricultural, food, petrochemical, and power industries:

- Reaction vessels
- Heat exchangers
- Valves
- Pumps
- Piping
- Storage tanks

The alloy is suitable for use at temperatures up to approximately 427°C (800°F). HYBRID-BC1[®] alloy excels in reducing acids and acid mixtures (with or without halides) open to oxygen and other oxidizing residuals/contaminants.

Field Test Program

Plain and welded samples of HYBRID-BC1[®] alloy are available for field trials. If required, these samples can be weighed and measured prior to shipping, so that corrosion rates can be determined after field exposure (if the samples are returned to Haynes International). Be aware that plain samples are better for determination of corrosion rates, whereas welded samples are useful in comparing base metal, weld metal, and heat-affected zone properties. For samples, please [click here](#).