

HP Alloys HPA COBALT Alloy 6BH, Wear Resistant, (Co-Cr-W) (UNS R30016)

Category : Metal , Nonferrous Metal , Cobalt Alloy , Superalloy

Material Notes:

Cobalt 6BH is the same composition of Cobalt 6B, except the material is hot rolled and then age hardened. The direct age-hardening after hot rolling provides the maximum hardness and wear resistance. The advantages this creates are increased wear life, retained edge characteristics, and increased hardness. These properties are in addition to the galling and seizing resistance of the regular Cobalt 6B. Cobalt 6BH is known in the industry as a metal that retains its cutting edge. The economic advantages are in its long wear time, less down time, and fewer replacements. Applications: Steam turbine erosion shields, Chain saw guide bars, High temperature bearings, Furnace fan blades, Valve stems, Food processing equipment, Needle valves, Centrifuge liners, Hot extrusion dies, Forming dies, Nozzles, Extruder screws, & many other Misc. wear surfaces. End uses for alloy 6BH also include tile making machines, rock crushing rollers and cement and steel mill equipment. Alloy 6BH is well suited for valve parts, pump plungers. Wrought alloy 6BH offers the fatigue resistance and toughness of a hot worked microstructure, with the heat corrosion and wear resistance of cobalt based alloy. High Performance Alloys, Inc. inventories sheet, and plate. Bar is can be produced 1/2" through 2-1/2" diameter. Bar can be supplied in random lengths or cut to order. Sheet and plate are offered as whole plates, can be abrasive cut, or processed further using waterjet services. Data provided by High Performance Alloys, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_HP-Alloys-HPA-COBALT-Alloy-6BH-Wear-Resistant-Co-Cr-W-UNS-R30016.php

Physical Properties	Metric	English	Comments
Density	8.39 g/cc	0.303 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	415	415	Estimated from Rockwell C
Hardness, Rockwell A	73	73	Estimated from Rockwell C
Hardness, Rockwell C	42 - 49	42 - 49	
Hardness, Vickers	440	440	Estimated from Rockwell C
Tensile Strength, Ultimate	1345 MPa	195100 psi	
Tensile Strength, Yield	834 MPa	121000 psi	
Elongation at Break	4.5 %	4.5 %	

Thermal Properties	Metric	English	Comments
Specific Heat Capacity	0.420 J/g-°C	0.100 BTU/lb-°F	
Thermal Conductivity	14.8 W/m-K	103 BTU-in/hr-ft ² -°F	
	@Temperature 0.000 - 100 °C	@Temperature 32.0 - 212 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.90 - 1.4 %	0.90 - 1.4 %	
Chromium, Cr	28 - 32 %	28 - 32 %	
Cobalt, Co	50 - 67 %	50 - 67 %	As remainder
Iron, Fe	<= 3.0 %	<= 3.0 %	
Manganese, Mn	<= 2.0 %	<= 2.0 %	
Molybdenum, Mo	<= 1.5 %	<= 1.5 %	
Nickel, Ni	<= 3.0 %	<= 3.0 %	
Tungsten, W	3.5 - 5.5 %	3.5 - 5.5 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.000120 ohm-cm	0.000120 ohm-cm	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China