

AK Steel 15-5 PH® Precipitation Hardening Stainless Steel, Condition H 1075

Category : Metal , Ferrous Metal , Martensitic , Stainless Steel , Precipitation Hardening Stainless

Material Notes:

AK Steel 15-5 PH® provides high strength, good corrosion resistance, good mechanical properties at temperatures up to 600°F (316°C), and good toughness in both base metal and welds. Short-time, low-temperature heat treatments minimize distortion and scaling. AK Steel 15-5 PH® is the ferrite-free version of AK Steel 17-4 PH® Stainless Steel. Both alloys are widely used in the aerospace, chemical, petrochemical, food processing, paper and general metalworking industries. The material supplied from the mill is in Condition A. After fabrication eight standard heat treatments have been developed to provide a wide range of properties. Information provided by AK Steel

Order this product through the following link:

http://www.lookpolymers.com/polymer_AK-Steel-15-5-PH-Precipitation-Hardening-Stainless-Steel-Condition-H-1075.php

Physical Properties	Metric	English	Comments
Density	7.81 g/cc	0.282 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	38	38	Longitudinal
	38	38	Transverse
Tensile Strength, Ultimate	1114 MPa	161600 psi	Longitudinal
	1114 MPa	161600 psi	Transverse
Tensile Strength, Yield	1102 MPa @Strain 0.200 %	159800 psi @Strain 0.200 %	Longitudinal
	1112 MPa @Strain 0.200 %	161300 psi @Strain 0.200 %	Transverse
Elongation at Break	11.4 %	11.4 %	in 2 inches, Transverse
	12.8 %	12.8 %	in 2 inches, Longitudinal

Thermal Properties	Metric	English	Comments
CTE, linear	11.3 µm/m-°C @Temperature 21.0 - 93.0 °C	6.28 µin/in-°F @Temperature 69.8 - 199 °F	
	12.2 µm/m-°C @Temperature <=427 °C	6.78 µin/in-°F @Temperature <=801 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.070 %	<= 0.070 %	
Chromium, Cr	14 - 15.5 %	14 - 15.5 %	
Copper, Cu	2.5 - 4.5 %	2.5 - 4.5 %	
Iron, Fe	71.91 - 79.85 %	71.91 - 79.85 %	As Remainder
Manganese, Mn	<= 1.0 %	<= 1.0 %	
Nb + Ta	0.15 - 0.45 %	0.15 - 0.45 %	
Nickel, Ni	3.5 - 5.5 %	3.5 - 5.5 %	
Phosphorous, P	<= 0.040 %	<= 0.040 %	
Silicon, Si	<= 1.0 %	<= 1.0 %	
Sulfur, S	<= 0.030 %	<= 0.030 %	

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