

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

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-A.php

Physical Properties	Metric	English	Comments
Density	7.78 g/cc	0.281 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	35	35	Longitudinal
	35	35	Transverse
Tensile Strength, Ultimate	1110 MPa	161000 psi	Longitudinal
	1116 MPa	161900 psi	Transverse
Tensile Strength, Yield	963 MPa	140000 psi	Longitudinal
	@Strain 0.200 %	@Strain 0.200 %	
	988 MPa	143000 psi	Transverse
	@Strain 0.200 %	@Strain 0.200 %	
Elongation at Break	7.6 %	7.6 %	in 2 inches, Transverse
	8.4 %	8.4 %	in 2 inches, Longitudinal

Thermal Properties	Metric	English	Comments
CTE, linear	10.8 µm/m-°C	6.00 µin/in-°F	
	@Temperature 21.0 - 93.0 °C	@Temperature 69.8 - 199 °F	
	11.3 µm/m-°C	6.28 µin/in-°F	
	@Temperature <=427 °C	@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