

AK Steel 400 Ferritic Stainless steel

Category : Metal , Ferrous Metal , Ferritic , Stainless Steel , T 400 Series Stainless Steel

Material Notes:

AK Steel 400 is one of the most economical chromium ferritic stainless steels. It has corrosion and oxidation resistance comparable to Type 410 stainless steel with good fabricating characteristics. AK Steel 400 contains no titanium, so its surface is free of titanium streaks. This provides improved appearance, and alleviates die wear that may be caused by titanium stabilized chromium steels. AK Steel 400 is non-hardenable by heat treatment because of its low carbon content which also minimizes hardening during welding. Typical applications include heat exchangers, display racks, gas range burner rings, office furniture and other uses where corrosion resistance at minimum cost is important. Information provided by AK Steel

Order this product through the following link:

http://www.lookpolymers.com/polymer_AK-Steel-400-Ferritic-Stainless-steel.php

Physical Properties	Metric	English	Comments
Density	7.47 g/cc	0.270 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	72	72	
Tensile Strength, Ultimate	469 MPa	68000 psi	
Tensile Strength, Yield	234 MPa @Strain 0.200 %	33900 psi @Strain 0.200 %	
Elongation at Break	30 %	30 %	in 2 inches
Modulus of Elasticity	200 GPa	29000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	10.8 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	6.00 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	
	@Temperature 24.0 - 260 $^\circ\text{C}$	@Temperature 75.2 - 500 $^\circ\text{F}$	
Specific Heat Capacity	12.8 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	7.11 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	
	@Temperature ≤ 871 $^\circ\text{C}$	@Temperature ≤ 1600 $^\circ\text{F}$	
Thermal Conductivity	0.460 J/g $\cdot^\circ\text{C}$	0.110 BTU/lb $\cdot^\circ\text{F}$	
	@Temperature 0.000 - 100 $^\circ\text{C}$	@Temperature 32.0 - 212 $^\circ\text{F}$	
Thermal Conductivity	24.9 W/m-K	173 BTU-in/hr-ft ² - $^\circ\text{F}$	
	@Temperature 100 $^\circ\text{C}$	@Temperature 212 $^\circ\text{F}$	

Thermal Properties	28.6 W/m-K Metric	198 BTU-in/hr-ft ² -°F English	Comments
	@Temperature 500 °C	@Temperature 932 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	<= 0.25 %	<= 0.25 %	
Carbon, C	<= 0.050 %	<= 0.050 %	
Chromium, Cr	12 - 13 %	12 - 13 %	
Iron, Fe	>= 84.64 %	>= 84.64 %	As Remainder
Manganese, Mn	<= 1.0 %	<= 1.0 %	
Phosphorous, P	<= 0.030 %	<= 0.030 %	
Silicon, Si	<= 1.0 %	<= 1.0 %	
Sulfur, S	<= 0.030 %	<= 0.030 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000600 ohm-cm	0.0000600 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