

Industeel CREUSABRO® 8000 High Performance Wear Resistant Steel

Category : Metal , Ferrous Metal , Carbon Steel , Medium Carbon Steel

Material Notes:

Description: CREUSABRO® 8000 is a high performance wear resistant steel, exhibiting a wear resistance of 50% higher than that of conventional 500 HB water quenched steel. CREUSABRO® 8000 is using an innovative concept, based on a unique combination of chemical analysis and heat treatment procedures (oil quenching). This confers to the steel an improved wear resistant by the contribution of: a very fine distribution of chromium and molybdenum microcarbides reinforcing the microstructure with the same principal as composite materials a very efficient work hardening capability in service, coming from a metallurgic effect called TRIP effect (Transformation Induced by Plasticity). In addition to its high wear resistance, CREUSABRO® 8000 still maintains a very good aptitude to processing, far much better than that of 500 HB water quenched. Application markets of CREUSABRO® 8000 are : mines, quarries, cement industries, steel making, public works. Information provided by manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Industeel-CREUSABRO-8000-High-Performance-Wear-Resistant-Steel.php

Physical Properties	Metric	English	Comments
Density	7.85 g/cc	0.284 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	430 - 500	430 - 500	Typical
Tensile Strength, Ultimate	1630 MPa	236000 psi	Typical
Tensile Strength, Yield	1250 MPa @Strain 0.200 %	181000 psi @Strain 0.200 %	Typical
Elongation at Break	12 %	12 %	Typical
Modulus of Elasticity	205 GPa	29700 ksi	Typical
Charpy Impact	>= 40.0 J @Temperature -20.0 °C	>= 29.5 ft-lb @Temperature -4.00 °F	
	55.0 J @Temperature -20.0 °C	40.6 ft-lb @Temperature -4.00 °F	Typical

Thermal Properties	Metric	English	Comments
CTE, linear	11.2 µm/m-°C @Temperature 20.0 - 100 °C	6.22 µin/in-°F @Temperature 68.0 - 212 °F	
	12.0 µm/m-°C @Temperature 20.0 -	6.67 µin/in-°F @Temperature 68.0 -	

Thermal Properties	200 °C Metric	392 °F English	Comments
	12.5 µm/m-°C	6.94 µin/in-°F	
	@Temperature 20.0 - 300 °C	@Temperature 68.0 - 572 °F	
	13.8 µm/m-°C	7.67 µin/in-°F	
	@Temperature 20.0 - 500 °C	@Temperature 68.0 - 932 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.28 %	<= 0.28 %	
Chromium, Cr	<= 1.6 %	<= 1.6 %	
Iron, Fe	<= 99.4 %	<= 99.4 %	As remainder
Manganese, Mn	<= 1.6 %	<= 1.6 %	
Molybdenum, Mo	>= 0.20 %	>= 0.20 %	
Nickel, Ni	0.40 %	0.40 %	
Sulfur, S	<= 0.0020 %	<= 0.0020 %	

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