

Latrobe Corsair,ç ASTM M3-1 High Speed Steel

Category : Metal , Ferrous Metal , Alloy Steel , Carbon Steel , High Carbon Steel , Tool Steel

Material Notes:

CORSAIR (M3-1) contains carbon and vanadium levels that are intermediate between those of Double Six (M2) and Crusader (M3-2). This gives the steel a fine balance of wear resistance and grindability. Corsair is an excellent steel for cutting tools such as broaches and form tools where both improved tool life and grindability are important considerations. Typical applications for Corsair high speed steel include form tools, spade drills, milling cutters and broaches. Information Provided by Timken Latrobe Steel. Timken sold Latrobe in December 2006. They are now Latrobe Specialty Steels Co.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Latrobe-Corsair-ASTM-M3-1-High-Speed-Steel.php

Physical Properties	Metric	English	Comments
Specific Gravity	8.17 g/cc	8.17 g/cc	
Density	8.17 g/cc	0.295 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	65	65	Oil Quenched from 1232 ^o C
	66.5	66.5	Oil Quenched from 1149 ^o C
	66.5	66.5	Oil Quenched from 1177 ^o C
Modulus of Elasticity	207 GPa	30000 ksi	
Machinability	40 - 45 %	40 - 45 %	1% Carbon Steel
Izod Impact Unnotched	28.5 J	21.0 ft-lb	Oil Quenched at 1204 ^o C; 510 ^o C Temper Temperature
	35.3 J	26.0 ft-lb	Oil Quenched at 1204 ^o C; 482 ^o C Temper Temperature
	43.4 J	32.0 ft-lb	Oil Quenched at 1177 ^o C; 482 ^o C Temper Temperature
	58.3 J	43.0 ft-lb	Oil Quenched at 1204 ^o C; 622 ^o C Temper Temperature
	61.0 J	45.0 ft-lb	Oil Quenched at 1177 ^o C; 622 ^o C Temper Temperature
	63.7 J	47.0 ft-lb	Oil Quenched at 1177 ^o C; 566 ^o C Temper Temperature

Thermal Properties	Metric	English	Comments
CTE, linear	11.12 $\mu\text{m/m-}^{\circ}\text{C}$	6.178 $\mu\text{in/in-}^{\circ}\text{F}$	

Thermal Properties	@Temperature 21.0 - Metric 204 Â°C	@Temperature 69.8 - English 399 Â°F	Comments
	12.4 Âµm/m-Â°C	6.89 Âµin/in-Â°F	
	@Temperature 21.0 - 358 Â°C	@Temperature 69.8 - 676 Â°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.02 %	1.02 %	
Chromium, Cr	4.1 %	4.1 %	
Iron, Fe	80.93 %	80.93 %	
Manganese, Mn	0.25 %	0.25 %	
Molybdenum, Mo	5.0 %	5.0 %	
Silicon, Si	0.30 %	0.30 %	
Tungsten, W	6.0 %	6.0 %	
Vanadium, V	2.4 %	2.4 %	

Chemical Properties	Metric	English	Comments
Critical Temperature	835 Â°C	1540 Â°F	Ac1

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