Carpenter Micro-Melt® 9 Annealed Tool Steel

Category : Metal , Ferrous Metal , Tool Steel

Material Notes:

Micro-Melt® 9 tool steel is a high vanadium tool steel produced using the Carpenter Micro-Melt powder process. This grade possesses wear resistance superior to most other tool steels along with good strength and toughness characteristics. In addition, it provides higher toughness characteristics than Micro-Melt® 10 alloy with slightly lower wear resistance. Micro-Melt 9 tool steel changes size only slightly after hardening. An expansion of about 0.0005 inches/inch is typical.Applications: punches, dies for blanking, piercing dies, forming rolls and dies, cold heading, steel mill rolls, cold extrusion, slitter knives, shears, pelletizer blades, nozzles, woodworking tools, cold extrusion barrels, cold extrusion liners, plastic injection molds, compacting toolsInformation provided by Carpenter Technology Corporation.Micro-Melt® is a registered trademark of Carpenter Technology Corporation.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Carpenter-Micro-Melt-9-Annealed-Tool-Steel.php

Physical Properties	Metric	English	Comments
Specific Gravity	7.45 g/cc	7.45 g/cc	

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	200 GPa	29000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	10.89 µm/m-°C @Temperature 21.0 - 100 °C	6.050 µin/in-°F @Temperature 69.8 - 212 °F	
	12.05 µm/m-°C @Temperature 21.0 - 649 °C	6.694 µin/in-°F @Temperature 69.8 - 1200 °F	
	12.84 µm/m-°C @Temperature 260 - 788 °C	7.133 µin/in-°F @Temperature 500 - 1450 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.7 - 1.85 %	1.7 - 1.85 %	
Chromium, Cr	4.75 - 5.75 %	4.75 - 5.75 %	
Iron, Fe	79.67 - 79.7 %	79.67 - 79.7 %	As Balance
Manganese, Mn	0.35 - 0.60 %	0.35 - 0.60 %	
Molybdenum, Mo	1.1 - 1.5 %	1.1 - 1.5 %	

Component Elements Properties	Metric	English	Comments
Silicon, Si	0.15 - 1.1 %	0.15 - 1.1 %	
Sulfur, S	<= 0.030 %	<= 0.030 %	
Vanadium, V	8.25 - 9.5 %	8.25 - 9.5 %	

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