

Bohler-Uddeholm BÖHLER S500(m42) High Speed Steel

Category : Metal , Ferrous Metal , Tool Steel

Material Notes:

Description: Cobalt Molybdenum high speed steel processing high hardness, excellent cutting properties, high red hardness and good toughness. BOHLER S500 is also available in the special grade ISORAPID for heavy duty. Applications: Milling cutters, taps, twist drills, broaches tools, and cold work tools. Standards: DIN/EN 1.3346 HS2-91, AISI M1, UNS T11301, BS ~BM1

Order this product through the following link:

http://www.lookpolymers.com/polymer_Bohler-Uddeholm-BHLER-S500m42-High-Speed-Steel.php

Physical Properties	Metric	English	Comments
Density	8.10 g/cc	0.293 lb/in ³	

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	220 GPa	31900 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	11.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.11 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 100 °C	@Temperature 212 °F	
	11.5 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.39 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 200 °C	@Temperature 392 °F	
	11.9 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.61 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 300 °C	@Temperature 572 °F	
	12.3 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.83 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 400 °C	@Temperature 752 °F	
	12.4 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.89 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 500 °C	@Temperature 932 °F	
	12.5 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.94 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 600 °C	@Temperature 1110 °F	
	12.5 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.94 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 700 °C	@Temperature 1290 °F	
Specific Heat Capacity	0.431 J/g-°C	0.103 BTU/lb-°F	
Thermal Conductivity	20.0 W/m-K	139 BTU-in/hr-ft ² -°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.1 %	1.1 %	
Chromium, Cr	3.9 %	3.9 %	
Cobalt, Co	7.8 %	7.8 %	
Iron, Fe	74.9 %	74.9 %	As remainder
Manganese, Mn	0.20 %	0.20 %	
Molybdenum, Mo	9.2 %	9.2 %	
Silicon, Si	0.50 %	0.50 %	
Tungsten, W	1.4 %	1.4 %	
Vanadium, V	1.0 %	1.0 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000520 ohm-cm	0.0000520 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