

Crucible Steel REX® M42 High Speed Steel, AISI M42

Category : Metal , Ferrous Metal , Tool Steel

Material Notes:

REX M42 is a super cobalt high speed steel which may be heat treated to HRC 68. This makes REX M42 outstanding for special purpose cutting tools, with requirements beyond the capability of general purpose high speed steels. Information provided by Crucible Industries

Order this product through the following link:

http://www.lookpolymers.com/polymer_Crucible-Steel-REX-M42-High-Speed-Steel-AISI-M42.php

Physical Properties	Metric	English	Comments
Density	8.00 g/cc	0.289 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	235 - 255	235 - 255	
Hardness, Rockwell C	66	66	oil quenched from 2050°F
	50	50	oil quenched from 2050°F then tempered
	@Tempering Temp. 621 °C	@Tempering Temp. 1150 °F	
	54	54	oil quenched from 2050°F then tempered
	@Tempering Temp. 593 °C	@Tempering Temp. 1100 °F	
	60	60	oil quenched from 2050°F then tempered
	@Tempering Temp. 566 °C	@Tempering Temp. 1050 °F	
	63	63	oil quenched from 2050°F then tempered
	@Tempering Temp. 551.7 °C	@Tempering Temp. 1025 °F	
	64.5	64.5	oil quenched from 2050°F then tempered
	@Tempering Temp. 538 °C	@Tempering Temp. 1000 °F	
Tensile Strength, Ultimate	2560 MPa	372000 psi	hardened at 2175°F
	3080 MPa	446000 psi	hardened at 2100°F
Modulus of Elasticity	207 GPa	30000 ksi	
Charpy Impact	6.78 J	5.00 ft-lb	hardened at 2175°F; C-notch
	9.49 J	7.00 ft-lb	hardened at 2100°F; C-notch

Component Elements Properties	Metric	English	Comments
Carbon, C	1.08 %	1.08 %	
Chromium, Cr	3.75 %	3.75 %	
Cobalt, Co	8.0 %	8.0 %	
Iron, Fe	74 %	74 %	as balance
Manganese, Mn	0.30 %	0.30 %	
Molybdenum, Mo	9.5 %	9.5 %	
Silicon, Si	0.30 %	0.30 %	
Sulfur, S	0.030 %	0.030 %	
Tungsten, W	1.6 %	1.6 %	
Vanadium, V	1.15 %	1.15 %	

Chemical Properties	Metric	English	Comments
Critical Temperature	849 °C	1560 °F	

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