

Schmolz + Bickenbach Formadur® 2085 Plastic Mold Steel

Category : Metal , Ferrous Metal , Tool Steel , Mold Steel

Material Notes:

Description: FORMADUR 2085 is a free-machining corrosion-resistant mold frame steel
 Characteristics: Lower mold production costs due to improved machinability; Improved corrosion resistance compared to Corroplast and Uniform hardness
 Applications: Mold frames for processing corrosive plastics, Mold components and Plastic extrusion components
 Heat Treatment: 1560°F- 1610°F; Cooling: Furnace 20°F/hour to 1200°F, Then air cools; Hardness:

Order this product through the following link:

http://www.lookpolymers.com/polymer_Schmolz-Bickenbach-Formadur-2085-Plastic-Mold-Steel.php

Physical Properties	Metric	English	Comments
Density	7.75 g/cc	0.280 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	28	28	
	@Treatment Temp. 200 °C	@Treatment Temp. 392 °F	
	30	30	
	@Treatment Temp. 600.0 °C	@Treatment Temp. 1112 °F	
	36	36	
	@Treatment Temp. 550.0 °C	@Treatment Temp. 1022 °F	
	46	46	
	@Treatment Temp. 400 °C	@Treatment Temp. 752 °F	
	47	47	
	@Treatment Temp. 300 °C	@Treatment Temp. 572 °F	
47	47		
@Treatment Temp. 450 °C	@Treatment Temp. 842 °F		
47	47		
@Treatment Temp. 500 °C	@Treatment Temp. 932 °F		
48	48		
@Treatment Temp. 100 °C	@Treatment Temp. 212 °F		

Mechanical Properties	Metric 1000 MPa	English 150000 psi	Comments
Tensile Strength	@Temperature -5.56 °C	@Temperature 22.0 °F	Hardened and tempered to 34 HRC
Tensile Strength, Yield	965 MPa @Temperature 22.0 °C	140000 psi @Temperature 71.6 °F	Hardened and tempered to 34 HRC
Elongation at Yield	12 % @Temperature 22.0 °C	12 % @Temperature 71.6 °F	Hardened and tempered to 34 HRC
Reduction of Area	45 % @Temperature 22.0 °C	45 % @Temperature 71.6 °F	Hardened and tempered to 34 HRC

Thermal Properties	Metric	English	Comments
CTE, linear	11.5 µm/m-°C @Temperature 21.1 - 204 °C	6.40 µin/in-°F @Temperature 70.0 - 400 °F	
Thermal Conductivity	23.5 W/m-K @Temperature 93.3 °C	163 BTU-in/hr-ft ² -°F @Temperature 200 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.33 %	0.33 %	
Chromium, Cr	16 %	16 %	
Iron, Fe	83.12 %	83.12 %	
Nickel, Ni	0.50 %	0.50 %	
Sulfur, S	0.050 %	0.050 %	

Processing Properties	Metric	English	Comments
Annealing Temperature	999 - 1050 °C	1830 - 1920 °F	Soft; Hold at temperature for 30 min; Cooling: Oil; Quenched < 48 HRC

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