

EDRO RoyAlloy™ #6 Free Machining Stainless Holder Steel

Category : Metal , Ferrous Metal , Martensitic , Stainless Steel , T 400 Series Stainless Steel

Material Notes:

RoyAlloy™ is a 400 series martensitic stainless steel supplied prehardened. RoyAlloy™ is characterized by excellent machinability, good corrosion resistance, uniform and consistent hardness in all dimensions, good resistance to indentation (compressive strength), excellent ductility, excellent flatness, dimensionally stable, smooth as rolled surfaces, excellent weldability, and good thermal conductivity.

RoyAlloy™ is an improved stainless grade designed specifically for plastic molding applications. Chemical composition and thermal treatments provide physical properties and microstructures designed to provide reduced mold maintenance costs, worry free weld repair, dimensional stability, and lower mold production costs due to less cutting tool wear and increased cutting speeds. Applications: plastic and rubber molds, plastic mold bases, plastic mold inserts, constructional parts, plastic extrusion. Information provided by EDRO

Order this product through the following link:

http://www.lookpolymers.com/polymer_EDRO-RoyAlloy-6-Free-Machining-Stainless-Holder-Steel.php

Physical Properties	Metric	English	Comments
Density	7.81 g/cc	0.282 lb/in ³	Prehardened to 321 HB
	@Temperature 199 °C	@Temperature 390 °F	
	7.86 g/cc	0.284 lb/in ³	Prehardened to 321 HB
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	321	321	
Tensile Strength, Ultimate	1050 MPa	152000 psi	Longitudinal Tests from 3" rolled plate at 321 HB
	@Temperature 199 °C	@Temperature 390 °F	
	1070 MPa	155000 psi	Longitudinal Tests from 3" rolled plate at 321 HB
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Tensile Strength, Yield	869 MPa	126000 psi	Longitudinal Tests from 3" rolled plate at 321 HB
	@Strain 0.200 %, Temperature 199 °C	@Strain 0.200 %, Temperature 390 °F	
	889 MPa	129000 psi	Longitudinal Tests from 3" rolled plate at 321 HB
	@Strain 0.200 %, Temperature 20.0 °C	@Strain 0.200 %, Temperature 68.0 °F	
Elongation at Yield	12 %	12 %	in 2"
	@Temperature 20.0 °C	@Temperature 68.0 °F	
	12 %	12 %	in 2"
	@Temperature 199 °C	@Temperature 390 °F	

Mechanical Properties	Metric	English	Comments
Reduction of Area	@Temperature 20.0 °C	@Temperature 68.0 °F	
	34 %	34 %	
Modulus of Elasticity	@Temperature 199 °C	@Temperature 390 °F	
	190 GPa	27600 ksi	
Charpy Impact	@Temperature 20.0 °C	@Temperature 68.0 °F	Longitudinal Charpy V-notch Tests from a 3" rolled plate at 321 HB
	21.7 J	16.0 ft-lb	
	@Temperature 199 °C	@Temperature 390 °F	Longitudinal Charpy V-notch Tests from a 3" rolled plate at 321 HB
	35.3 J	26.0 ft-lb	

Thermal Properties	Metric	English	Comments
CTE, linear	11.0 µm/m-°C	6.10 µin/in-°F	
	@Temperature 20.0 - 199 °C	@Temperature 68.0 - 390 °F	

Descriptive Properties	Value	Comments
Color Code	Yellow Blue Stripe	

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