

Assab Steels ASSAB XW-5 Cold Work Steel

Category : Metal , Ferrous Metal , Carbon Steel , High Carbon Steel , Tool Steel , Cold Work Steel

Material Notes:

ASSAB XW-5 is a high-carbon, high chromium tool steel alloyed with tungsten, characterized by: High wear resistance High compressive strength High surface hardness after hardening Good through-hardening properties Good stability in hardening Good resistance to tempering-back Applications: blanking and shearing tools for thin, hard materials long-run press tools forming tools molds for ceramics and abrasive plastics AISI D6, (AISI D3), W.-Nr. 1.2436

Order this product through the following link:

http://www.lookpolymers.com/polymer_Assab-Steels-ASSAB-XW-5-Cold-Work-Steel.php

Physical Properties	Metric	English	Comments
Density	7.67 g/cc	0.277 lb/in ³	
	7.61 g/cc	0.275 lb/in ³	
	@Temperature 400 °C	@Temperature 752 °F	
	7.64 g/cc	0.276 lb/in ³	
	@Temperature 200 °C	@Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	46	46	900°C Austenitizing temperature, for tempering at 600°C
	48	48	980°C Austenitizing temperature, for tempering at 600°C
	60.5	60.5	900°C Austenitizing temperature, for tempering at 250°C
	62	62	Hardened and tempered.
	62	62	980°C Austenitizing temperature, for tempering at 250°C
	64.5	64.5	At 920°C during hardening, soaking time: 30 min
	65.5	65.5	At 1000°C during hardening, soaking time: 30 min
	65.5	65.5	920°C during hardening, soaking time: 60 min
	66.5	66.5	At 960°C during hardening, soaking time: 30 min
	Modulus of Elasticity	194 GPa	28100 ksi
173 GPa		25100 ksi	

Mechanical Properties	@Temperature 400 °C Metric	@Temperature 752 °F English	Comments
Compressive Strength	1320 MPa	191000 psi	HRC 45 R_c>0.2
	1860 MPa	270000 psi	HRC 55 R_c>0.2
	2210 MPa	321000 psi	HRC 62 R_c>0.2.

Thermal Properties	Metric	English	Comments
CTE, linear	10.8 µm/m-°C	6.00 µin/in-°F	
	@Temperature 20.0 - 400 °C	@Temperature 68.0 - 752 °F	
	11.0 µm/m-°C	6.11 µin/in-°F	
	@Temperature 20.0 - 200 °C	@Temperature 68.0 - 392 °F	
Specific Heat Capacity	0.460 J/g-°C	0.110 BTU/lb-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	20.5 W/m-K	142 BTU-in/hr-ft²-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
	21.5 W/m-K	149 BTU-in/hr-ft²-°F	
	@Temperature 200 °C	@Temperature 392 °F	
	23.0 W/m-K	160 BTU-in/hr-ft²-°F	
	@Temperature 400 °C	@Temperature 752 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	2.05 %	2.05 %	
Chromium, Cr	12.5 %	12.5 %	
Iron, Fe	83.05 %	83.05 %	
Manganese, Mn	0.80 %	0.80 %	
Silicon, Si	0.30 %	0.30 %	
Tungsten, W	1.3 %	1.3 %	

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