

## Latrobe Graph-Mo<sup>®</sup> Cold Work Tool Steel (ASTM O6)

Category : Metal , Ferrous Metal , Alloy Steel , Carbon Steel , High Carbon Steel , Tool Steel , Cold Work Steel , Oil-Hardening Steel

### Material Notes:

Graph-Mo tool steel is an oil-hardening, graphitic tool steel with outstanding resistance to metal-to-metal sliding wear and galling. The steel contains a uniform dispersion of graphite particles which impart excellent machinability and non-seizing characteristics. The graphite particles make the steel self-lubricating in dry environments, and help to retain oil in lubricated environments. Graph-Mo tool steel can be hardened to over 60 Rockwell C from a relatively low hardening temperature, which minimizes size change and distortion during heat treatment. Typical applications include thread gauges, master gages, cams, bushings, sleeves, meat granulator plates, arbors, forming rolls, shear blades, punches, dies, bar feed guides and other machine tool parts. Information Provided by Timken Latrobe Steel. Timken sold Latrobe in December 2006. They are now Latrobe Specialty Steels Co.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Latrobe-Graph-Mo-Cold-Work-Tool-Steel-ASTM-O6.php](http://www.lookpolymers.com/polymer_Latrobe-Graph-Mo-Cold-Work-Tool-Steel-ASTM-O6.php)

Physical Properties	Metric	English	Comments
Specific Gravity	7.70 g/cc	7.70 g/cc	
Density	7.70 g/cc	0.278 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	62	62	Air Cooled from 774 <sup>°</sup> C, 30 minutes
	64	64	Air Cooled from 871 <sup>°</sup> C, 30 minutes
	65.5	65.5	Air Cooled from 802 <sup>°</sup> C, 30 minutes
Modulus of Elasticity	207 GPa	30000 ksi	
Machinability	130 %	130 %	1% Carbon Steel
Izod Impact Unnotched	27.1 J	20.0 ft-lb	Oil Quenched from 788 <sup>°</sup> C; 250 <sup>°</sup> C Temper Temperature
	129 J	95.0 ft-lb	Oil Quenched from 788 <sup>°</sup> C; 538 <sup>°</sup> C Temper Temperature

Thermal Properties	Metric	English	Comments
CTE, linear	11.15 $\mu\text{m/m-}^{\circ}\text{C}$	6.194 $\mu\text{in/in-}^{\circ}\text{F}$	
	@Temperature 21.0 - 204 <sup>°</sup> C	@Temperature 69.8 - 399 <sup>°</sup> F	
	12.94 $\mu\text{m/m-}^{\circ}\text{C}$	7.189 $\mu\text{in/in-}^{\circ}\text{F}$	
	@Temperature 21.0 - 538 <sup>°</sup> C	@Temperature 69.8 - 1000 <sup>°</sup> F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.45 %	1.45 %	
Iron, Fe	96.4 %	96.4 %	
Manganese, Mn	1.0 %	1.0 %	
Molybdenum, Mo	0.25 %	0.25 %	
Silicon, Si	0.90 %	0.90 %	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China