

## Latrobe LSSâ,,¢ H10A Modified

Category: Metal, Ferrous Metal, Alloy Steel, Chrome-moly Steel, Tool Steel, Hot Work Steel

## **Material Notes:**

TLS H10 Mod. hot work tool steel is a chromium-molybdenum H10-type hot work steel which contains cobalt for increased strength and resistance to softening at elevated temperature. This grade is also very resistant to thermal fatigue cracking (heat checking), and can be water cooled in service. TLS H10 Mod. is recommended for difficult hot work tooling applications such as hot punches, die casting dies, forging dies, hot shear blades, hot gripper dies, and extrusion tooling.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-LSS-H10A-Modified.php

Physical Properties	Metric	English	Comments
Density	7.78 g/cc	0.281 lb/in³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	32	32	Air Cooled from 1010°C; 650°C Temper Temperature
	33	33	Oil Quenched from 1010°C; 650°C Temper Temperature
	35	35	Air Cooled from 1066°C; 650°C Temper Temperature
	35	35	Oil Quenched from 1066°C; 650°C Temper Temperature
	54.5	54.5	Oil Quenched from 1010°C; 482°C Temper Temperature
	55	55	Air Cooled from 1010°C; 482°C Temper Temperature
	56.5	56.5	Air Cooled from 1066°C; 482°C Temper Temperature
	59.5	59.5	Oil Quenched from 1066°C; 482°C Temper Temperature
Modulus of Elasticity	207 GPa	30000 ksi	
Machinability	90 - 95 %	90 - 95 %	1% Carbon Steel

Thermal Properties	Metric	English	Comments
CTE, linear	11.3 Âμm/m-°C	6.28 µin/in-°F	
	@Temperature 21.0 - 204 °C	@Temperature 69.8 - 399 °F	
	13.5 Âμm/m-°C	7.50 µin/in-°F	



Thermal Properties	Metric perature 21.0 -	Englisherature 69.8 -	Comments
	538 A°C	1000 A°F	

Component Elements Properties	Metric	English	Comments	
Carbon, C	0.35 %	0.35 %		
Chromium, Cr	3.3 %	3.3 %		
Cobalt, Co	2.0 %	2.0 %		
Iron, Fe	89.95 %	89.95 %		
Manganese, Mn	0.30 %	0.30 %		
Molybdenum, Mo	2.45 %	2.45 %		
Silicon, Si	1.0 %	1.0 %		
Vanadium, V	0.65 %	0.65 %		

Chemical Properties	Metric	English	Comments
Critical Temperature	830 °C	1530 °F	Ac1

## **Contact Songhan Plastic Technology Co.,Ltd.**

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