

H10A HOT WORK TOOL STEEL

COMPOSITION %	C	Cr	Mo	V	Co
	0.32	3.0	2.80	0.5	3.0
STANDARDS	1.2885, X 32 CrMoCoV 3 3 3				

H10A is a hot work tool steel with good resistance to thermal shocks and hot tensile strength.

APPLICATIONS

Pressure casting dies, hot pressing dies, metal extrusion tools primarily for heavy metals.

PHYSICAL PROPERTIES

THERMAL EXPANSION	$10^{-6}\text{m} / (\text{m} \cdot \text{K})$	20-100	20-200	20-300	20-400	20-500	20-600	20-700
		10.5	11.3	11.8	12.3	12.5	12.8	13.0
THERMAL CONDUCTIVITY	$\text{W} / (\text{m} \cdot \text{K})$	200°C		350°C		700°C		
		27.3		30.6		28.0		

HEAT TREATMENT

HARDENING	IN AIR, OIL OR HOT BATH	HRC	N/MM²
1000°C	500°C - 550°C	52	1790

SOFT ANNEALING	COOLING	HARDNESS HB
770 - 840	Furnace	max. 230

TEMPERING									
°C	100	200	300	400	500	550	600	650	700
HRC	52	52	50	49	50	51	50	44	31
N/MM²	1790	1790	1670	1630	1670	1730	1670	1400	995