

Short name	54NiCrMoV6
No.	1.2711
AISI	-L6

Typical chemical composition, %	C	0.55
	Si	0.25
	Mn	0.70
	Cr	0.70
	Ni	1.60
	Mo	0.40
	V	0.10

PROPERTIES AND USES

CrNiMo-alloyed mold steel of great high temperature strength and high toughness. For tools with higher mechanical and thermal requirements. The steel is normally supplied in the hardened and tempered condition with

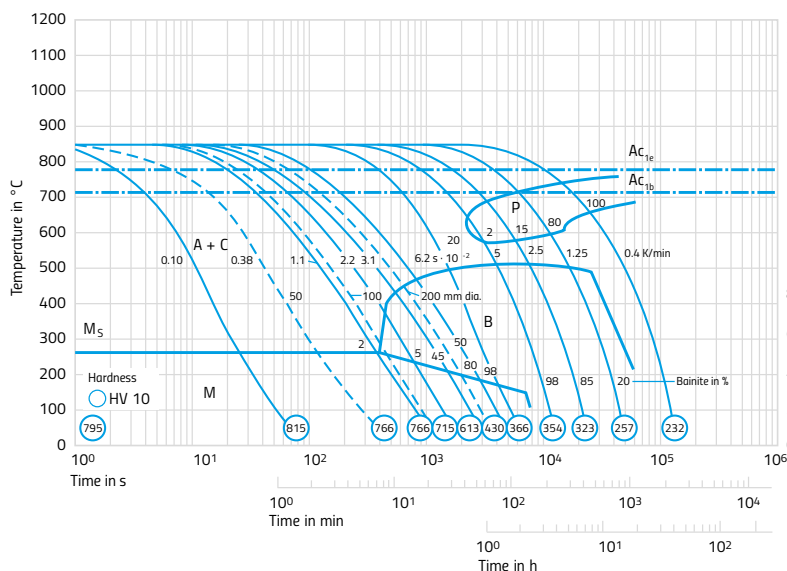
a hardness of approx. 36–40 HRC. But it can also be delivered in another hardness range or the annealed condition on request.

HOT WORKING AND HEAT TREATMENT

Forging	1150–800 °C (2100–1470 °F)
Soft annealing	650–680 °C (1200–1255 °F) 2–4 hrs/furnace cooling
Brinell Hardness in the annealed condition	Max. 240 HB
Stress relieving	650 °C (1200 °F)
Preheating for hardening	650 °C (1200 °F)
Hardening temperature	830–870 °C (1525–1600 °F)
Quenching	Oil ¹
Tempering	According to tempering curve
Time	1 hr/25 mm (1 hr/in.)

¹ Take the pieces out of the oil while they are still warm (100–150 °C (210–300 °F))

CONTINUOUS TTT CURVE



TEMPERING CURVE (APPROX. VALUES)

