

Short name	40CrMnMoS8-6
No.	1.2312
AISI	P20 + S

Typical chemical composition, %	C	0.40
	Si	0.40
	Mn	1.50
	Cr	1.95
	Mo	0.20
	S	Add.

PROPERTIES AND USES

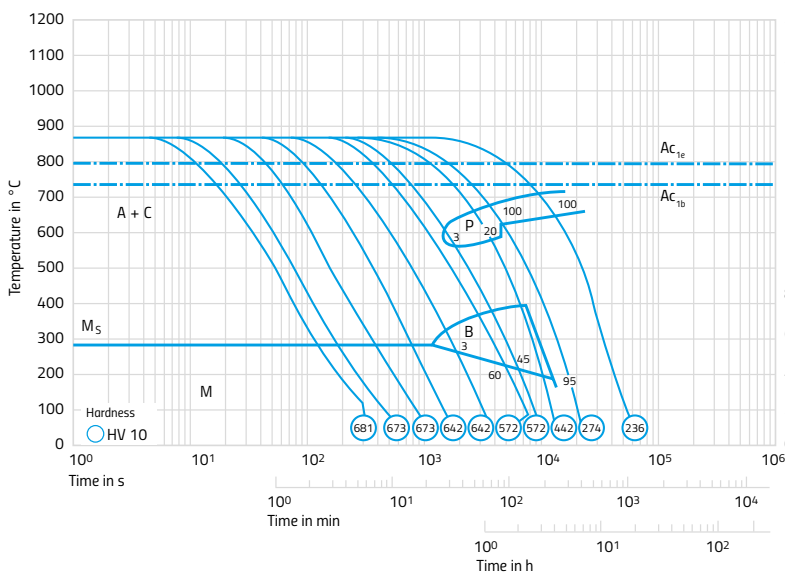
Special steel with excellent machinability for mold chases in injection die-casting machines. Supplied as heat-treated to service strength.

The usual service strength of MFR S is about 1000 N/mm². For higher strength, please refer to the following treatment instructions.

HOT WORKING AND HEAT TREATMENT

Forging	1150–850 °C (2100–1560 °F)
Soft annealing	700–730 °C (1290–1350 °F) 4 hrs/furnace cooling
Brinell Hardness in the annealed condition	Max. 220 HB
Stress relieving	650 °C (1200 °F)
Preheating for hardening	650 °C (1200 °F)
Hardening temperature	840–860 °C (1545–1580 °F)
Quenching	Oil
Tempering	According to tempering curve
Time	1 hr/25 mm (1 hr/in.)

CONTINUOUS TTT CURVE



TEMPERING CURVE (APPROX. VALUES)

