

1.2738

40CrMnNiMo8-6-4

PLASTIC MOLD STEEL

APPLICATION

Large plastic molds heavily loaded on the core, hydroforming tools.

CHEMICAL COMPOSITION

Chemical composition

Element	C	Si	Mn	P	S	Cr	Mo	Ni
min	0.35	0.20	1.30	max	max	1.80	0.15	0.90
max	0.45	0.40	1.60	0.03	0.03	2.10	0.25	1.20

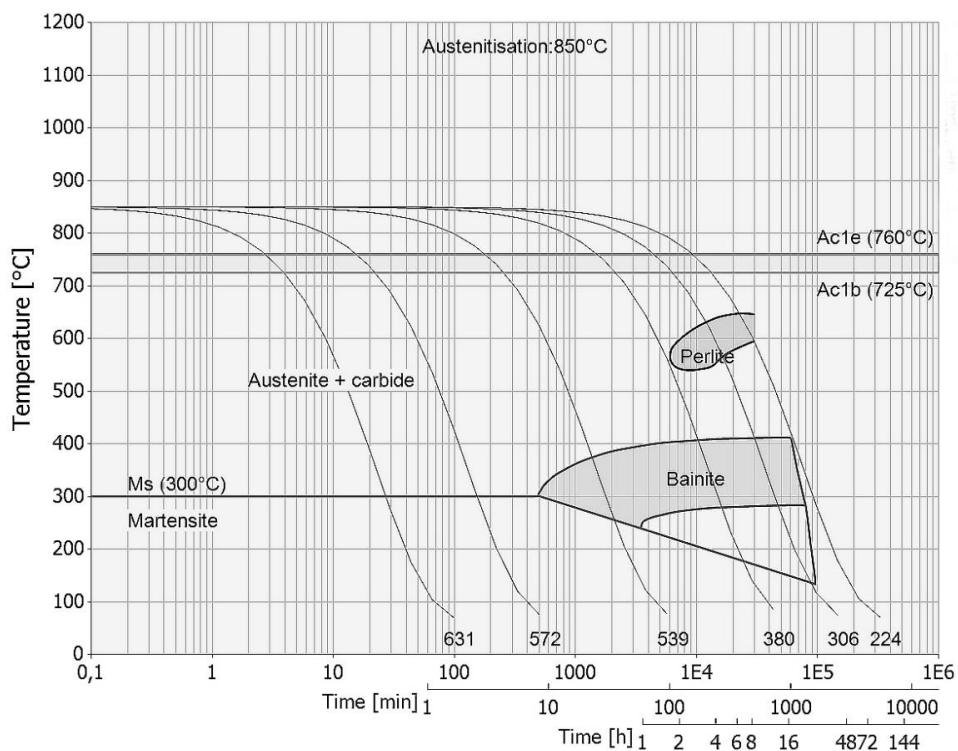
TREATMENT

Soft annealing	710 - 740°C / slow controlled cooling in furnace at a rate of 10-20°C/h down to approx. 600°C, further cooling in air
Stress relieving	600 - 650°C (soft annealed conditions)
Stress relieving	500 - 550°C (pre-tempered conditions)
Hardening	840 - 870°C / air, oil, hot bath 180-220°C
Tempering	200 - 600°C
Hardness [HRC]	min. 63

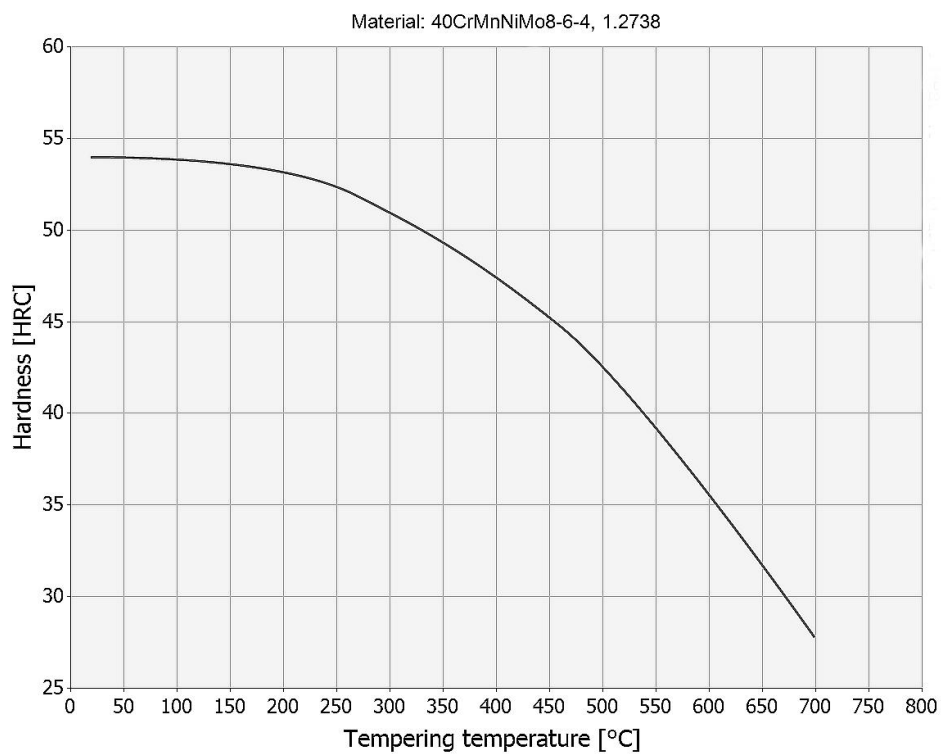
MECHANICAL PROPERTIES

Condition	Soft annealed (+A)
Hardness [HB]	280 – 325

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM



NOTE: All technical information is for reference only