

1.7225

42CrMo4 / 40HM

STEEL FOR HEAT TREATMENT

APPLICATION

The steel is used for the production of high-strength parts used in cars and vehicle construction. It produces: king pins, connecting rods, gears, geared rollers, spindles, reinforced rims, axles.

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	Cu
min	0.38	0.10	0.60	max.	max.	0.90	0.15	max.
max.	0.90	0.40	0.90	0.025	0.035	1.20	0.40	0.40

TREATMENT

Hardening	820 - 860 °C at least 30 min. (approx.) / Oil or water
Tempering	540 - 680 °C at least 60 min. (approx.)

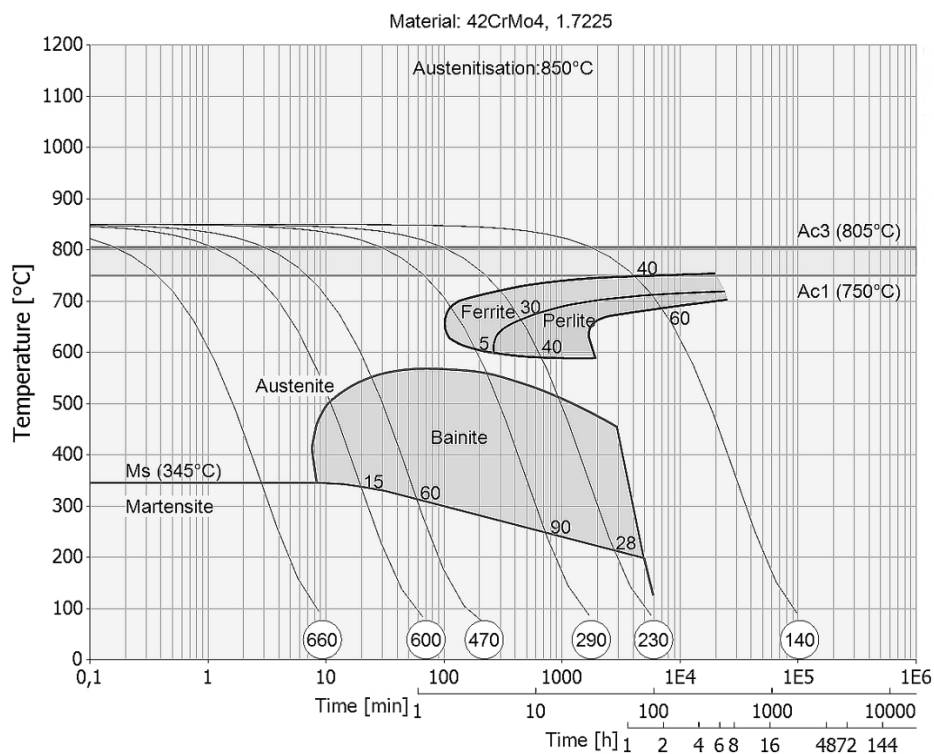
ADDITIONAL HEAT TREATMENT

Normalising	840 - 880 °C
Soft annealing	680 - 720 °C

MECHANICAL PROPERTIES

Condition	Quenched and tempered (+QT)	Treated to improve shearability (+S)	Soft annealed (+A)
Hardness [HB]	Depend on diameter and thickness	max. 255	max. 241

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM

