

Wr.Nr.	PN	EN	GOST	AISI
1.7035	40H	41Cr4	40X	5140

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Cu
min	0.38	0.10	0.60	max.	max.	max.	max.
max	0.45	0.40	0.90	0.025	0.035	0.035	0.40

APPLICATION

Heat-treatable steel with strength of 700 – 950 N/mm² for crankshaft bearings, front axes, steering parts, gear wheels, levers, connecting rods, components of bodies and tool grips, connecting elements, grinding wheels. After surface hardening for shafts, mandrels.

TREATMENT

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

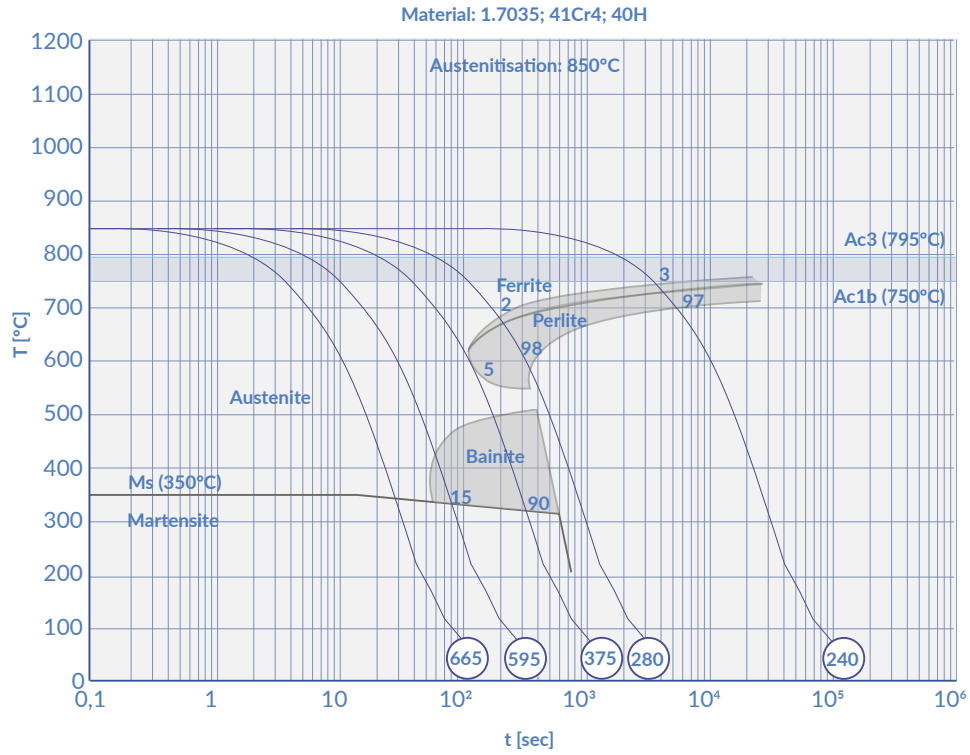
ADDITIONAL HEAT TREATMENT

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

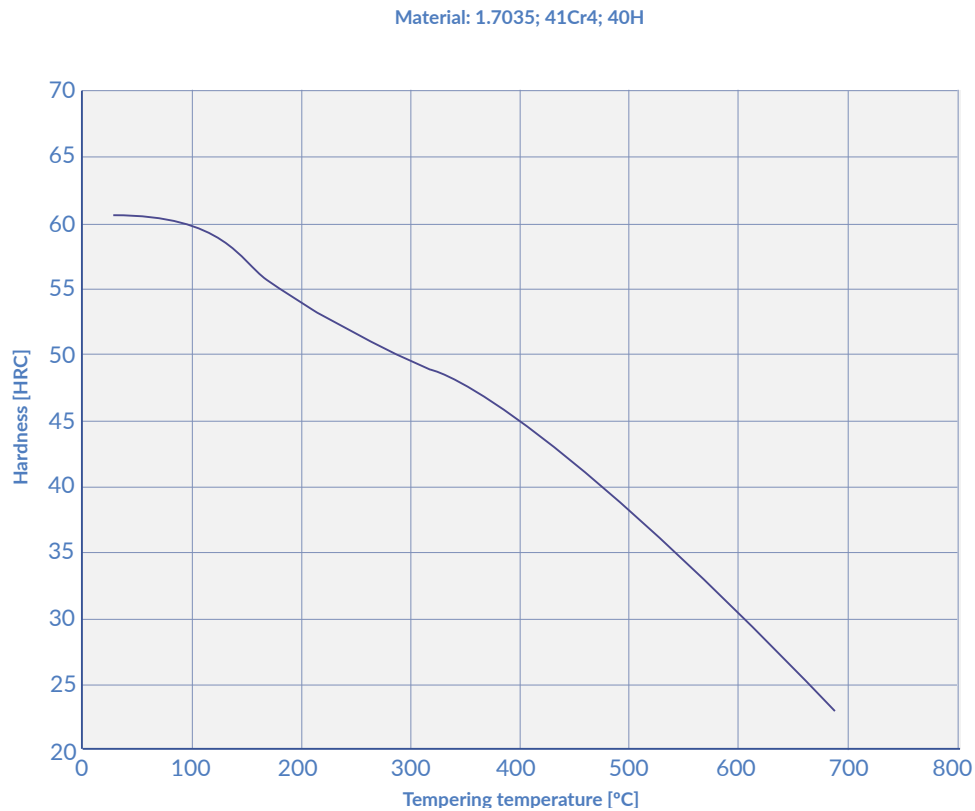
MECHANICAL PROPERTIES

Condition	Quenched and tempered (+QT)	Quenched & tempered and surface hardened, relaxed at 150 - 180°C (1h)
Hardness [HB]	Depend on diameter and thickness	max. 53

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM



NOTE: All technical information is for reference only.