

1.6582

34CrNiMo6 / 34HNM

STEEL FOR HEAT TREATMENT

APPLICATION

For highly stressed parts in the automobile and motor construction. Steel for cold extrusion, steel for superficial hardening, steel forging. Crankshafts of aircraft engines, driving shafts, large-sized turbine components, gear wheels, rotors and discs of steam turbines.

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
min	0.30	0.10	0.50	max.	max.	1.30	0.15	1.30	max.
max.	0.38	0.40	0.80	0.025	0.035	1.70	0.30	1.70	0.40

TREATMENT

Hardening	830 - 860 °C at least 30 min. (approx.) / oil
Tempering	540 - 660 °C at least 60 min. (approx.)

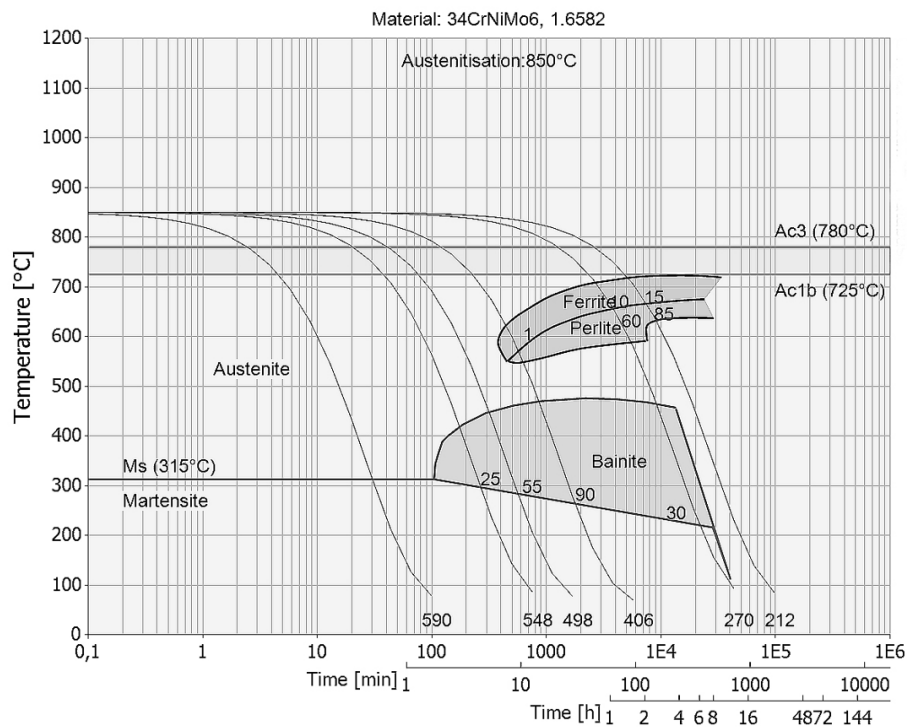
ADDITIONAL HEAT TREATMENT

Normalising	850 - 880 °C
Soft annealing	650 - 680 °C

MECHANICAL PROPERTIES

Condition	Quenched and tempered (+QT)	Soft annealed (+A)
Hardness [HB]	Depend on diameter and thickness	max. 248

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM

