

1.6580

30CrNiMo8 / 30H2N2M

STEEL FOR HEAT TREATMENT

APPLICATION

For highly stressed parts in automobile and motor construction. Crankshafts of aircraft engines, driving shafts, large-sized turbine components, gear wheels, connecting rods, pump and press shafts, steering elements, steam turbine shafts, rings.

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
min	0.26	0.10	0.50	max.	max.	1.80	0.30	1.80	Max.
max.	0.34	0.40	0.80	0.025	0.035	2.20	0.50	2.20	0.4

TREATMENT

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

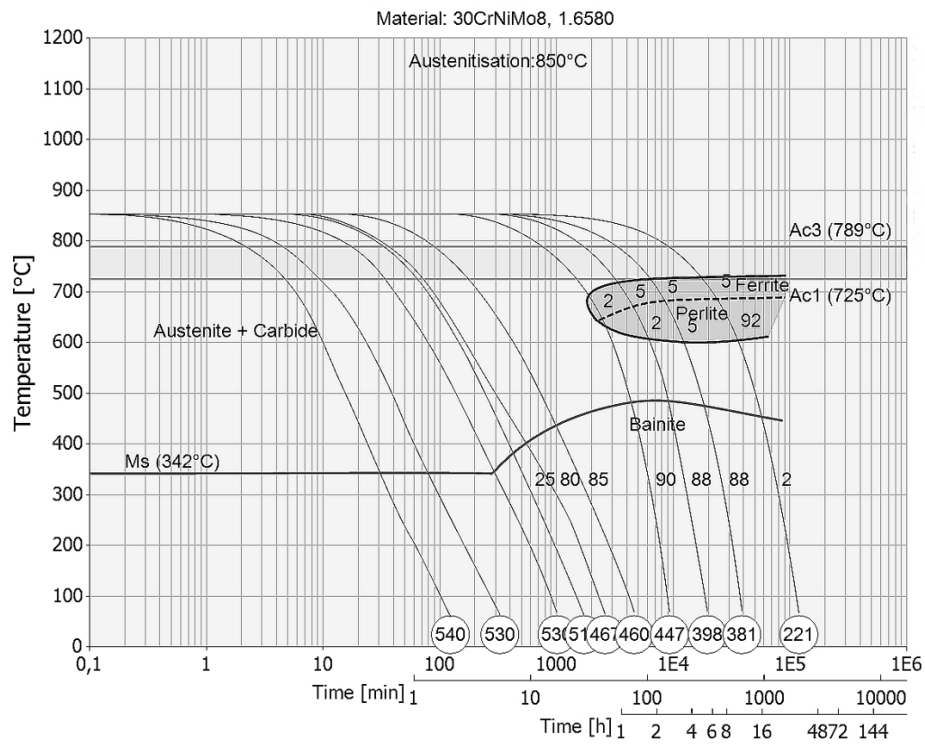
ADDITIONAL HEAT TREATMENT

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

