

COLD WORK TOOL STEEL

Wr.Nr.	PN	EN	GOST	AISI
1.2842	NMV	90MnCrV8	9Г2Φ	O2

## CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	V
min	0.85	0.10	1.80	max.	max.	0.20	0.05
max	0.95	0.40	2.20	0.03	0.03	0.50	0.20

## APPLICATION

Cutting, punching and embossing tools, squeeze mouldings for plastics industry, rollers measuring tools. Gauges, long taps, reamers, disc and circular knives for paper and leather, shear blades, guide rails.

## TREATMENT

Hardening	790°C ± 10°C/ Oil
Tempering	180°C ± 10°C (see tempering diagram)
Hardness [HRC]	min. 60

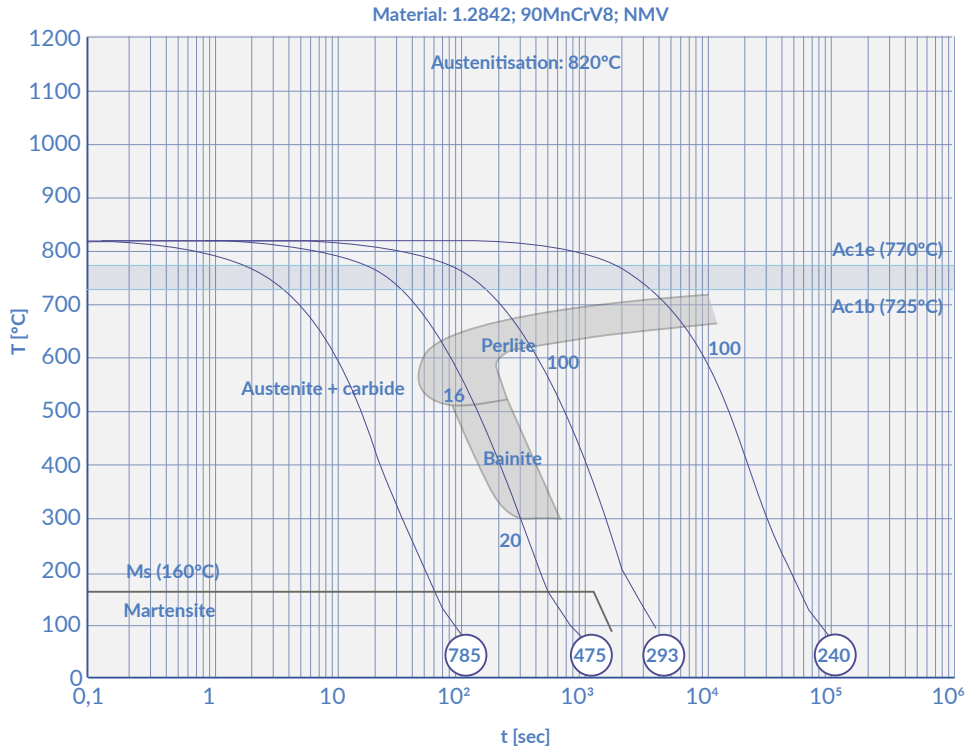
## ADDITIONAL HEAT TREATMENT

Soft annealing	680 - 720°C /furnace; max. 220 HB
Stress relieving	650 - 680°C (only for soft delivery conditions)
Additional quenching media	Hot bath 180 - 220°C

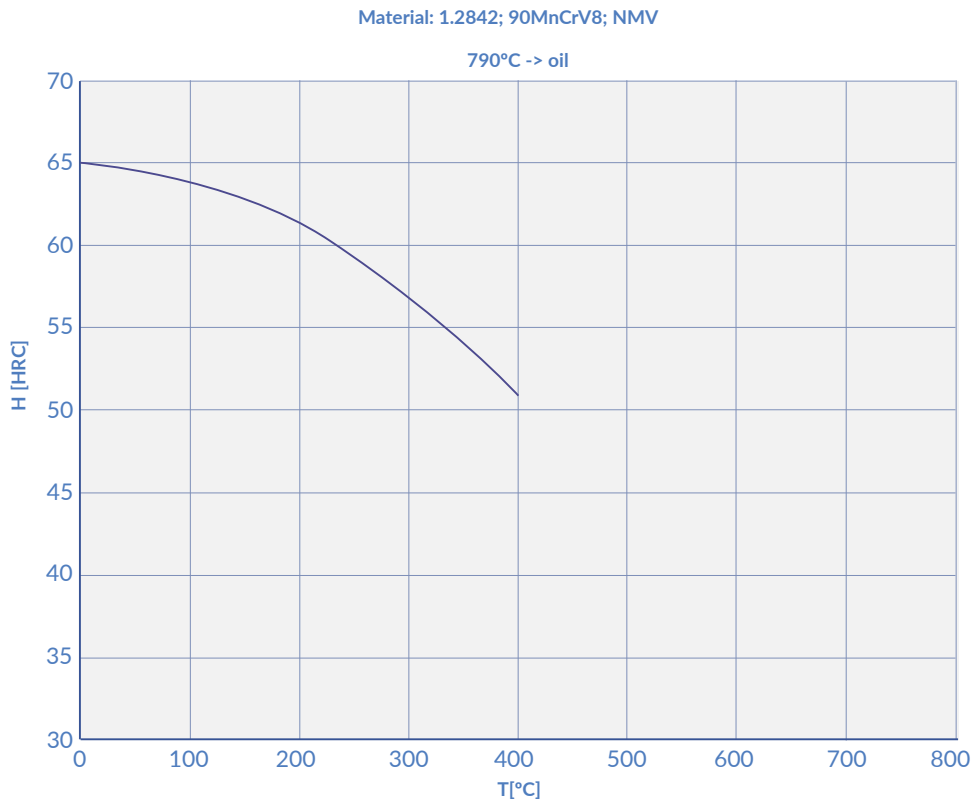
## MECHANICAL PROPERTIES

Condition	Soft annealed (+A)	Annealed and cold drawn (+A+C)
Hardness [HB]	max. 229	max. 249

## CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



## TEMPERING DIAGRAM



**NOTE:** All technical information is for reference only.