

Acciaio per molle • EN 10089

RIFERIMENTI NORMATIVI

UNI	AFNOR	DIN-W.Nr.	BS	AISI-SAE
58CrV4	-	1.8161	-	-

COMPOSIZIONE CHIMICA INDICATIVA [%]

Elemento	C	Mn	Si	Cr	Ni	Mo	V
Intervallo [%]	0.55 – 0.62	0.70 – 1.10	0.15 – 0.40	0.90 – 1.20	-	-	0.10 – 0.20

LAVORAZIONE A CALDO E TRATTAMENTO TERMICO

Punti critici: Ac1 735°C, Ac3 765°C, Ms 255 °C

Operazione	Fucinatura	Normalizzazione	Ricottura subcritica	Ric. sferoidale	Tempra	Rinvenimento
Parametro	1100 - 850	840 - 880	660 - 720	-	850 - 880	-

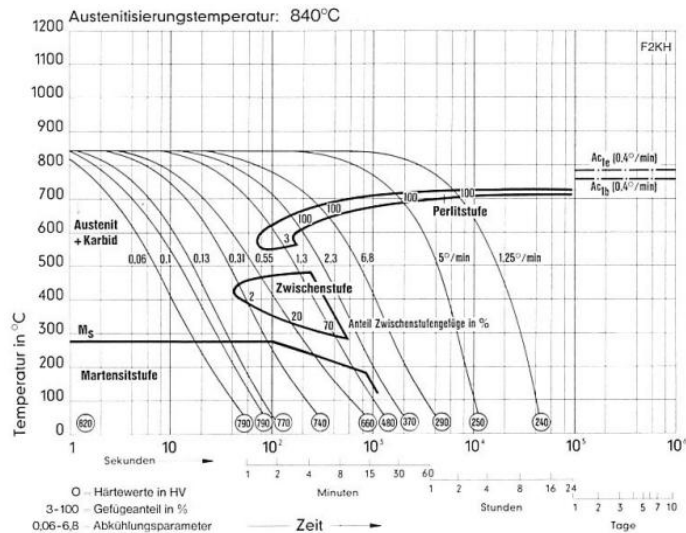
CARATTERISTICHE MECCANICHE

Rinvenuto °C	400	450	500	550	600	650
HB	468	421	384	353	315	271
HRC	49	45	41	38	33	28
R N/mm ²	1700	1480	1320	1180	1040	900
Rp 0.2	1600	1380	1210	1060	920	780
A (%)	5	8	8	9	9	10

IMPIEGHI impiegato principalmente per la fabbricazione di ingranaggi, componenti automobilistici, macchinari e apparecchiature.



CURVA CCT



CURVA TTT

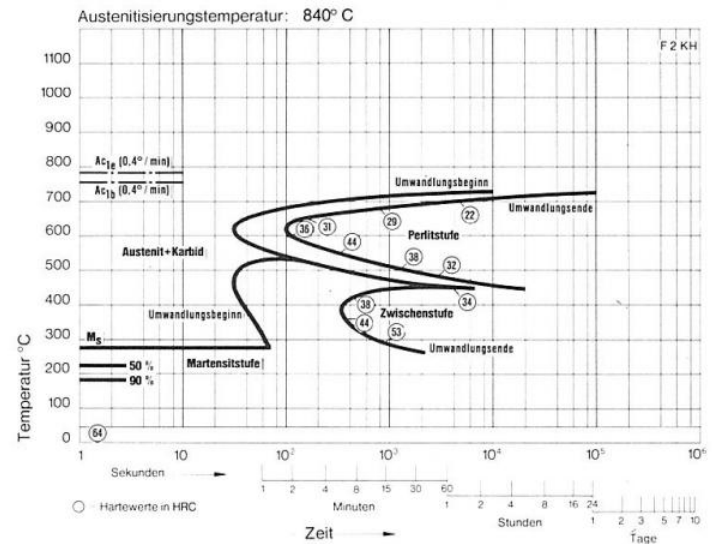


DIAGRAMMA DI RINVENIMENTO

Note operative:

Diametro: 15 mm;

Tempra: 850 °C in olio;

Rinvenimento per 1 ore;

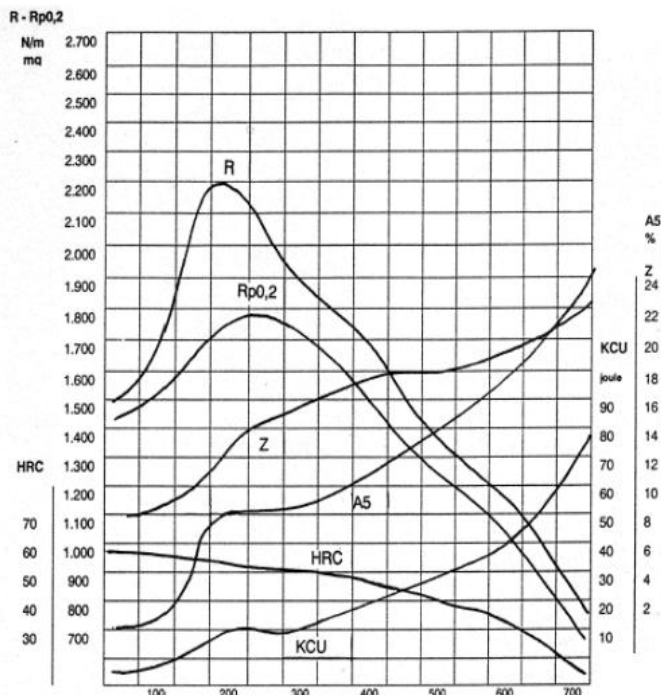
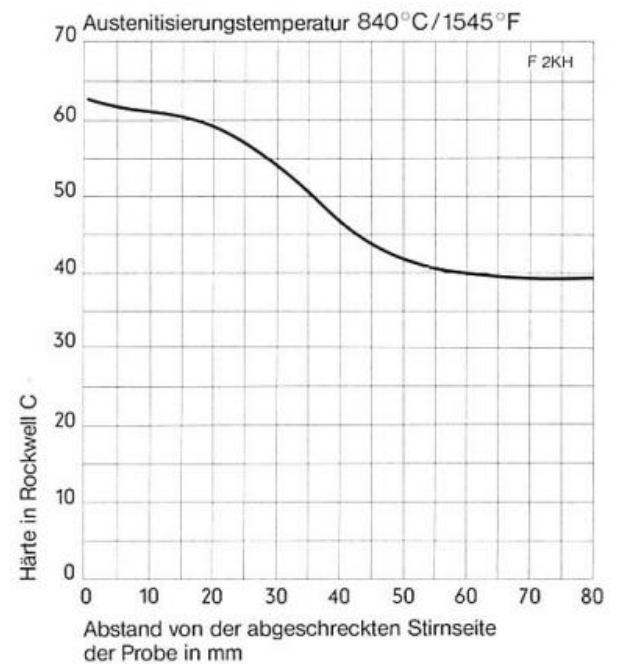


DIAGRAMMA DUREZZA



Spring steel • EN 10089

REFERENCES

UNI	AFNOR	DIN-W.Nr.	BS	AISI-SAE
58CrV4	-	1.8161	-	-

CHEMICAL COMPOSITION

Element	C	Mn	Si	Cr	Ni	Mo	S
Interval [%]	0.55 – 0.62	0.70 – 1.10	0.15 – 0.40	0.90 – 1.20	-	-	0.10 – 0.20

HOT WORKING AND HEAT TREATMENT

Critical points: Ac1 735 °C, Ac3 765 °C, Ms 255 °C.

Operation	Forging	Normalizing	Subcritical annealing	Spheroidal annealing	Tempering	Quenching
Parameter	1100 - 850	840 - 880	660 - 720	-	850 - 880	-

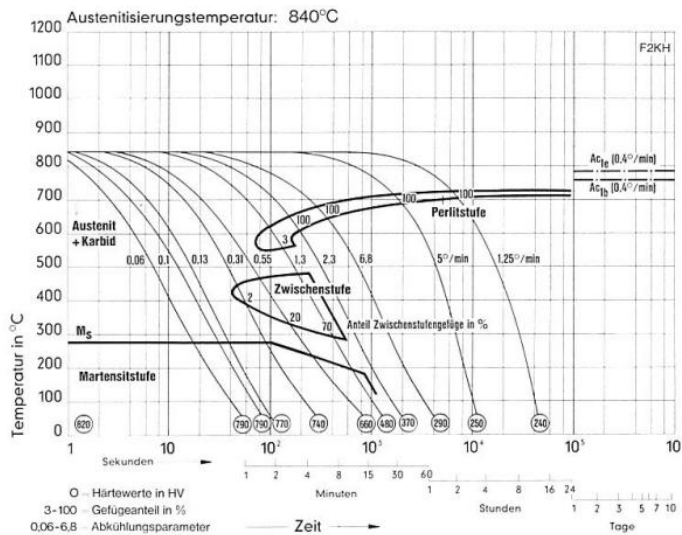
MECHANICAL PROPERTIES

Tempred °C	400	450	500	550	600	650
HB	468	421	384	353	315	271
HRC	49	45	41	38	33	28
R N/mm ²	1700	1480	1320	1180	1040	900
Rp 0.2	1600	1380	1210	1060	920	780
A (%)	5	8	8	9	9	10

USES used in the manufacturing of gears, automotive components, machinery and equipment

Sping steel • EN 10089

CURVA CCT



CURVA TTT

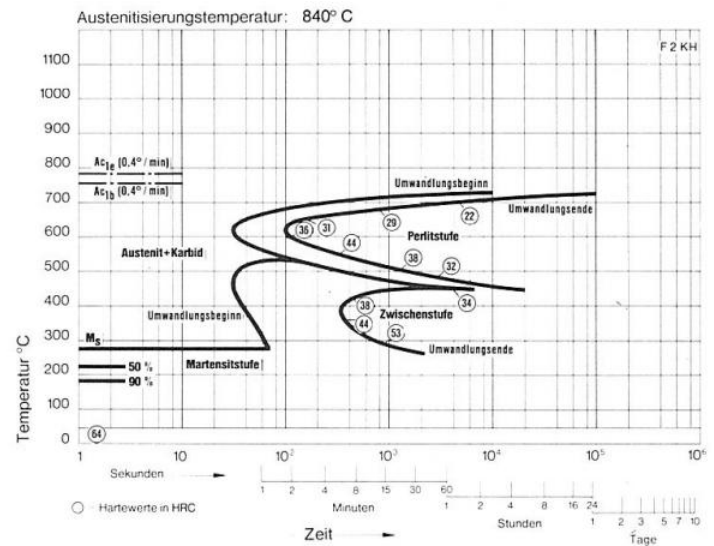


DIAGRAMMA DI RINVENIMENTO

Operative notes:

Diameter: 15 mm;

Tempering: 850 °C in oil;

Quenching for 1 hours;

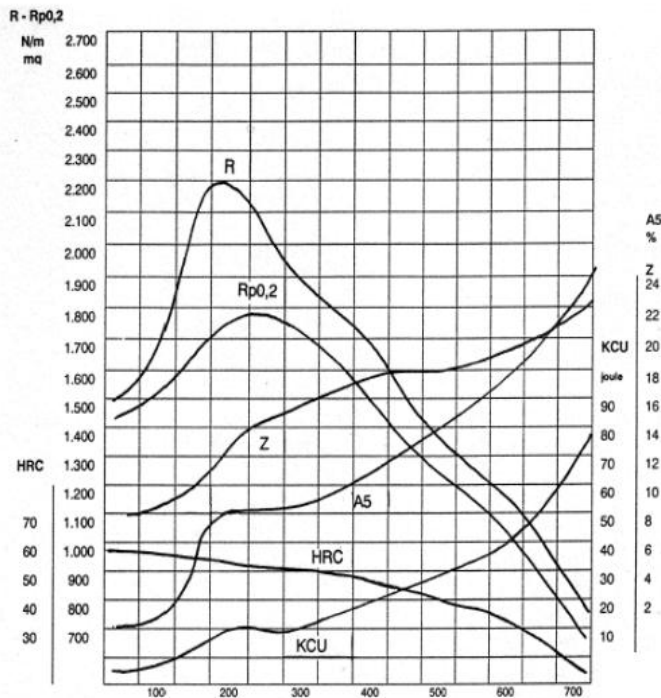


DIAGRAMMA DUREZZA

