100Cr6

TRAFILSPEC·ITS
competenza d'acciaio

Acciaio per cuscinetti • UNI EN ISO 683 -17

CORRISPONDENZE

UNI	AFNOR	DIN-W.Nr.	BS	AISI-SAE
100Cr6	100C6	1.3505	53A99	52100

COMPOSIZIONE CHIMICA INDICATIVA

Elemento	C	Mn	Si	Cr	Al	Mo	S
Range [%]	0.90 – 1.08	0.21 – 0.49	0.12 – 0.38	1.30 – 1.65	0.05	≤0.10	≤0.025

LAVORAZIONE A CALDO E TRATTAMENTO TERMICO

Punti critici: Ac1 755°C, Acm 850°C, Ms 305°C

Operazione	Fucinatura	Normalizzazione	Ricottura subcritica	Ricottura sferoidale	Tempra	Rinvenimento
T [°C]	850 - 1050	870 – 900	700 - 740	800	830 - 870	150 - 200

CARATTERISTICHE MECCANICHE

Spessore Ø [mm]	Durezza HB	
	+AC	+AC+C
≤16	207	241
≤40	207	241
≤100	207	241

IMPIEGHI

Adatto per la costruzione di **ghiere, sfere e rulli per cuscinetti** di piccole e medie dimensioni, **piccoli cilindri** per laminazione a freddo, di **fusi e camme** per macchine tessili e coltelli.

DIAGRAMMA DI RINVENIMENTO

Note operative:
Diametro: 10 mm;
Tempra: 850 °C in olio;
Rinvenimento per 2 ore;

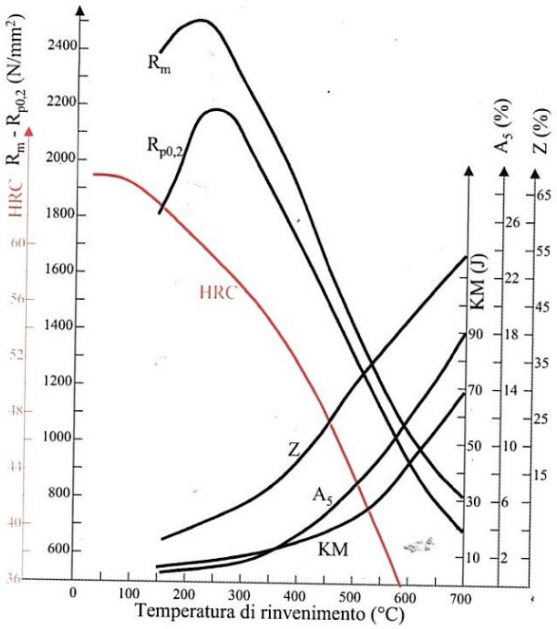


Diagramma CCT

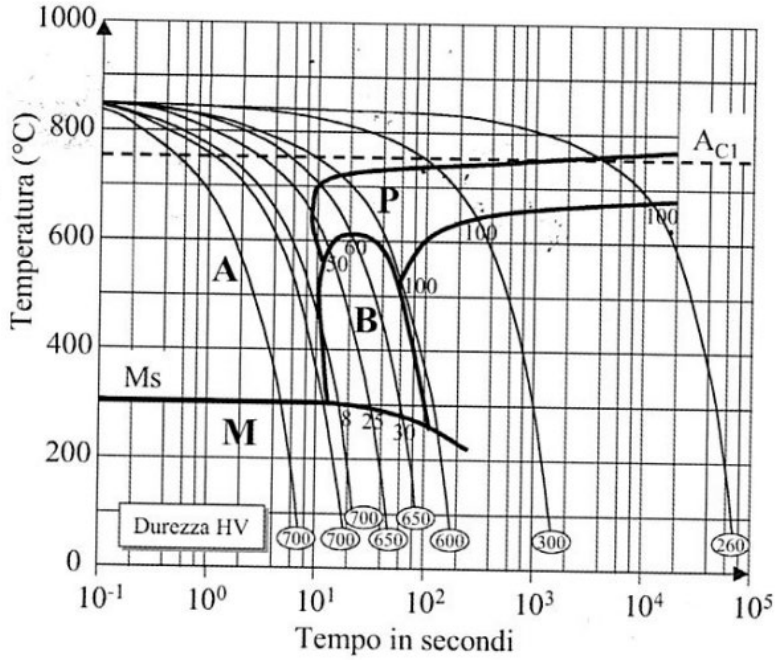
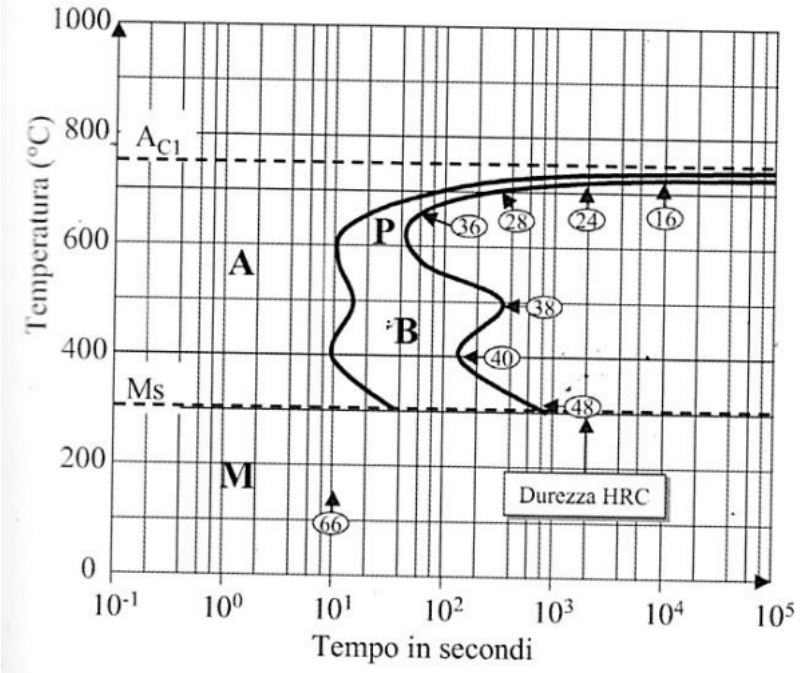


Diagramma TTT



100Cr6

TRAFILSPEC·ITS
competenza d'acciaio

Bearing steel • UNI EN ISO 683 -17

CORRESPONDENCES

UNI	AFNOR	DIN-W.Nr.	BS	AISI-SAE
100Cr6	100C6	1.3505	53A99	52100

CHEMICAL COMPOSITION

Element	C	Mn	Si	Cr	Al	Mo	S
Range [%]	0.90 – 1.08	0.21 – 0.49	0.12 – 0.38	1.30 – 1.65	0.05	≤0.10	≤0.025

HOT WORKING AND HEAT TREATMENT

Critical points: Ac1 755°C, Acm 850°C, Ms 305°C

Operation	Forging	Normalizing	Subcritical annealing	Spheroidal annealing	Quenching	Tempering
T [°C]	850 – 1050	870 – 900	700 - 740	800	830 - 870	150 - 200

MECHANICAL PROPERTIES

Size Ø [mm]	HB hardness	
	+AC	+AC+C
≤16	207	241
≤40	207	241
≤100	207	241

USES

Used for the construction of **ring nuts, balls** and rollers for small and medium-sized bearings, small cylinders for cold rolling, **spindles and cams** for textile machines and knives.

TEMPERING DIAGRAM

Operative notes:
Diameter: 10 mm;
Quenching: 850 °C in oil;
Tempering for 2 hours;

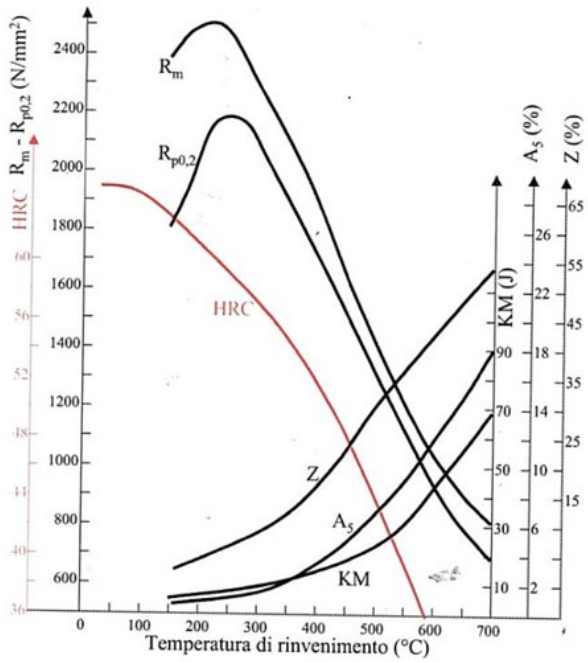


Diagramma CCT

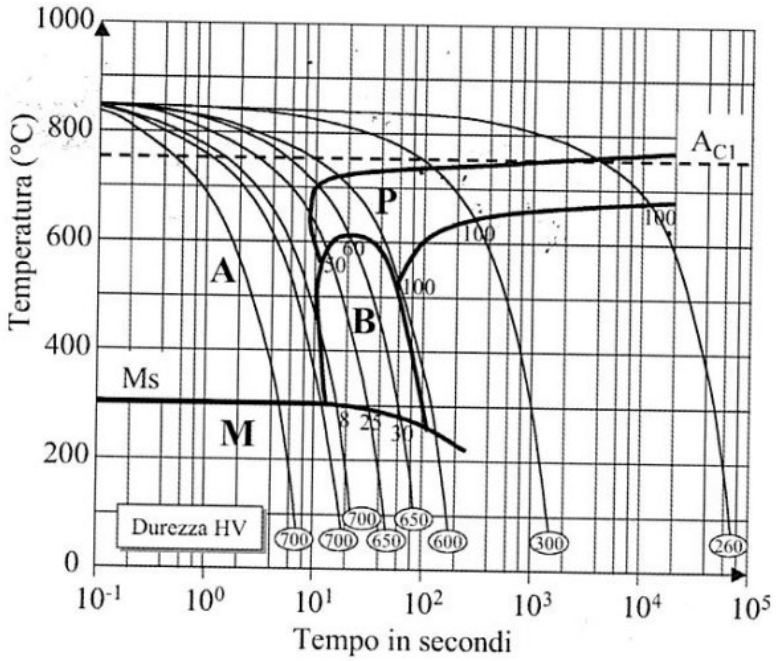


Diagramma TTT