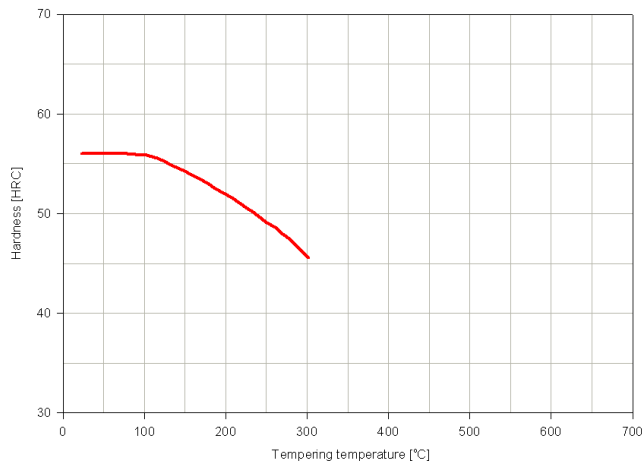


SSA1191

Trade Name	Technical Delivery Condition	Annealed Hardness	Typical Chemical Composition					
			C	Si	Mn	Cr	Mo	Ni
SSA1191	Normalised	190 HB	0.42 – 0.50	≤ 0.40	0.50 – 0.80	≤ 0.40	≤ 0.10	≤ 0.40

Werkstoff	DIN standard	AISI	BS	JIS	SIS	UNI
1.1191	CK45	1045		S45C	1672	C45



Graph 1

Type of steel and characteristics:

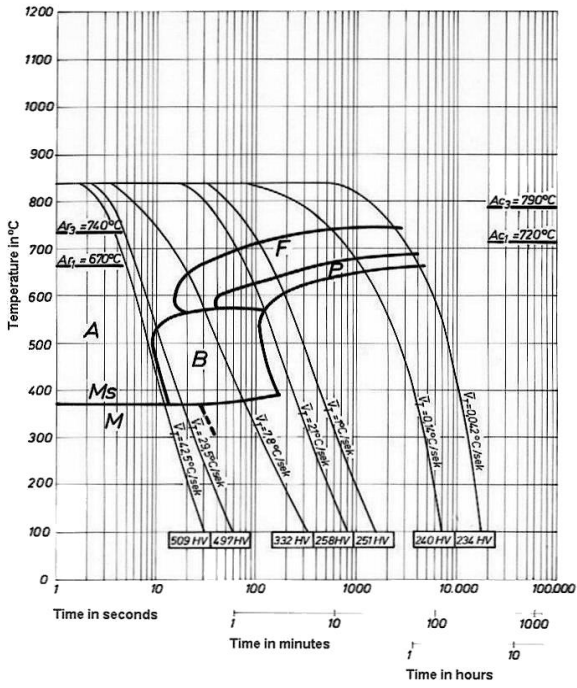
Unalloyed Medium Carbon Steel.

Applications:

Components with small cross sections, requiring with low tensile strength, as well as heavy forging in normalised condition. For general mechanical and automotive engineering, engine construction, e.g. axles, clutch members, shafts, pressed and blank parts, piston rods and gear racks.

Heat Treatment:

Hot Forging	1050 - 850°C
Normalizing	820 - 850°C
Annealing	650 - 700°C
Hardening	810 - 840°C
Hardness obtainable	50 – 56 HRC water quenched
Tempering	Refer Graph 1



TTT Graph