

EQUIVALENTS:

American: AISI 4340

British: BS970 Part 1 1983, 817M40 (EN24)

German: W. Stoff No 1.6582

COLOUR CODE:



Rolled



Heat Treated

CHEMICAL COMPOSITION %

	C	Si	Mn	Ni	Cr	Mo	S	P
Min	0.36	0.10	0.45	1.30	1.00	0.20		
Max	0.44	0.35	0.70	1.70	1.40	0.35	0.035	0.040

MECHANICAL PROPERTIES:

Heat Treatment	Tensile Strength RM MPA	Yield Stress REMPA	RP0,2 MPA	A min on 5,65 √So	Impact		Hardness HB	Limited Ruling Section mm
					IZOD FT.Lb	KCV Joules		
T	850/1000	650	635	13	30	35	248/302	250
	850/1000	680	665	13	40	50	248/302	150
U	925/1075	755	740	12	35	42	269/331	100
V	1000/1150	850	835	12	35	42	293/352	63
W	1075/1225	940	925	11	30	35	311/375	29
X	1150/1300	1020	1005	10	25	28	341/401	29
Y	1225/1375	1095	1080	10	18	21	363/429	29
Z	1550	1235	1125	5	8	9	444	29

CHARACTERISTICS:

- Alloy steel
- A 6% allowance should always be made for removal of surface defects during machining
- Machinability good (tends to work harden)
- Ideal for 60 ton tensile applications up to 250mm max
- This material is often ordered in the annealed, as rolled or forged condition for machining. Subsequent heat treatment is used to achieve higher tensility i.e condition T, U, V, W, X, Y and Z
- This grade can be nitrated or surface hardened

APPLICATIONS:

Axles
Studs
Drive shafts
Propeller shaft joints
Crankshafts
Rifle barrels
Connecting rods
Breech mechanisms for small arms
High tensile bolts
Induction hardened pins