

EQUIVALENTS:

American: AISI 4140
British: BS970 Part 1 1983, 709M40 (EN19)
Chinese: 42CrMo4
German: W. Stoff No 1.7225

COLOUR CODE:



CHEMICAL COMPOSITION %

	C	Si	Mn	Cr	Mo	P	S
Min	0.36	0.10	0.70	0.90	0.20		
Max	0.44	0.35	1.00	1.20	0.35	0.04	0.035

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		
R	700/850	495	480	15	25	28	201/255	250
S	775/925	555	540	13	20	22	223/277	250
	775/925	585	570	15	40	50	223/277	150
T	850/1000	680	665	13	40	50	248/302	100
U	925/1075	755	740	12	35	42	269/331	63
V	1000/1150	850	835	12	35	42	293/352	29
W	1075/1225	940	925	12	30	35	311/375	19

CHARACTERISTICS:

- Alloy steel
- A 6% allowance should always be made for removal of surface defects during machining
- Machinability good
- Weldable in the as rolled condition
- Ideal for 60 ton tensile applications up to 100mm max
- Sizes above limited ruling section will be heat treated to hardness only with no guarantee on mechanical properties
- This grade can be nitrited, flame and or induction hardened

APPLICATIONS:

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

TOLERANCES

- Outer Diameter (OD): +/- 1%
- Wall Thickness: +/- 10%
- The above mentioned should be determined based on nominal dimensions