

EN26 High tensile steel

Typical Analysis (Ave. values %)	C	Si	Mn	Ni	Cr	Mo	S	P	
	0.40	0.25	0.60	2.50	0.65	0.55	0.025	0.025	
NEAREST STANDARD	AS		DIN		BS 970		AISI		
	X9940		1.6745 40NiMoCr10-4		826 M 40 EN26		-		

DESCRIPTION	2½% Nickel Chromium Molybdenum alloy steel with higher Carbon content. Supplied in the hardened and tempered condition. Higher strength than EN25
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APPLICATIONS	Highly stressed components of large cross section for automotive, and general engineering applications, such as Shafts, connecting rods, pump and gear shafts, Die Holder Blocks, heavy forgings where optimum strength is required.
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HEAT TREATMENT	Forge	850-1050°C. Cool in furnace.
	Normalize	850-880°C. Air cool.
	Anneal	650-700°C. Cool slowly in controlled furnace.
	Stress relieve	In the quenched and tempered condition, about 30-50°C below the tempering temperature. Air cool. In the annealed condition, 600-650°C. Air cool.
	Harden	820-850°C Oil quench.
	Temper	540-660°C hold for 1 hour min. at temperature, air cool.

MECHANICAL PROPERTIES Heat Treated Condition	Condition	Ruling section mm	Tensile Strength MPa	Yield Strength MPa	Elong. %	Izod Impact J	Brinell Hardness
	U	250	930-1080	725	12	34	269-331
	U	150	930-1080	740	12	47	269-331
	V	250	1000-1150	820	12	34	293-352
	V	150	1000-1150	835	12	47	293-352
	W	250	1080-1230	910	11	27	311-375
	W	150	1080-1230	925	11	40	311-375
	X	150	1150-1300	1005	10	34	341-401
	Y	150	1230-1380	1080	10	34	363-429
	Z	100	1555-	1125	7	13	444-

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WELDING	Limited weldability. Parts should be welded in the hardened and tempered condition. Strength properties of the joint will not be the same as the base metal. Preheat 300-400oC. Temper after welding to about 35-50°c below the recommended tempering temperature. Filler metal: - Fox CM2-KB electrodes or CM2-IG wire. For advice in connection with difficult welding, please consult our engineers.
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SIZE RANGE	Standard stock condition "V" (Refer to mechanical properties)	
	Round	32 to 360 mm

Notes

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