

Engineering Steel

Applications

- High strength shafts
- Punches & dies
- Drill bushings
- Retaining rings
- Gears

Product Description

EN24 is a very high strength steel alloy which is supplied hardened and tempered. The grade is a nickel chromium molybdenum combination - this offers high tensile steel strength, with good ductility and wear resistance characteristics. With relatively good impact properties at low temperatures, EN24 is also suitable for a variety of elevated temperature applications.

Hardening

Supplied hardened and tempered.

Availability

Round bar, flat bar, square bar and plate

Key features:

- Very high strength steel alloy
- Easy to heat treat and temper
- Supplied hardened & tempered
- Good combination of strength, ductility and wear resistance

Machinability

Readily machinable

Related material specifications

BS 970:1955	EN24T
BS 970:1991	817M40T
German / DIN	34CrNiMo6
French AFNOR	35NCD6
American AISI / SAE	4340
German Werkstoff No.	1.6582
European Standard	EN10277-5

Chemical Composition (weight %)

	C	Si	Mn	P	S	Mo	Cr	Ni
min.	0.36	0.10	0.45			0.20	1.00	1.30
max.	0.44	0.35	0.70	0.035	0.04	0.35	1.40	1.70

Mechanical Properties (subject to ruling section)

Condition	Tensile N/mm ²	Yield N/mm ²	Elongation %	Izod KCV J	Hardness Brinell
T	850-1000	650	13	35	248-302
U	925-1000	755	12	42	269-331
V	1000-1150	850	12	42	293-352
W	1075-1225	940	11	35	311-375
X	1150-1300	1020	10	28	341-401
Y	1225-1375	1095	10	21	363-429
Z	1550	1235	5	9	444

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

www.smithmetal.com

sales@smithmetal.com

Biggleswade 01767 604604	Birmingham 0121 7284940	Bristol 0117 9712800	Chelmsford 01245 466664	Gateshead 0191 4695428	Horsham 01403 261981	Leeds 0113 3075167
London 020 72412430	Manchester 0161 7948650	Nottingham 0115 9254801	Norwich 01603 789878	Redruth 01209 315512	Verwood 01202 824347	General 0845 5273331



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