

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.

UK Service Centres:

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Smiths Biggleswade	01767 604 704
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Quality & Testing:



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