

EN40B

Technical Datasheet



Engineering Steel

Service. Quality. Value.

Applications

- Drills
- Guides
- Shafts
- Gear wheels
- Bolts and fixings

Product Description

EN40B is a chromium-molybdenum nitriding steel characterised by its suitability for nitriding which promotes high wear resistance. The material is supplied in the hardened and tempered 'T' condition, EN40B offers good toughness and good ductility. The nitriding process produces a scale free surface with minimal distortion.

Weldability

Readily weldable in the annealed supplied condition.

Key features:

- Nitriding steel
- High wear resistance
- Good toughness & ductility
- Supplied in the hardened and tempered 'T' condition
- Good shock resistance

Machinability

Readily machinable.

Related material specifications

- EN40B
- 1.7361
- 30CD12
- 722M24
- 32CrMo12

Availability

Round bar and flat bar

Chemical Composition (weight %)

	C	Si	Mn	Mo	Cr	Ni	P	S
min.	0.20	0.10	0.40	0.40	2.90	0.40	0.05	0.05
max.	0.30	0.35	0.65	0.70	3.50	0.40	0.05	0.05

Mechanical Properties (subject to ruling section)

Condition	Tensile N/mm ²	Yield N/mm ²	Elongation %	Izod KCV J	Hardness Brinell
S	775-925	585	15	50	223-277
T	850-1000	680	13	50	248-302
U	925-1000	755	12	42	269-331

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:

Smiths Belfast **02895 908 897**
Smiths Biggleswade **01767 604 704**
Smiths Birmingham **0121 728 4940**
Smiths Bristol **0117 971 2800**
Smiths Chelmsford **01245 466 664**
Smiths Gateshead **0191 469 5428**
Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**
Smiths Manchester **0161 794 8650**
Smiths Norwich **01603 789 878**
Smiths Nottingham **0115 925 4801**
Smiths Redruth **01209 315 512**
Smiths Verwood **01202 824 347**
Main Office **0845 527 3331**

Quality & Testing:



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