

EN36

Technical Datasheet



Service. Quality. Value.

Engineering Steel

Applications

- Crankshafts
- Connecting rods
- High strength gearing
- Shafts
- Couplings

Product Description

EN36 is a carburising steel grade with very high surface strength with a soft but strong core. The material retains a remarkable degree of toughness. With high tensile strength, EN36 is used in the production of numerous high strength parts including crankshafts in the automotive and aerospace sector.

Weldability

Readily weldable in the annealed supplied condition.

Availability

Bar.

Key features:

- Carburising steel grade
- Very high surface strength with soft but strong core
- High tensile strength
- Deep hardening due to nickel/chrome content
- Excellent toughness / fatigue resistance

Machinability

Very good in the annealed condition.

Related material specifications

Australia	AS 1444-1996-X3312/X3312H
Germany	W.Nr 1.5752 DIN 14NiCr14
Great Britain	BS970: PART 3: 1991 655 M13 BS970: 1955 - EN36A
Japan	JISG 4052 SNC815H JISG 4102 SNC815
USA	SAE 3310 9310

Chemical Composition (weight %)

	C	Mn	Si	Cr	Ni	S	P
min.	0.12	0.30	0.10	0.60	3.00		
max.	0.18	0.60	0.35	1.10	3.75	0.05	0.05

Mechanical Properties *

Tensile Strength N/mm ²	Elongation %	Impact Izod J	Impact KCV J	Hardness HB	Reduction of Area %
1100	15	40	35	341	50

* blank case hardened. Test piece 19mm.

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**
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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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