

### Engineering Steel

#### Applications

- Gears
- Spindles
- Bushes
- Rollers
- Cams

#### Key features:

- Case hardening steel
- Low tensile strength
- Readily machinable & weldable
- For lightly stressed components

#### Product Description

EN32 is a case hardening steel with low tensile strength and is used in general engineering for the production of lightly stressed components. The material displays good weldability and machinability characteristics in the supplied condition and has a hard wearing surface. EN32 is classed as an unalloyed low carbon grade.

#### Machinability

Readily machinable

#### Availability

Round bar, square bar and flat bar

#### Tempering

Tempering is recommended for stress relief and maximum case toughness. Tempering range from 150-200°C.

#### Weldability

Good.

#### Chemical Composition (weight %)

	C	Mn	Si	P	S
min.	0.10	0.60	0.05		
max.	0.18	1.00	0.35	0.05	0.05

#### Mechanical Properties \*

Tensile Strength N/mm <sup>2</sup>	Elongation %	Impact Izod J	Impact KCV J
430	18	39	35

\* blank case hardened. 29m test piece.

### 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**  
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 Smiths Verwood **01202 824 347**  
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#### Quality & Testing:



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