



## CARBON STEEL BS EN 10293:2015

### (G28Mn6 - 1.1165)

This 'middle carbon steel' is one of the most widely used Carbon Steels in the industry. It is used in machinery (mechanical, electrical...) automotive industries, railroad, armament, agricultural equipment, mining, etc.

### Chemical Composition

Element		%
Carbon	C	0.25 - 0.32
Maganese	Mn	1.2 - 1.8
Silicon	Si	0.6 maximum
Phosphorus	P	0.035 maximum
Sulphur	S	0.030 maximum

Heat Treatment	
'QT1'	(Thickness <100mm)
Normalizing	880 - 950 °C +
Tempering	630 - 680 °C

Typical Mechanical Properties	
Tensile Strength	600 - 750 MPa min.
Hardness	201 - 225 HB
Elongation	14 % min.
Impact	35j min.

### Comparative Specifications

Material	Country/Standards
1.1165	European Union / EN
G28Mn6	European Union / EN
G28Mn6	United Kingdom / b.s.
SCMn 1	Japan / JIS

**To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email [sales@novacast.co.uk](mailto:sales@novacast.co.uk)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy options rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

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