



CARBON STEEL BS EN 10213:2007

(Gr 1.0619)

These steel castings used for pressure purposes are normally used in the annealed or normalised state. However when higher strength steels or steels with other enhanced properties are required a full regime of heat treatment options are available. Low carbon steel castings are often produced for case hardened products which have hard surfaces with tough ductile cores.

Chemical Composition

Element		%
Carbon	C	0.18 - 0.23
Silicon	Si	0.6 maximum
Maganese	Mn	0.5 - 1.2
Phosphorus	P	0.03 maximum
Sulphur	S	0.02 maximum
Chromium	Cr	0.3 maximum
Nickel	Ni	0.4 maximum
Molybdenum	Mo	0.12 maximum
Copper	Cu	0.3 maximum
Vanadium	V	0.03 maximum
MAX Cr+Mo+Ni+Cu+v = 1		

Heat Treatment	
'QT' - Normalized	890 - 980 °C
Quenched	890 - 980 °C
Tempered	600 - 700 °C

Comparative Specifications

Material	Country/Standards
1.0619	European Union / EN
GP 240 GH	European Union / EN
SCPH 1	Japan / JIS

Typical Mechanical Properties	
Tensile Strength	420 - 600 MPa min.
Yield Strength	240 MPa min.
Elongation	22 % min.
Reduction in the Area	22j (room temp)
'QT'	40J

To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email 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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