



## Material - BS 10213 EN 1.5422

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - BS 10213 Steel Castings for Pressure Purposes

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Carbon	C %	0.150 - 0.200	Normalising or Annealing or Hardening + Tempering															
Silicon	Si %	0.600 max.																
Manganese	Mn %	0.800 - 1.200																
Phosphorus	P %	0.020 max.																
Sulphur	S %	0.020 max.																
Chromium	Cr %	0.300 max.																
Nickel	Ni %	0.400 max.																
Molybdenum	Mo %	0.450 - 0.650																
Copper	Cu %	0.300 max.																
Vanadium	V %	0.050 max.																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>440 - 790</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>240 min.</td> </tr> <tr> <td>Elongation in %</td> <td>23 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>27 min. @ -45°C</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	440 - 790	Yield Strength in Mpa	240 min.	Elongation in %	23 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	27 min. @ -45°C
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G18Mo5	UNI	Italy	Steel
StE285	DIN	Germany	Steel
TS 15 CD 2-05	AFNOR NF	France	Steel
WStE 285	DIN	Germany	Steel
1.0486	BS	British	Steel
1.0488	BS	British	Steel
1.0487	BS	British	Steel

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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