

# Material: BS 10213 EN 1.7357

## 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 %	0.500 - 1.000																
Phosphorus	P %	0.020 max.																
Sulphur	S %	0.020 max.																
Chromium	Cr %	1.000 - 1.500																
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>490 - 690</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>315 min.</td> </tr> <tr> <td>Elongation in %</td> <td>20 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. @ RT</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	490 - 690	Yield Strength in Mpa	315 min.	Elongation in %	20 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	27 min. @ RT
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J12072	UNS	USA	Casting
SA-217 Grade WC6	ASME	USA	Casting
G 17 CrMo 5-5	AFNOR NF	France	Casting
A426 Grade CP11	ASTM	USA	Steel
621	BS	British	Plate
G S 17 CrMo 5-5	DIN	Germany	Casting
A S 17 CrMo 5-5	EN	European Union	Casting

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