

# Material: BS 10213 EN 1.4859

## Standard Specification for Steel Castings for Pressure Purposes

**Group:** Ferrous Stainless 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 %	0.050 - 0.150	AS- Cast															
Silicon	Si %	0.500 - 1.500																
Manganese	Mn %	2.000 max.																
Phosphorus	P %	0.040 max.																
Sulphur	S %	0.030 max.																
Chromium	Cr %	19.000 - 21.000																
Nickel	Ni %	31.000 - 33.000																
Molybdenum	Mo %	0.500 max.																
Copper	Cu %	0.500 max.																
Niobium	Nb %	0.500 - 1.500																
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>400 - 600</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>180 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	400 - 600	Yield Strength in Mpa	180 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
1.4859	BS	British	Casting
1.4859	DIN	Germany	Casting
GX10NiCrSiNb32-20	UNI	Italy	Casting
GX10NiCrSiNb32-20	EN	European Union	Casting
GX10NiCrSiNb32-20	DIN	Germany	Casting
GX10NiCrSiNb32-20	BS	British	Casting
GX10NiCrSiNb32-20	AFNOR NF	France	Casting

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