

# Material: BS 10213 EN 1.4581

## 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		
Carbon	C %	0.070 max.
Silicon	Si %	1.500 max.
Manganese	Mn %	1.500 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 max.
Chromium	Cr %	18.000 - 20.000
Nickel	Ni %	9.000 - 12.000
Molybdenum	Mo %	2.000 - 2.500
Copper	Cu %	0.500 max.
Niobium	Nb %	8×C - 1.000 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment	
Solution Annealing	

Mechanical Properties	
Tensile Strength in Mpa	440 - 640
Yield Strength in Mpa	210 min.
Elongation in %	25 min.
Reduction of Area in %	-
Hardness in BHN	-
Impact in Joule	40 min. @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4581	BS	British	Casting
1.4581	DIN	Germany	Casting
GX 5 CrNiMoNb19-11-2	DIN	Germany	Casting
GX 5 CrNiMoNb19-11-2	AFNOR NF	France	Casting
GX 5 CrNiMoNb19-11-2	EN	European Union	Casting
GX 5 CrNiMoNb19-11-2	UNI	Italy	Casting
G X 6 CrNiMoNb 20 11	UNI	Italy	Casting

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