



## Material - MSZ 1.4581

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - MSZ 1.4581 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 %	0.070 max.	Normalizing or Quenching or Solution Annealing	
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		
Molybdenum	Mo %	2.000 - 2.500		
Nickel	Ni %	9.000 - 12.000		
Copper	Cu %	0.500 max.		
Nb + Ta	Nb % + Ta %	1.000 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa      440 - 640 Yield Strength in Mpa      185 min. Elongation in %      25 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      40 J @ RT	
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-	-	-		
-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
GX5CrNiMo19-11-2	BS	British	Plate, Tubes and Forging
1.4581	ISO	International	Casting
1.4581	UNI	Italy	Casting
1.4581	PN	Poland	Casting
1.4581	UNE	Spain	Casting
1.4581	SS	Sweden	Casting
1.4581	BDS	Bulgaria	Casting

**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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