

## Material - EN 1.4589

## Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - DIN 1.4589 Chromium and Chromium-Nickel Stainless Steel for Pressure Vessels and for General Applications

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Steel and Flate

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	Р%	0.040 max.	Annealing or Hardening + Tempering	
Sulphur	S %	0.030 max.		
Chromium	Cr %	13.500 - 15.500		
Nickel	Ni %	1.000 - 2.500		
Molybdenum	Mo %	0.200 - 1.200		
Titanium	Ti %	0.300 - 0.500	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	550 - 750
-	-	-	Yield Strength in Mpa	360 min.
-	-	-	Elongation in %	14 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
A240 UNS S42035	ASTM	USA	Steel, Plate, Sheet and Strip	
S42035	UNS	USA	Steel	
A268 S42035	ASTM	USA	Steel and Tube	
A959 S42035	ASTM	USA	Steel	
1.4589	DIN	Germany	Steel and Flat	
X5CrNiMoTi 15 2	DIN	Germany	Steel and Flat	
X5CrNiMoTi 15 2	EN	European Union	Steel and Flat	

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

## **ONE STOP SOLUTION FOR METAL PARTS**