



## Material - EN X 12 CrNi 23-13

## **Standard Specification for Austenitic Heat Resisting Steel**

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - EN X 12 CrNi 23-13 Austenitic Heat Resisting Steel

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Bar Wire, Strip, Plate, Sheet, and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.045 max.		
Sulphur	S %	0.150 max.		
Chromium	Cr %	22.000 - 24.000		
Nickel	Ni %	12.000 - 14.000		
Nitrogen	N %	0.110 max.		-
Iron	Fe %	Balance	Mechanical Properties	
-	-		Tensile Strength in Mpa	500 - 700
-	-		Yield Strength in Mpa	210 min.
-	-	-	Elongation in %	33 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	192 J @ RT
	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
SA-351 Grade CH8	ASME	USA	Casting	
X 7 CrNi 23-14	DIN	Germany	Rolled and Forged Steel	
309S	AISI	USA	Bar, Wire, Strip, Plat, Sheet and Forging	
X 15 CrNi 24-13	AFNOR NF	France	Rolled Tubes for Pressure Service	
SUS 309S	JIS	Japan	Wire, Rods for Wedding Material	
X 6 CrNi 23-14	UNI	Italy	Plate, Sheet, Strip and Coil	
A351 CH8	ASTM	USA	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

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