

# Material: ASTM A 789 S32003

## 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:** ASTM A 789 S32003 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 Tube

Chemical Composition		
Carbon	C %	0.030 max.
Silicon	Si %	1.000 max.
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.030 max.
Sulphur	S %	0.020 max.
Chromium	Cr %	19.500 - 21.500
Nickel	Ni %	3.000 - 4.000
Molybdenum	Mo %	1.500 - 2.000
Nitrogen	N %	0.140 - 0.200
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment	
	Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	655 min.
Yield Strength in Mpa	450 min.
Elongation in %	25 min.
Reduction of Area in %	-
Hardness in HB	290 max.
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32003	ASTM	USA	Steel, Plate, Sheet and Strip
S32003	UNS	USA	Steel
A959 S32003	ASTM	USA	Steel
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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