

# Material: ASTM A 789 S32001

## 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 S32001 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 %	4.000 - 6.000
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 max.
Chromium	Cr %	19.500 - 21.500
Molybdenum	Ni %	0.600 max.
Nickel	Ni %	1.000 - 3.000
Nitrogen	N %	0.050 - 0.170
Copper	Cu %	1.000 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment	
	Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	620 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 S32001	ASTM	USA	Steel, Plate, Sheet and Strip
S32001	UNS	USA	Steel
A959 S32001	ASTM	USA	Steel
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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