

## Material: AISI 405

### 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:** AISI 405 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

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.	Annealing or Hardening + Tempering	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	11.500 - 14.500		
Aluminium	Al %	0.100 - 0.300		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	415 - 724
-	-	-	Yield Strength in Mpa	170 min.
-	-	-	Elongation in %	11 min.
-	-	-	Reduction of Area in %	45 min.
-	-	-	Hardness in HB	250 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S40500	ASTM	USA	Steel, Plate, Sheet and Strip
S40500	UNS	USA	Steel
405	AMS	USA	Sheet, Bar, Wire, Shape and Forging
405	AS	Australia	Steel, Sheet, Plate and Strip
405	SAE	USA	Sheet, Bar, Wire, Shape and Forging
STS 405	KS	Korea	Steel and Wire
SUS 405	JIS	Japan	Steel, Plate and Sheet

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