



Material - ASME SA-312 UNS S31725

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 - ASME SA-312 UNS S31725 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 Pipe

Chemical Composition			Heat Treatment															
Carbon	C %	0.030 max.	Solution Annealing															
Silicon	Si %	0.750 max.																
Manganese	Mn %	2.000 max.																
Phosphorus	P %	0.040 max.																
Sulphur	S %	0.030 max.																
Chromium	Cr %	18.000 - 20.000																
Molybdenum	Mo %	4.000 - 5.000																
Nickel	Ni %	13.500 - 17.500																
Copper	Cu %	0.750 max.																
Nitrogen	N %	0.100 max.																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>515 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>205 min.</td> </tr> <tr> <td>Elongation in %</td> <td>25 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	515 min.	Yield Strength in Mpa	205 min.	Elongation in %	25 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	-
Mechanical Properties																		
Tensile Strength in Mpa	515 min.																	
Yield Strength in Mpa	205 min.																	
Elongation in %	25 min.																	
Reduction of Area in %	-																	
Hardness in BHN	-																	
Impact in Joule	-																	
-	-	-																
-	-	-																
-	-	-																
-	-	-																
-	-	-																

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S31725	ASTM	USA	Steel, Plate, Sheet and Strip
A358 S31725	ASTM	USA	Steel
A403 WP S31725	ASTM	USA	Steel and Pipe
A943 S31725	ASTM	USA	Steel and Pipe
SA-376	ASME	USA	Steel and Pipe
SA-409 UNS S31725	ASME	USA	Steel and Pipe
A240 S31726	ASTM	USA	Steel

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.