

## Material: UNS S32304

### 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:** UNS 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 %	0.030 max.	Solution Annealing															
Silicon	Si %	1.000 max.																
Manganese	Mn %	2.500 max.																
Phosphorus	P %	0.040 max.																
Sulphur	S %	0.030 max.																
Chromium	Cr %	21.500 - 24.500																
Nickel	Ni %	3.000 - 5.500																
Molybdenum	Mo %	0.050 - 0.600																
Nitrogen	N %	0.050 - 0.200																
Copper	Cu %	0.050 - 0.600																
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>600 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>400 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>290 max.</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	600 min.	Yield Strength in Mpa	400 min.	Elongation in %	25 min.	Reduction of Area in %	-	Hardness in BHN	290 max.	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32304	ASTM	USA	Steel, Plate, Sheet and Strip
A276 S32304	ASTM	USA	Steel, Bar and Shape
A789 S32304	ASTM	USA	Steel and Tube
A790 S32304	ASTM	USA	Steel and Tube
A928 S32304	ASTM	USA	Steel and Pipe
S32304	AS	Australia	Steel, Sheet, Plate and Strip
SA-276 S32304	ASME	USA	Steel, Bar and Shape

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