STRUCTURAL STEEL PIPE AND TUBING AS PER ASTM A106 OR A500 GRADE B H2S SERVICE

Rev	Reason of change	Date	Made By	Reviewed By	Approved By	Status
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1.0 SCOPE

1.1 This specification covers seamless and welded low carbon structural steel pipe and tubing.

1.2 For design purposes, the materials described herein should be treated as 35 ksi (241 MPa) minimum yield strength for A106 plate and 50 ksi (345 MPa) for A500 Grade B/C tubing.

2.0 APPLICABLE SPECIFICATIONS

2.1 ASTM A106 Grade B

2.2 ASTM A500 Grade B and Grade C

3.0 CHEMISTRY REQUIREMENTS

3.1 The heat and product analysis shall conform to one of the compositions listed below. Values are weight percentages.

	A106 B	A500 Grade B		A500 Grade C	
		Heat	Product	Heat	Product
Carbon, max	0.30	0.26	0.30	0.23	0.27
Manganese	0.29 - 1.06	1.35, max	1.40, max	1.35	1.40
Phosphorus, max	0.025	0.025	0.025	0.035	0.045
Sulfur, max	0.025	0.025	0.025	0.035	0.045
Silicon, min	0.10	-	-	-	-

4.0 MECHANICAL PROPERTIES

4.1 Minimum yield strength for A106 plate shall be 35 ksi (241 MPa) and 50 ksi (345MPa) for A500 Grade B/C tubing.

4.2 The material shall have a maximum hardness of 237 HBW.

5.0 INSPECTION

5.1 Material shall be inspected for surface imperfections such as seams, laps or tears. Defects of this type shall be removed by grinding.