

BRI-STEEL MANUFACTURING SPECIFICATIONS



ASTM/ASME A/SA53

Steel Pipe

Gr.A: 30 ksi (205 MPa) YS, 48 ksi (330 MPa) UTS, Not Impact Tested
 Gr.B: 35 ksi (240 MPa) YS, 60 ksi (415 MPa) UTS, Not Impact Tested
 NPS 14 to 36 SMLS, All Wall Thicknesses
 Must Complete one of Hydrotesting, UT or ET
 End Finishes: Plain End, Bevel

ASTM/ASME A/SA106 Grade B/C

Seamless Steel Pipe for High Temperature Service

Gr.B: 35 ksi (240 MPa) YS, 60 ksi (415 MPa) UTS, Not Impact Tested
 Gr.C: 40 ksi (275 MPa) YS, 70 ksi (485 MPa) UTS, Not Impact Tested
 NPS 14 to 36 SMLS, All Wall Thicknesses
 Must Complete one of Hydrotesting, UT or ET
 End Finishes: Plain End, Bevel

ASTM/ASME A/SA333 Grade 6

Steel Pipe for Low Temp Service

Gr.6: 35 ksi (240 MPa) YS, 60 ksi (415 MPa) TS, Impact 18J at -45°C
 NPS 14 to 36 SMLS, All Wall Thicknesses
 Must Complete one of Hydrotesting, UT or ET
 End Finishes: Plain End, Bevel

API 5L

Specification for Line Pipe

Gr.B PSL1: 35.5ksi (245MPa) YS, 60.2ksi (415MPa) UTS, Not Impact Tested
 Gr.X42 PSL1: 42.1ksi (290MPa) YS, 60.2ksi (415MPa) UTS, Not Impact Tested
 Gr.X46 PSL1: 46.4ksi (320MPa) YS, 63.1ksi (435MPa) UTS, Not Impact Tested
 Gr.X52 PSL1: 52.2ksi (360MPa) YS, 66.7ksi (460MPa) UTS, Not Impact Tested
 Gr.X56 PSL1: 56.6ksi (390MPa) YS, 71.1ksi (490MPa) UTS, Not Impact Tested
 Gr.X60 PSL1: 60.2ksi (415MPa) YS, 75.4ksi (520MPa) UTS, Not Impact Tested
 Gr.X65 PSL1: 65.3ksi (450MPa) YS, 77.6ksi (535MPa) UTS, Not Impact Tested
 Gr.B PSL2: 35.5ksi (245MPa) YS, 60.2ksi (415MPa) UTS, Impact 27J at 0°C
 Gr.X42 PSL2: 42.1ksi (290MPa) YS, 60.2ksi (415MPa) UTS, Impact 27J at 0°C
 NPS 14 to 36 SMLS, All Wall Thicknesses
 Hydrostatic Testing is Mandatory, UT & ET when specified by end user
 End Finishes: Plain End, Bevel

CSA Z245.1

Steel Pipe

Gr.241: 241-495 MPa YS, 414-760 MPa UTS
 Gr.290: 290-495 MPa YS, 414-760 MPa UTS
 Gr.359: 359-530 MPa YS, 455-760 MPa UTS
 Gr.386: 386-540 MPa YS, 490-760 MPa UTS
 Gr.414: 414-565 MPa YS, 517-760 MPa UTS
 Gr.448: 448-600 MPa YS, 531-760 MPa UTS
 Category I: Not Impact Tested
 Category II: Impact 27J *; 60% Shear
 Category III: Impact 27J *; No Shear Requirement
 * End User specifies the test temperature.
 NPS 14 to 36 SMLS, All Wall Thicknesses
 Hydrostatic Testing and UT are Mandatory
 End Finishes: Plain End, Bevel
 End Finishes: Plain End, Bevel

NACE MR0175 / ISO 15156

Production

Refer to MR0175/ISO 15156-2 Annex A2 for Region 3 Applications
 For carbon and low-alloy hot-rolled SMLS pipe steels, the following apply
 Max 1% Ni, Max 22 HRC Hardness, No cold work permitted

NACE MR0103

Materials Resistant to Sulphide Stress Cracking in Corrosive Petroleum Refining Environments

For carbon and low-alloy SMLS pipe steels, the following apply
 Max 1% Ni, Max 22 HRC Hardness, No cold work permitted

