

PLATES TYPICAL PROPERTIES

Properties shown for annealed and as rolled alloy plate are based on single test result. They will vary considerably dependent on thickness.

| Types | Condition of Steel | Tensile Strength ksi | Yield Strength ksi | % Elong in 2" | % Elong in 8" | Approx. Brinell Hardness |
|--|--------------------|--|---|---------------|---------------|--------------------------|
| GENERAL PURPOSE | | | | | | |
| 1015 | As Rolled | 50 | 29 | — | — | 133 |
| 1020 | As Rolled | 58 | 32 | — | — | 143 |
| 1025 | As Rolled | 70 | 34 | — | — | 156 |
| STRUCTURAL QUALITY CARBON | | | | | | |
| ASTM A283, ASME SA283 | | | | | | |
| | As Rolled | 55 to 60 | 30 Min. | 25 | 22 | 133 |
| ASTM A36, ASME SA36 | | | | | | |
| | As Rolled | 58 to 80 | 36 Min. | 23 | 20 | 137 |
| INX 50, EX-TEN 50- ASTM A572 [50] | | | | | | |
| | As Rolled | 65 Min. | 50 Min. | 21 | 18 | 143 |
| TRI-STEEL, TRI-TEN ASTM A441 | | | | | | |
| | As Rolled | 70/50 Min. 67/46 Min. 63/42 Min. | (Thru 3/4") (3/4" Thru 1 1/2") (1 1/2" Thru 4") | — 21 21 | — 18 18 | — 156 156 |
| Cor-Ten A ASTM A242 | | | | | | |
| | As Rolled | 70 Min. | 50 Min. | — | 16 | 156 |
| Cor-Ten B ASTM A588[A] ASTM A588 Mod. | | | | | | |
| | As Rolled | 70 Min. | 50 Min. | 19 | 16 | 156 |
| | Q & T | 70 Min. | 60 Min. | 19 | — | 180 |
| ASTM A656 Gr. 80 | | | | | | |
| | As Rolled | 95 Min. | 80 Min. | 18 | 12 | 212/255 |
| RQC-100 | | | | | | |
| | Q & T | 110 | 100 | 18 | — | 229 |
| STRUCTURAL QUALITY ALLOY | | | | | | |
| T-1 Type A ASTM A514 Gr. B | | | | | | |
| | Q & T | 110 to 130 | 100 Min. | 16 | — | 235/293 |
| T-1 Type B ASTM A514 Gr. H | | | | | | |
| | Q & T | 110 to 130 | 100 Min. | 16 | — | 235/293 |
| T-1 ASTM A514 Gr. F | | | | | | |
| | Q & T | 110 to 130 | 100 Min. | 16 | — | 235/293 |
| T-1 Type C ASTM A514 Gr. Q | | | | | | |
| | Q & T | 100 to 130 | 90 Min. | 14 | — | 235/293 |
| PRESSURE VESSEL QUALITY CARBON | | | | | | |
| ASTM A285, ASME SA285 Grade C | | | | | | |
| | As Rolled | 55 to 75 | 30 Min. | 27 | 23 | 137 |
| ASTM A515, ASME SA515 Grade 55 | | | | | | |
| | As Rolled | 55 to 75 | 30 Min. | 27 | 23 | 137 |
| ASTM A515, ASME SA515 Grade 70 | | | | | | |
| | As Rolled | 70 to 90 | 38 Min. | 21 | 17 | 163 |
| ASTM A516, ASME SA516 Grade 70 | | | | | | |
| | As Rolled | 70 to 90 | 38 Min. | 21 | 17 | 163 |
| PRESSURE VESSEL QUALITY ALLOY | | | | | | |
| T-1 PVQ ASTM A517, ASME SA517 Grade F | | | | | | |
| | Q & T | 115 to 135 | 100 Min. | 16 | — | 235/293 |
| ASTM A387, ASME SA387 Grade II | | | | | | |
| | Ann. | 60 to 85 | 35 Min. | 22 | 19 | 135/174 |
| ASTM A387, ASME SA387 Grade 22 | | | | | | |
| | N&T | 75 to 100 | 45 Min. | 18 | — | 149/207 |
| INTERMEDIATE CARBON AISI 1045 | | | | | | |
| | As Rolled | 90 | 50 | — | — | 187 |