



CARBON HOT ROLLED STEEL BARS - ASTM A576

| Chemistry | | | | | |
|--|-----------------------|-------------------------|--------------------|--------------------|-------------------|
| Grade: | Carbon: | Manganese: | Phosphorus (max.): | Sulphur (max.): | |
| 1018 | 0.15/0.20 | 0.60/0.90 | 0.040 | 0.050 | |
| 1045 | 0.43/0.50 | 0.60/0.90 | 0.040 | 0.050 | |
| 1141 | 0.37/0.45 | 1.35/1.65 | 0.040 | 0.08/0.13 | |
| Mechanical Properties (typical) | | | | | |
| Grade: | Yield Strength (psi): | Tensile Strength (psi): | Elongation in 2": | Reduction of Area: | Brinell Hardness: |
| 1018 | 32,000 | 58,000 | 25% | 40% | 116 |
| 1045 | 45,000 | 80,000 | 16% | 40% | 163 |
| 1141 | 51,000 | 94,000 | 15% | 35% | 187 |

The information listed is correct to the best of our knowledge. Wisconsin Steel & Tube Corporation assumes no responsibility for errors or omissions. Wisconsin Steel & Tube Corporation publishes this for guidance of their customers and reserves the right to add or delete items without notification.



CARBON HOT ROLLED STEEL - ASTM A36

| Chemistry | | | | | | |
|--|-----------------------|-------------------------|-------------------|--------------------|-------------------|-------------------------------|
| Grade: | Carbon: | Manganese: | Phosphorus (max): | Sulphur (max.): | Silicon (max.): | Copper (min. when specified): |
| A36 | 0.072 | 0.60/0.90 | 0.040 | 0.050 | 0.15/0.40 | 0.200 |
| Mechanical Properties (typical) | | | | | | |
| Grade: | Yield Strength (psi): | Tensile Strength (psi): | Elongation in 2": | Reduction of Area: | Brinell Hardness: | |
| A36 | 36,000 | 58,000/80,000 | 23% | 40% | 116 | |

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