

This page is mainly introduced the 60S20 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 60S20, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## **Datasheet for Steel Grades Carbon Steel 60S20**

| 60S20 Standard Number: |          |               |               |              |
|------------------------|----------|---------------|---------------|--------------|
| Area                   | Standard | Standard Code | Standard Year | Descriptions |
|                        |          |               |               |              |

| 60S20 Chemical composition(mass fraction)(wt.%) |         |         |             |  |
|---|---------|---------|-------------|--|
| Chemical  | Min.(%) | Max.(%) | Similar (%) |  |

| 60S20 Physical Properties |         |             |  |  |
|---------------------------|---------|-------------|--|--|
| Tensile strength          | 115-234 | σb/MPa      |  |  |
| Yield Strength            | 23      | σ 0.2 ≥/MPa |  |  |
| Elongation                | 65      | δ5≥ (%)     |  |  |
| ψ                         | -       | ψ≥ (%)      |  |  |
| Akv                       | -       | Akv≥/J      |  |  |
| HBS                       | 123-321 | -           |  |  |
| HRC                       | 30      | -           |  |  |

| 60S20 Mechanical Properties |         |             |  |  |
|-----------------------------|---------|-------------|--|--|
| Tensile strength            | 231-231 | σb/MPa      |  |  |
| Yield Strength              | 154     | σ 0.2 ≥/MPa |  |  |
| Elongation                  | 56      | δ5≥(%)      |  |  |
| Ψ                           | -       | ψ≥(%)       |  |  |
| Ακν                         | -       | Akv≥/J      |  |  |
| HBS                         | 235-268 | -           |  |  |
| HRC                         | 30      | -           |  |  |



| 60S20 Heat Treatment Regime |              |              |             |              |
|-----------------------------|--------------|--------------|-------------|--------------|
| Annealing                   | Quenching    | Tempering    | Normalizing | Q & T        |
| $\checkmark$                | $\checkmark$ | $\checkmark$ |             | $\checkmark$ |

| 60S20 Range of products |   |                               |   |  |
|-------------------------|---|-------------------------------|---|--|
| Product type            | Products                                    | Dimension                     | Processes                                   | Deliver Status   |
| Plates / Sheets         | Plates / Sheets                             | 0.08-200mm(T)*W*L             | Forging, hot rolling and cold rolling       | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Steel Bar               | Round Bar, Flat Bar,<br>Square Bar          | Φ8-1200mm*L                   | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning,<br>Shot Blasting,                              |
| Coil / Strip            | Steel Coil /Steel Strip                     | 0.03-16.0x1200mm              | Cold-Rolled & Hot-<br>Rolled                | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Pipes / Tubes           | Seamless Pipes/Tubes,<br>Welded Pipes/Tubes | OD:6-219mm x<br>WT:0.5-20.0mm | Hot extrusion, Cold<br>Drawn, Welded        | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED                |

We can produce Carbon Steel the specifications follows: