**This page is mainly introduced the 310 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 310,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.**

# Datasheet for Steel Grades Specialsteel 310

| 310 Standard Number: | | |
|---|---|---|
| ITEM | Standard Number | Descriptions |
| 1 | MIL-S-862B | Steel bar, corrosion resisting, and steel billet, corrosion resisting, reforging application |

| 310 Chemical composition(mass fraction)(wt.%) | | |
|---|---|---|
| Chemical | Min.(%) | Max.(%) |
| C | | 0.25 |
| Si | | 1.50 |
| Mn | | 2.00 |
| P | | 0.045 |
| S | | 0.03 |
| Cr | 24.00 | 26.00 |
| Ni | 19.00 | 22.00 |
| Mo | | 1.00 |
| Cu | | 1.00 |

| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
| | | | | | | | | | |

Steel bar, corrosion resisting, and steel billet, corrosion resisting, reforging application

| 310 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 | - |

## 310 Mechanical Properties

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

## 310 Heat Treatment Regime

| Annealing | Quenching | Tempering | Normalizing | Q & T |
|---|---|---|---|---|
| √ | √ | √ | √ | √ |

## 310 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 Aging, Q+T, ACID-WASHED, Shot Blasting |
| Steel Bar | Round Bar, Flat Bar, Square Bar | Φ8-1200mm*L | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning, Shot Blasting, |
| Coil / Strip | Steel Coil /Steel Strip | 0.03-16.0x1200mm | Cold-Rolled & Hot-Rolled | Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting |
| Pipes / Tubes | Seamless Pipes/Tubes, Welded Pipes/Tubes | OD:6-219mm x WT:0.5-20.0mm | Hot extrusion, Cold Drawn, Welded | Annealed, Solution and Aging, Q+T, ACID-WASHED |

## We can produce Specialsteel the specifications follows: