

This page is mainly introduced the 440A Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 440A, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 440A

440A Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|----------------------|
| 1 | G3067 | Stainless steel bars |

440A Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) | Max.(%) | | | | | | | |
|----------|---------|---------|----|----|----|----|----|----|-------|
| C | 0.60 | 0.75 | | | | | | | |
| Si | | 1.00 | | | | | | | |
| Mn | | 1.00 | | | | | | | |
| P | | 0.040 | | | | | | | |
| S | | 0.030 | | | | | | | |
| Ni | | 0.60 | | | | | | | |
| Cr | 16.00 | 18.00 | | | | | | | |
| Mo | | 0.75 | | | | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |

Stainless steel bars

440A Physical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | σ_b /MPa |
| Yield Strength | 23 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 65 | $\delta_{5\%} \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |

| | | |
|-----|---------|--------------|
| Akv | - | Akv \geq J |
| HBS | 123-321 | - |
| HRC | 30 | - |

| 440A Mechanical Properties | | |
|----------------------------|---------|--------------------------|
| Tensile strength | 231-231 | σ_b /MPa |
| Yield Strength | 154 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 56 | $\delta_5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | Akv \geq J |
| HBS | 235-268 | - |
| HRC | 30 | - |

| 440A Heat Treatment Regime | | | | |
|----------------------------|-----------|-----------|-------------|-------|
| Annealing | Quenching | Tempering | Normalizing | Q & T |
| √ | √ | √ | √ | √ |

| 440A 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 | Φ 8-1200mm*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: