

This page is mainly introduced the HS 556 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of HS 556, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel HS 556

| HS 556 Standard Number: | | |
|-------------------------|----------------------|---|
| ITEM | Standard Number | Descriptions |
| 1 | SAE AMS 5877B (2002) | Iron Alloy, Corrosion and Heat-Resistant, Bars, Forgings, and Rings 29Fe - 22Cr - 21Ni - 18.5Co - 3.2Mo - 2.8W - 0.78Ta - 0.30Al - 0.05La - 0.20N Solution Heat Treated |

| HS 556 Chemical composition (mass fraction) (wt.%) | | | | | | | | | |
|--|----|---------|----|----|----|-----------|----|----|-------|
| Chemical | | Min.(%) | | | | Max.(%) | | | |
| C | | 0.05 | | | | 0.15 | | | |
| Si | | 0.20 | | | | 0.80 | | | |
| Mn | | 0.50 | | | | 2.00 | | | |
| Ni | | 19.00 | | | | 22.50 | | | |
| Cr | | 21.00 | | | | 23.00 | | | |
| Al | | 0.10 | | | | 0.50 | | | |
| Cu | | | | | | | | | |
| Ti | | | | | | | | | |
| Fe | | | | | | remaining | | | |
| Mo | | 2.50 | | | | 4.00 | | | |
| Co | | 16.00 | | | | 21.00 | | | |
| W | | 2.00 | | | | 3.50 | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
| | | | | | | | | | |

Iron Alloy, Corrosion and Heat-Resistant, Bars, Forgings, and Rings 29Fe - 22Cr - 21Ni - 18.5Co -

3.2Mo - 2.8W - 0.78Ta - 0.30Al - 0.05La - 0.20N Solution Heat Treated

HS 556 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 | - |

HS 556 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 | - |

HS 556 Heat Treatment Regime

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

| HS 556 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: