

This page is mainly introduced the 1.4057 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 1.4057, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 1.4057

| 1.4057 Standard Number: | | |
|-------------------------|------------------|--|
| ITEM | Standard Number | Descriptions |
| 1 | DIN 17440 (1996) | Stainless steels - Technical delivery conditions for drawn wire |
| 2 | DIN EN 10088-1 | Stainless steels - Part 1: List of stainless steels |
| 3 | DIN EN 10088-3 | Stainless steels - Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes |
| 4 | DIN EN 10088-5 | Stainless steels - Part 5: Technical delivery conditions for bars, rods, wire, sections and bright products of corrosion resisting steels for construction purposes |
| 5 | DIN EN 10250-4 | Open die steel forgings for general engineering purposes - Part 4: Stainless steels |
| 6 | DIN EN 10272 | Stainless steel bars for pressure purposes |
| 7 | DIN 17440 (1972) | Stainless steels - Technical delivery conditions for drawn wire |

| 1.4057 Chemical composition (mass fraction) (wt.%) | | | | | | | | | |
|--|----|---------|----|----|----|---------|----|----|-------|
| Chemical | | Min.(%) | | | | Max.(%) | | | |
| C | | 0.12 | | | | 0.22 | | | |
| Si | | | | | | 1.00 | | | |
| Mn | | | | | | 1.50 | | | |
| P | | | | | | 0.045 | | | |
| S | | | | | | 0.015 | | | |
| Cr | | 15.0 | | | | 17.0 | | | |
| Ni | | 1.50 | | | | 2.50 | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
| | | | | | | | | | |

Stainless steels - Part 3: Technical delivery conditions for semi-finished

products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes

1.4057 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 | - |

1.4057 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 | - |

1.4057 Heat Treatment Regime

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

1.4057 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: