

This page is mainly introduced the S32520 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of S32520, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel S32520

S32520 Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--------------|
|------|-----------------|--------------|

S32520 Chemical composition (mass fraction) (wt.%)

| Chemical | Min.(%) | | Max.(%) | | | | | | |
|----------|---------|----|---------|----|----|----|----|----|-------|
| C | | | 0.03 | | | | | | |
| Mn | | | 1.50 | | | | | | |
| Si | | | 0.80 | | | | | | |
| P | | | 0.035 | | | | | | |
| S | | | 0.02 | | | | | | |
| Cr | 24.00 | | 26.00 | | | | | | |
| Ni | 5.50 | | 8.00 | | | | | | |
| Mo | 3.00 | | 5.00 | | | | | | |
| N | 0.20 | | 0.35 | | | | | | |
| Cu | 0.05 | | 3.00 | | | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |

Duplex (Austenitic-Ferritic) Chromium Nickel Molybdenum Copper Nitrogen Stainless Steel

S32520 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 | - |

S32520 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 | - |

S32520 Heat Treatment Regime

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

S32520 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: