

This page is mainly introduced the X15Cr13 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X15Cr13, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel X15Cr13

| X15Cr13 Standard Number: | | | | | |
|--------------------------|--------------------------------|--|--|--|--|
| ITEM | I Standard Number Descriptions | | | | |
| 1 | DIN 17441 (1985) | Stainless steels - Technical delivery conditions for cold rolled strips and slit coils strip and sheets cut from such strips for pressure purposes | | | |
| 2 | DIN EN 10088-1 | Stainless steels - Part 1: List of stainless steels | | | |
| 3 | DIN EN 10088-2 | Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes | | | |
| 4 | 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 | | | |

| X15Cr13 Chemical composition(mass fraction)(wt.%) | | | | | | | | | |
|---|----|-----------|----|---------|----|----|---------|----|-------|
| Chemical | | | | Min.(%) | | | Max.(%) | | |
| С | | | | 0.12 | | | 0.17 | | |
| Si | | | | | | | 1.00 | | |
| Mn | | | | | | | 1.00 | | |
| Р | | | | | | | 0.045 | | |
| S | | | | | | | 0.030 | | |
| | Cr | 12.0 14.0 | | | | | | | |
| С | Si | Mn | Р | S | Cr | Ni | Мо | V | Та |
| | | | | | | | | | |
| W | N | Cu | Co | Pb | В | 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



| X15Cr13 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 | - | | | |

| X15Cr13 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 | - | | | |

| X15Cr13 Heat Treatment Regime | | | | | | |
|-------------------------------|--------------|--------------|--------------|--------------|--|--|
| Annealing | Quenching | Tempering | Normalizing | Q & T | | |
| \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | | |

| X15Cr13 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: