

This page is mainly introduced the **2Cr25Ni20 Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 2Cr25Ni20, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 2Cr25Ni20

2Cr25Ni20 Standard Number:

| ITEM | Standard Number | Descriptions |
|------|------------------|--|
| 1 | GB 13296 (2007) | Seamless stainless steel tubes for boiler and heat exchanger |
| 2 | GB 4238 (1992) | Heat-resisting steel sheets and plates |
| 3 | GB/T 1221 (1992) | Heat-resisting steel bars |
| 4 | JB/T 6398 (2006) | Heavy stainless acid resistant and heat resistant steel forgings |

2Cr25Ni20 Chemical composition (mass fraction) (wt.%)

| Chemical | | Min.(%) | | | | | Max.(%) | | | |
|----------|----|---------|----|----|----|----|---------|----|-------|--|
| C | | | | | | | 0.25 | | | |
| Si | | | | | | | 1.50 | | | |
| Mn | | | | | | | 2.00 | | | |
| P | | | | | | | 0.35 | | | |
| S | | | | | | | 0.03 | | | |
| Ni | | 19.00 | | | | | 22.00 | | | |
| Cr | | 24.00 | | | | | 26.00 | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other | |
| | | | | | | | | | | |

2Cr25Ni20

2Cr25Ni20 Physical Properties

| | | |
|------------------|---------|-----------------|
| Tensile strength | 115-234 | σ_b /MPa |
|------------------|---------|-----------------|

| | | |
|----------------|---------|----------------------------------|
| Yield Strength | 23 | $\sigma_{0.2} \geq / \text{MPa}$ |
| Elongation | 65 | $\delta 5 \geq (\%)$ |
| ψ | - | $\psi \geq (\%)$ |
| Akv | - | $Akv \geq / \text{J}$ |
| HBS | 123-321 | - |
| HRC | 30 | - |

2Cr25Ni20 Mechanical Properties

| | | |
|------------------|---------|----------------------------------|
| Tensile strength | 231-231 | σ_b / MPa |
| Yield Strength | 154 | $\sigma_{0.2} \geq / \text{MPa}$ |
| Elongation | 56 | $\delta 5 \geq (\%)$ |
| ψ | - | $\psi \geq (\%)$ |
| Akv | - | $Akv \geq / \text{J}$ |
| HBS | 235-268 | - |
| HRC | 30 | - |

2Cr25Ni20 Heat Treatment Regime

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

2Cr25Ni20 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 | $\Phi 8$ -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: