

**This page is mainly introduced the Z1CN25-20 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Z1CN25-20, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.**

## Datasheet for Steel Grades Specialsteel Z1CN25-20

| Z1CN25-20 Standard Number: |                 |   |
|----------------------------|-----------------|---|
| ITEM                       | Standard Number | Descriptions  |
| 1                          | NF A 35-573     | Stainless steels for general purposes. Plates, wide strips and strips   |
| 2                          | NF A 36-209     | Iron and steel. Austenitic and austenitic-ferritic stainless steels plates for boilers and pressure vessels   |
| 3                          | NF A 49-244     | Steel tubes - Welded austenitic stainless and austenitic ferritic steel rolled tubes for pressure service - Dimensions, technical conditions for delivery |

| Z1CN25-20 Chemical composition (mass fraction) (wt.%) |    |         |    |    |         |    |    |    |       |
|---|----|---------|----|----|---------|----|----|----|-------|
| Chemical  |    | Min.(%) |    |    | Max.(%) |    |    |    |       |
| C   |    |         |    |    | 0.015   |    |    |    |       |
| Si  |    |         |    |    | 0.40    |    |    |    |       |
| Mn  |    |         |    |    | 2.00    |    |    |    |       |
| P   |    |         |    |    | 0.025   |    |    |    |       |
| S   |    |         |    |    | 0.010   |    |    |    |       |
| Cr  |    | 24.00   |    |    | 26.00   |    |    |    |       |
| Mo  |    |         |    |    | 0.50    |    |    |    |       |
| Ni  |    | 19.00   |    |    | 22.00   |    |    |    |       |
| C   | Si | Mn      | P  | S  | Cr      | Ni | Mo | V  | Ta    |
| W   | N  | Cu      | Co | Pb | B       | Nb | Al | Ti | Other |
|   |    |         |    |    |         |    |    |    |       |

Steel tubes - Welded austenitic stainless and austenitic ferritic steel rolled tubes for pressure

service - Dimensions, technical conditions for delivery

### Z1CN25-20 Physical Properties

|                  |         |                          |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | $\sigma_b$ /MPa          |
| Yield Strength   | 23      | $\sigma_{0.2} \geq$ /MPa |
| Elongation       | 65      | $\delta_5 \geq$ (%)      |
| $\psi$           | -       | $\psi \geq$ (%)          |
| Akv              | -       | Akv $\geq$ /J            |
| HBS              | 123-321 | -                        |
| HRC              | 30      | -                        |

### Z1CN25-20 Mechanical Properties

|                  |         |                          |
|------------------|---------|--------------------------|
| Tensile strength | 231-231 | $\sigma_b$ /MPa          |
| Yield Strength   | 154     | $\sigma_{0.2} \geq$ /MPa |
| Elongation       | 56      | $\delta_5 \geq$ (%)      |
| $\psi$           | -       | $\psi \geq$ (%)          |
| Akv              | -       | Akv $\geq$ /J            |
| HBS              | 235-268 | -                        |
| HRC              | 30      | -                        |

### Z1CN25-20 Heat Treatment Regime

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

| Z1CN25-20 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:**