This page is mainly introduced the Z8CN25-20 chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Z8CN25-20, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Data Table for Grades Stainless Steels Z8CN25-20

| Z8CN25-20 Standard Number: | | | |
|----------------------------|-----------------|---|--|
| ITEM | Standard Number | Descriptions | |
| 1 | NF A 35-573 | Stainless steels for general purposes. Plates, wide strips and strips | |
| 2 | NF A 35-578 | Iron and steel. Stainless steel for high temperature application | |
| 3 | NF A 36-209 | Iron and steel. Austenitic and austenic-ferritic stainless steels plates for boilers and pressure vessels | |
| 4 | NF A 49-244 | Steel tubes - Welded austenitic stainless and austenitic ferritic steel rolled tubes for pressure service - Dimensions, technical conditions for delivery | |

| Z8CN25-20 Chemical composition(mass fraction)(wt.%) | | | |
|---|---------|---------|--|
| Chemical | Min.(%) | Max.(%) | |
| С | | 0.080 | |
| Si | | 0.75 | |
| Mn | | 2.00 | |
| Р | | 0.040 | |
| S | | 0.015 | |
| Cr | 24.00 | 26.00 | |
| Мо | | | |
| Ni | 19.00 | 21.00 | |

| Z8CN25-20 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 | - | |



| Z8CN25-20 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 | - | | |

| | Z8CN25-20 Heat Treatment Regime | | | | |
|--------------|---------------------------------|--------------|--------------|--------------|--|
| Annealing | Quenching | Tempering | Normalizing | Q & T | |
| \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | |

| Z8CN25-20 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 Stainless Steels the specifications follows:

Note:

(1) listed in the table apex diameter (d), to steel thickness (a) multiples said.

(2) in the ASTM A6 standard specified scope can meet any additional conditions.

(3) from the standard for 50 mm (2 in).

Mechanical properties

Mechanische Eigenschaften

Caracteristiques mecaniques

ReH Minimum yield strength / Mindestwert der oberen Streckgrenze / Limite d'elasticite minimale

Rm Tensile strength / Zugfestigkeit / Resistance a la traction

A Minimum elongation / Mindestwert der Bruchdehnung / Allongement minimal

J Notch impact test / Kerbschlagbiegeversuch / Essai de flexion par choc



Round bar: Diameter: 1mm-2000mm Square bar: Size: 50mm * 50mm-600mm *600mm Plate steel/flat bar: Size: Thickness: 0.1mm-800mm Width: 10mm to 1500mm Tube/pipe: Size: OD: 6-219mm WT: 1-35 mm. Cold-rolled sheet: Thickness: 2-5mm Width:1000mm Length: 2000mm Hot-rolled sheet: Thickness:6-80mm Width: 210-610mm Length: We can supply any length based on the customer's requirement. Forging/hot rolling/ extrusion of steel. Forging: Shafts with flanks/pipes/tubes/slugs/donuts/cubes/other shapes Finished goods condition: hot forging/hot rolling + annealing/normalizing + tempering/quenching + tempering/any conditions based on the customer's requirement Surface conditions: scaled (hot working finish)/ground/rough machining/fine machining/based on the customer's requirement Furnaces for metallurgical processing: electrode arc + LF/VD/VOD/ESR/Vacuum consumable electrode. Ultrasonic inspection: 100% ultrasonic inspection for any inperfections or based on the customer's requirement. UTS according to SEP 1921 C/c,D/d,E/e;A388 or GB/T 6402 Excellent service for all kinds of industries, with advantages of technologies, equipment and price. We serve you with our honesty, integrity, and professionality.