

**This page is mainly introduced the CNS 303 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of CNS 303, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.**

## Datasheet for Steel Grades Special Steel CNS 303

| CNS 303 Standard Number: |                 |                           |
|--------------------------|-----------------|---------------------------|
| ITEM                     | Standard Number | Descriptions              |
| 1                        | G3067           | Stainless steel bars      |
| 2                        | G3077           | Stainless steel wire rods |
| 3                        | G3076           | Stainless steel wires     |

| CNS 303 Chemical composition (mass fraction) (wt.%) |    |         |    |    |    |         |    |    |       |
|---|----|---------|----|----|----|---------|----|----|-------|
| Chemical  |    | Min.(%) |    |    |    | Max.(%) |    |    |       |
| C   |    |         |    |    |    | 0.15    |    |    |       |
| Si  |    |         |    |    |    | 1.00    |    |    |       |
| Mn  |    |         |    |    |    | 2.00    |    |    |       |
| P   |    |         |    |    |    | 0.20    |    |    |       |
| S   |    |         |    |    |    | 0.15    |    |    |       |
| Ni  |    | 8.00    |    |    |    | 10.00   |    |    |       |
| Cr  |    | 17.00   |    |    |    | 19.00   |    |    |       |
| Mo  |    |         |    |    |    | 0.60    |    |    |       |
| C   | Si | Mn      | P  | S  | Cr | Ni      | Mo | V  | Ta    |
|   |    |         |    |    |    |         |    |    |       |
| W   | N  | Cu      | Co | Pb | B  | Nb      | Al | Ti | Other |
|   |    |         |    |    |    |         |    |    |       |

## Stainless steel wire rods

| CNS 303 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      | -                        |

| CNS 303 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      | -                        |

| CNS 303 Heat Treatment Regime |           |           |             |       |
|-------------------------------|-----------|-----------|-------------|-------|
| Annealing                     | Quenching | Tempering | Normalizing | Q & T |
| √                             | √         | √         | √           | √     |

| CNS 303 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, | Φ8-1200mm*L       | Forging, hot rolling and              | Black, Rough Turning,   |

|               |  |                            |                                   |   |
|---------------|--|----------------------------|-----------------------------------|---|
|               | Square Bar                               |                            | cold rolling, Cast                | 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:**