

This page is mainly introduced the SUS 303Se Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 303Se, 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 SUS 303Se

### SUS 303Se Standard Number:

| ITEM | Standard Number | Descriptions                       |
|------|-----------------|------------------------------------|
| 1    | G 4303 (2005)   | Stainless steel bars               |
| 2    | G 4308 (2007)   | Stainless steel wire rods          |
| 3    | G 4309 (1999)   | Stainless steel wires              |
| 4    | G 4318 (2007)   | Cold finished stainless steel bars |

### SUS 303Se Chemical composition (mass fraction) (wt.%)

| Chemical |    | Min.(%) |    |    |    |    | Max.(%) |    |       |  |
|----------|----|---------|----|----|----|----|---------|----|-------|--|
| C        |    |         |    |    |    |    | 0.15    |    |       |  |
| Si       |    |         |    |    |    |    | 1.00    |    |       |  |
| Mn       |    |         |    |    |    |    | 2.00    |    |       |  |
| P        |    |         |    |    |    |    | 0.2     |    |       |  |
| S        |    |         |    |    |    |    | 0.06    |    |       |  |
| Cr       |    | 17.0    |    |    |    |    | 19.0    |    |       |  |
| Ni       |    | 8.00    |    |    |    |    | 10.0    |    |       |  |
| Se       |    | 0.15    |    |    |    |    |         |    |       |  |
| C        | Si | Mn      | P  | S  | Cr | Ni | Mo      | V  | Ta    |  |
| W        | N  | Cu      | Co | Pb | B  | Nb | Al      | Ti | Other |  |
|          |    |         |    |    |    |    |         |    |       |  |

Austenitic Alloys; Sizes M1.6 through M24  
 Standard Specification for Stainless Steel Socket Set Screws (Metric)

### SUS 303Se 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      | -                        |

### SUS 303Se 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      | -                        |

### SUS 303Se Heat Treatment Regime

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

### SUS 303Se 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:**