

This page is mainly introduced the SUS 317 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 317, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel SUS 317

### SUS 317 Standard Number:

| ITEM | Standard Number | Descriptions                                |
|------|-----------------|---|
| 1    | G 4312 (2011)   | Heat-resisting steel plate, sheet and strip |

### SUS 317 Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) |    |    |    |    | Max.(%) |    |    |       |  |
|----------|---------|----|----|----|----|---------|----|----|-------|--|
| C        |         |    |    |    |    | 0.08    |    |    |       |  |
| Si       |         |    |    |    |    | 1.00    |    |    |       |  |
| Mn       |         |    |    |    |    | 2.00    |    |    |       |  |
| P        |         |    |    |    |    | 0.045   |    |    |       |  |
| S        |         |    |    |    |    | 0.03    |    |    |       |  |
| Cr       | 18.00   |    |    |    |    | 20.00   |    |    |       |  |
| Ni       | 11.00   |    |    |    |    | 15.00   |    |    |       |  |
| Mo       | 3.00    |    |    |    |    | 4.00    |    |    |       |  |
| N        |         |    |    |    |    |         |    |    |       |  |
| C        | Si      | Mn | P  | S  | Cr | Ni      | Mo | V  | Ta    |  |
| W        | N       | Cu | Co | Pb | B  | Nb      | Al | Ti | Other |  |
|          |         |    |    |    |    |         |    |    |       |  |

Heat-resisting steel plate, sheet and strip

### SUS 317 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 317 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 317 Heat Treatment Regime

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

### SUS 317 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:**