

This page is mainly introduced the SUH11 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUH11, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel SUH11

### SUH11 Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--------------|
|------|-----------------|--------------|

### SUH11 Chemical composition (mass fraction) (wt.%)

| Chemical |    |    | Min.(%) |    |    |    | Max.(%) |    |       |  |
|----------|----|----|---------|----|----|----|---------|----|-------|--|
| C        |    |    | 0.45    |    |    |    | 0.55    |    |       |  |
| Si       |    |    |         |    |    |    | 1.00    |    |       |  |
| Mn       |    |    |         |    |    |    | 2.00    |    |       |  |
| P        |    |    |         |    |    |    | 0.030   |    |       |  |
| S        |    |    |         |    |    |    | 0.030   |    |       |  |
| Cr       |    |    | 7.50    |    |    |    | 9.50    |    |       |  |
| Ni       |    |    |         |    |    |    | 0.60    |    |       |  |
| Mo       |    |    |         |    |    |    |         |    |       |  |
| N        |    |    |         |    |    |    |         |    |       |  |
| C        | Si | Mn | P       | S  | Cr | Ni | Mo      | V  | Ta    |  |
|          |    |    |         |    |    |    |         |    |       |  |
| W        | N  | Cu | Co      | Pb | B  | Nb | Al      | Ti | Other |  |
|          |    |    |         |    |    |    |         |    |       |  |

CNS standard heat resistant steel bar steel grade and chemical composition

### SUH11 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      | -                |

### SUH11 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      | -                         |

### SUH11 Heat Treatment Regime

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

### SUH11 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          | $\Phi 8$ -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:**