

**This page is mainly introduced the SUS 316TKA Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 316TKA, 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 316TKA

### SUS 316TKA Standard Number:

| ITEM | Standard Number | Descriptions  |
|------|-----------------|---|
| 1    | G 3446 (2012)   | Stainless steel pipes for machine and structural purposes |

### SUS 316TKA Chemical composition (mass fraction) (wt.%)

| Chemical |    | Min.(%) |    |    | Max.(%) |    |    |    |       |
|----------|----|---------|----|----|---------|----|----|----|-------|
| C        |    |         |    |    | 0.08    |    |    |    |       |
| Si       |    |         |    |    | 1.00    |    |    |    |       |
| Mn       |    |         |    |    | 2.00    |    |    |    |       |
| P        |    |         |    |    | 0.04    |    |    |    |       |
| S        |    |         |    |    | 0.03    |    |    |    |       |
| Cr       |    | 16.00   |    |    | 18.00   |    |    |    |       |
| Ni       |    | 10.00   |    |    | 14.00   |    |    |    |       |
| Mo       |    | 2.00    |    |    | 3.00    |    |    |    |       |
| C        | Si | Mn      | P  | S  | Cr      | Ni | Mo | V  | Ta    |
| W        | N  | Cu      | Co | Pb | B       | Nb | Al | Ti | Other |
|          |    |         |    |    |         |    |    |    |       |

Stainless steel pipes for machine and structural purposes

### SUS 316TKA 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 316TKA 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 316TKA Heat Treatment Regime

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

### SUS 316TKA 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:**