

This page is mainly introduced the SUS 321 TKA Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 321 TKA, 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 321 TKA

SUS 321 TKA Standard Number:

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

SUS 321 TKA Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) | | Max.(%) | | | | | | |
|----------|---------|----|---------|----|----|----|----|----|-------|
| C | | | 0.08 | | | | | | |
| Si | | | 1.00 | | | | | | |
| Mn | | | 2.00 | | | | | | |
| P | | | 0.045 | | | | | | |
| S | | | 0.03 | | | | | | |
| Cr | 17.00 | | 19.00 | | | | | | |
| Ni | 9.00 | | 13.00 | | | | | | |
| Mo | | | | | | | | | |
| N | | | | | | | | | |
| Ti | 5×C□ | | | | | | | | |
| 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 321 TKA Physical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | σ_b /MPa |
| Yield Strength | 23 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 65 | $\delta 5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | Akv \geq /J |
| HBS | 123-321 | - |
| HRC | 30 | - |

SUS 321 TKA Mechanical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 231-231 | σ_b /MPa |
| Yield Strength | 154 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 56 | $\delta 5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | Akv \geq /J |
| HBS | 235-268 | - |
| HRC | 30 | - |

SUS 321 TKA Heat Treatment Regime

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

SUS 321 TKA 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, | $\Phi 8$ -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: