

This page is mainly introduced the X6CrNiTi 12 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X6CrNiTi 12, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Alloy Steel X6CrNiTi 12

| X6CrNiTi 12 Standard Number: |          |               |               |              |
|------------------------------|----------|---------------|---------------|--------------|
| Area                         | Standard | Standard Code | Standard Year | Descriptions |
|                              |          |               |               |              |

| X6CrNiTi 12 Chemical composition(mass fraction)(wt.%) |         |         |             |
|---|---------|---------|-------------|
| Chemical  | Min.(%) | Max.(%) | Similar (%) |
|   |         |         |             |

| X6CrNiTi 12 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      | -                        |

| X6CrNiTi 12 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      | -                        |

### X6CrNiTi 12 Heat Treatment Regime

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

### X6CrNiTi 12 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 Alloy Steel the specifications follows:**