

This page is mainly introduced the 6X2C Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 6X2C, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Tool Steel And Hard Alloy 6X2C

### 6X2C Standard Number:

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

### 6X2C Chemical composition(mass fraction)(wt.%)

| Chemical  |           |           | Min.(%) |        |           |       | Max.(%) |       |       |
|-----------|-----------|-----------|---------|--------|-----------|-------|---------|-------|-------|
| C         | Si        | Mn        | P       | S      | Cr        | Ni    | Mo      | V     | Ta    |
| 0.55-0.65 | 0.50-0.80 | 0.15-0.45 | ≤0.030  | ≤0.030 | 1.00-1.30 | ≤0.35 | ≤0.30   | ≤0.15 |       |
| W         | N         | Cu        | Co      | Pb     | B         | Nb    | Al      | Ti    | Other |
| 2.20-2.70 |           | ≤0.30     |         |        |           |       |         | ≤0.03 |       |

### 6X2C 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      | -                        |

### 6X2C 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      | -                    |

| 6??2C Heat Treatment Regime |           |           |             |       |
|-----------------------------|-----------|-----------|-------------|-------|
| Annealing                   | Quenching | Tempering | Normalizing | Q & T |
| √                           | √         | √         | √           | √     |

| 6??2C 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 Tool Steel And Hard Alloy the specifications follows:**