

This page is mainly introduced the 15Cr9AT Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 15Cr9AT, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Structure Steel 15Cr9AT

### 15Cr9AT Standard Number:

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

### 15Cr9AT Chemical composition (mass fraction) (wt.%)

| Chemical   |           |           | Min.(%) |       |           |      | Max.(%) |    |       |  |
|------------|-----------|-----------|---------|-------|-----------|------|---------|----|-------|--|
| C          | Si        | Mn        | P       | S     | Cr        | Ni   | Mo      | V  | Ta    |  |
| 0.12- 0.18 | 0.17-0.37 | 0.40-0.70 | 0.025   | 0.025 | 0.70-1.00 | 0.30 |         |    |       |  |
| W          | N         | Cu        | Co      | Pb    | B         | Nb   | Al      | Ti | Other |  |
|            |           | 0.3       |         |       |           |      |         |    |       |  |

### 15Cr9AT

### 15Cr9AT 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      | -                        |

### 15Cr9AT 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      | -                    |

### 15Cr9AT Heat Treatment Regime

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

### 15Cr9AT 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 Structure Steel the specifications follows:**