

This page is mainly introduced the 6160H Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 6160H, 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 6160H

### 6160H Standard Number:

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

### 6160H Chemical composition (mass fraction) (wt.%)

| Chemical  |           |           | Min.(%) |       |           |    | Max.(%) |    |       |
|-----------|-----------|-----------|---------|-------|-----------|----|---------|----|-------|
| C         | Si        | Mn        | P       | S     | Cr        | Ni | Mo      | V  | Ta    |
| 0.47-0.54 | 0.10-0.35 | 0.60-1.00 | 0.04    | 0.040 | 0.75-1.20 |    |         |    |       |
| W         | N         | Cu        | Co      | Pb    | B         | Nb | Al      | Ti | Other |
|           |           |           |         |       |           |    |         |    |       |

### 6160H

### 6160H 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      | -                        |

### 6160H 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      | -                |

| 6160H Heat Treatment Regime |           |           |             |       |
|-----------------------------|-----------|-----------|-------------|-------|
| Annealing                   | Quenching | Tempering | Normalizing | Q & T |
| √                           | √         | √         | √           | √     |

| 6160H 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:**