

This page is mainly introduced the ISO H6 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of ISO H6, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel ISO H6

| ISO H6 Standard Number: |                  |  |
|-------------------------|------------------|--|
| ITEM                    | Standard Number  | Descriptions                             |
| 1                       | ISO 15510 (2010) | Stainless steels -- Chemical composition |
| 2                       | ISO 4955 (2005)  | Heat-resistant steels                    |

| ISO H6 Chemical composition (mass fraction) (wt.%) |    |         |    |    |         |    |    |    |       |
|--|----|---------|----|----|---------|----|----|----|-------|
| Chemical   |    | Min.(%) |    |    | Max.(%) |    |    |    |       |
| C  |    |         |    |    | 0.12    |    |    |    |       |
| Si   |    | 0.70    |    |    | 1.40    |    |    |    |       |
| Mn   |    |         |    |    | 1.00    |    |    |    |       |
| P  |    |         |    |    | 0.040   |    |    |    |       |
| S  |    |         |    |    | 0.030   |    |    |    |       |
| Cr   |    | 23.00   |    |    | 26.00   |    |    |    |       |
| Ni   |    |         |    |    | 1.00    |    |    |    |       |
| Al   |    | 0.70    |    |    | 1.20    |    |    |    |       |
| C  | Si | Mn      | P  | S  | Cr      | Ni | Mo | V  | Ta    |
| W  | N  | Cu      | Co | Pb | B       | Nb | Al | Ti | Other |
|  |    |         |    |    |         |    |    |    |       |

### Heat-resistant steels

| ISO H6 Physical Properties |         |                          |
|----------------------------|---------|--------------------------|
| Tensile strength           | 115-234 | $\sigma_b$ /MPa          |
| Yield Strength             | 23      | $\sigma_{0.2} \geq$ /MPa |
| Elongation                 | 65      | $65 \geq$ (%)            |

|        |         |                 |
|--------|---------|-----------------|
| $\psi$ | -       | $\psi \geq$ (%) |
| Akv    | -       | $Akv \geq$ /J   |
| HBS    | 123-321 | -               |
| HRC    | 30      | -               |

### ISO H6 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      | -                        |

### ISO H6 Heat Treatment Regime

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

### ISO H6 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          | $\Phi$ 8-1200mm*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 Specialsteel the specifications follows:**