

This page is mainly introduced the Custom 475 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Custom 475, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades High Alloy Custom 475

| Custom 475 Standard Number: |          |               |               |              |
|-----------------------------|----------|---------------|---------------|--------------|
| Area                        | Standard | Standard Code | Standard Year | Descriptions |
|                             |          |               |               |              |

| Custom 475 Chemical composition(mass fraction)(wt.%) |         |         |             |
|--|---------|---------|-------------|
| Chemical   | Min.(%) | Max.(%) | Similar (%) |
|  |         |         |             |

| Custom 475 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      | -                        |

| Custom 475 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      | -                        |

### Custom 475 Heat Treatment Regime

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

### Custom 475 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 High Alloy the specifications follows:**