

This page is mainly introduced the X2CrNiN18-7 chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X2CrNiN18-7, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Grades Special Alloy X2CrNiN18-7

| X2CrNiN18-7 Standard Number: |                 |              |  |  |
|------------------------------|-----------------|--------------|--|--|
| ITEM                         | Standard Number | Descriptions |  |  |

| X2CrNiN18-7 Chemical composition(mass fraction)(wt.%) |         |         |  |
|---|---------|---------|--|
| Chemical  | Min.(%) | Max.(%) |  |

| X2CrNiN18-7 Physical Properties |         |             |  |  |
|---------------------------------|---------|-------------|--|--|
| Tensile strength                | 115-234 | σb/MPa      |  |  |
| Yield Strength                  | 23      | σ 0.2 ≥/MPa |  |  |
| Elongation                      | 65      | δ5≥ (%)     |  |  |
| Ψ                               | -       | ψ≥ (%)      |  |  |
| Akv                             | -       | Akv≥/J      |  |  |
| HBS                             | 123-321 | -           |  |  |
| HRC                             | 30      | -           |  |  |

| X2CrNiN18-7 Mechanical Properties |         |             |  |
|-----------------------------------|---------|-------------|--|
| Tensile strength                  | 231-231 | σb/MPa      |  |
| Yield Strength                    | 154     | σ 0.2 ≥/MPa |  |
| Elongation                        | 56      | δ5≥(%)      |  |
| Ψ                                 | -       | ψ≥(%)       |  |
| Akv                               | -       | Akv≥/J      |  |
| HBS                               | 235-268 | -           |  |
| HRC                               | 30      | -           |  |

| X2CrNiN18-7 Heat Treatment Regime |           |           |             |       |
|-----------------------------------|-----------|-----------|-------------|-------|
| Annealing                         | Quenching | Tempering | Normalizing | Q & T |
| $\checkmark$                      | √         | √         | √           | √     |

## X2CrNiN18-7 Chemical information, Mechanical properties

Physical properties, Mechanical properties, Heat treatment, and Micro structure

| X2CrNiN18-7 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<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Steel Bar                     | Round Bar, Flat Bar,<br>Square Bar          | Φ8-1200mm*L                   | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning,<br>Shot Blasting,                              |
| Coil / Strip                  | Steel Coil /Steel Strip                     | 0.03-16.0x1200mm              | Cold-Rolled & Hot-<br>Rolled                | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Pipes / Tubes                 | Seamless Pipes/Tubes,<br>Welded Pipes/Tubes | OD:6-219mm x<br>WT:0.5-20.0mm | Hot extrusion, Cold<br>Drawn, Welded        | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED                |

We can produce Special Alloy the specifications follows: