

This page is mainly introduced the UNS J93401 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of UNS J93401, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Special Alloy UNS J93401

| UNS J93401 Standard Number: |                 |              |
|-----------------------------|-----------------|--------------|
| ITEM                        | Standard Number | Descriptions |

| UNS J93401 Chemical composition (mass fraction) (wt.%) |          |          |          |           |           |           |          |    |       |
|--|----------|----------|----------|-----------|-----------|-----------|----------|----|-------|
| Chemical   |          |          |          | Min.(%)   |           |           | Max.(%)  |    |       |
| C  | Si       | Mn       | P        | S         | Cr        | Ni        | Mo       | V  | Ta    |
| 0.04-0.10  | Max 2.00 | Max 1.50 | Max 0.04 | Max 0.040 | 22.0-26.0 | 12.0-15.0 | Max 0.50 |    |       |
| W  | N        | Cu       | Co       | Pb        | B         | Nb        | Al       | Ti | Other |
|  |          |          |          |           |           |           |          |    |       |

### UNS J93401

| UNS J93401 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      | -                        |

| UNS J93401 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      | -                    |

### UNS J93401 Heat Treatment Regime

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

### UNS J93401 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 Special Alloy the specifications follows:**