

**This page is mainly introduced the NA14 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of NA14, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.**

## Datasheet for Steel Grades Specialsteel NA14

| NA14 Standard Number: |                 |   |
|-----------------------|-----------------|---|
| ITEM                  | Standard Number | Descriptions  |
| 1                     | BS 3072         | Specification for nickel and nickel alloys: sheet and plate |
| 2                     | BS 3073         | Specification for nickel and nickel alloys: strip           |
| 3                     | BS 3074         | Specification for nickel and nickel alloys: seamless tube   |
| 4                     | BS 3075         | Specification for nickel and nickel alloys: wire            |
| 5                     | BS 3076         | Specification for nickel and nickel alloys: bar             |

| NA14 Chemical composition(mass fraction)(wt.%) |    |         |    |    |    |         |    |    |       |
|--|----|---------|----|----|----|---------|----|----|-------|
| Chemical                                       |    | Min.(%) |    |    |    | Max.(%) |    |    |       |
| C  |    |         |    |    |    | 0.15    |    |    |       |
| Si   |    |         |    |    |    | 0.50    |    |    |       |
| Mn   |    |         |    |    |    | 1.00    |    |    |       |
| P  |    |         |    |    |    |         |    |    |       |
| S  |    |         |    |    |    | 0.015   |    |    |       |
| Cr   |    | 14.00   |    |    |    | 17.00   |    |    |       |
| Ni   |    | 72.00   |    |    |    |         |    |    |       |
| Mo   |    |         |    |    |    |         |    |    |       |
| Al   |    |         |    |    |    |         |    |    |       |
| Cu   |    |         |    |    |    | 0.50    |    |    |       |
| Ti   |    |         |    |    |    |         |    |    |       |
| Fe   |    | 6.00    |    |    |    | 10.00   |    |    |       |
| C  | Si | Mn      | P  | S  | Cr | Ni      | Mo | V  | Ta    |
| W  | N  | Cu      | Co | Pb | B  | Nb      | Al | Ti | Other |
|  |    |         |    |    |    |         |    |    |       |

Specification for nickel and nickel alloys: bar

### NA14 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      | -                        |

### NA14 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      | -                        |

### NA14 Heat Treatment Regime

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

### NA14 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, | $\Phi 8$ -1200mm*L | Forging, hot rolling and              | Black, Rough Turning,   |

|               |  |                            |                                   |   |
|---------------|--|----------------------------|-----------------------------------|---|
|               | Square Bar                               |                            | cold rolling, Cast                | 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:**