

This page is mainly introduced the A 959 Type 409Cb Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of A 959 Type 409Cb, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel A 959 Type 409Cb

### A 959 Type 409Cb Standard Number:

| ITEM | Standard Number | Descriptions  |
|------|-----------------|---|
| 1    | A 959 (2011)    | Standard Guide for Specifying Harmonized Standard Grade Compositions for Wrought Stainless Steels |

### A 959 Type 409Cb Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) | Max.(%)   |
|----------|---------|-----------|
| C        |         | 0.06      |
| Si       |         | 1.00      |
| Mn       |         | 1.00      |
| P        |         | 0.045     |
| S        |         | 0.04      |
| Ni       |         | 0.50      |
| Cr       | 10.50   | 11.75     |
| Al       |         |           |
| Cu       |         |           |
| Ti       |         |           |
| Fe       |         | remaining |
| N        |         |           |
| Mo       |         |           |
| V        |         |           |

|   |    |    |    |    |    |    |    |    |       |
|---|----|----|----|----|----|----|----|----|-------|
| C | Si | Mn | P  | S  | Cr | Ni | Mo | V  | Ta    |
| W | N  | Cu | Co | Pb | B  | Nb | Al | Ti | Other |

Standard Guide for Specifying Harmonized Standard Grade Compositions for Wrought Stainless

Steels

### A 959 Type 409Cb 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      | -                        |

### A 959 Type 409Cb 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      | -                        |

### A 959 Type 409Cb Heat Treatment Regime

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

| A 959 Type 409Cb 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 Specialsteel the specifications follows:**