

This page is mainly introduced the A 358 310Cb Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of A 358 310Cb, 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 358 310Cb

### A 358 310Cb Standard Number:

| ITEM | Standard Number     | Descriptions                                                                                                                 |
|------|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1    | A 358/A 358M (2008) | Electric-Fusion-Welded Austenitic Chromium-Nickel Stainless Steel Pipe for High-Temperature Service and General Applications |

### A 358 310Cb Chemical composition (mass fraction) (wt.%)

| Chemical Composition of Cast Iron |    |    |         |    |    |    |         |    |       |
|-----------------------------------|----|----|---------|----|----|----|---------|----|-------|
| Chemical                          |    |    | Min.(%) |    |    |    | Max.(%) |    |       |
| C                                 |    |    |         |    |    |    | 0.08    |    |       |
| Si                                |    |    |         |    |    |    | 1.50    |    |       |
| Mn                                |    |    |         |    |    |    | 2.00    |    |       |
| P                                 |    |    |         |    |    |    | 0.045   |    |       |
| S                                 |    |    |         |    |    |    | 0.03    |    |       |
| Cr                                |    |    | 24.00   |    |    |    | 26.00   |    |       |
| Ni                                |    |    | 19.00   |    |    |    | 22.00   |    |       |
| Nb+Ta                             |    |    |         |    |    |    | 1.10    |    |       |
| C                                 | Si | Mn | P       | S  | Cr | Ni | Mo      | V  | Ta    |
|                                   |    |    |         |    |    |    |         |    |       |
| W                                 | N  | Cu | Co      | Pb | B  | Nb | Al      | Ti | Other |
|                                   |    |    |         |    |    |    |         |    |       |

Electric-Fusion-Welded Austenitic Chromium-Nickel Stainless Steel Pipe for High-Temperature Service and General Applications

### A 358 310Cb Physical Properties

|                  |         |        |
|------------------|---------|--------|
| Tensile strength | 115-234 | σb/MPa |
|                  |         |        |

|                |         |                                  |
|----------------|---------|----------------------------------|
| Yield Strength | 23      | $\sigma_{0.2} \geq / \text{MPa}$ |
| Elongation     | 65      | $\delta 5 \geq (\%)$             |
| $\psi$         | -       | $\psi \geq (\%)$                 |
| Akv            | -       | $Akv \geq / \text{J}$            |
| HBS            | 123-321 | -                                |
| HRC            | 30      | -                                |

### A 358 310Cb Mechanical Properties

|                  |         |                                  |
|------------------|---------|----------------------------------|
| Tensile strength | 231-231 | $\sigma_b / \text{MPa}$          |
| Yield Strength   | 154     | $\sigma_{0.2} \geq / \text{MPa}$ |
| Elongation       | 56      | $\delta 5 \geq (\%)$             |
| $\psi$           | -       | $\psi \geq (\%)$                 |
| Akv              | -       | $Akv \geq / \text{J}$            |
| HBS              | 235-268 | -                                |
| HRC              | 30      | -                                |

### A 358 310Cb Heat Treatment Regime

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

### A 358 310Cb 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          | $\Phi 8$ -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:**