

This page is mainly introduced the LWCF21 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of LWCF21, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel LWCF21

### LWCF21 Standard Number:

| ITEM | Standard Number | Descriptions  |
|------|-----------------|---|
| 1    | BS 6323-8       | Specification for seamless and welded steel tubes for automobile , mechanical and general engineering purposes. Specific requirements for longitudinally welded stainless steel tubes |

### LWCF21 Chemical composition(mass fraction)(wt.%)

| Chemical |    | Min.(%) |    |    | Max.(%) |    |    |    |       |
|----------|----|---------|----|----|---------|----|----|----|-------|
| C        |    |         |    |    | 0.06    |    |    |    |       |
| Si       |    |         |    |    | 1.00    |    |    |    |       |
| Mn       |    |         |    |    | 2.00    |    |    |    |       |
| P        |    |         |    |    | 0.045   |    |    |    |       |
| S        |    |         |    |    | 0.030   |    |    |    |       |
| Cr       |    | 17.50   |    |    | 19.00   |    |    |    |       |
| Ni       |    | 8.00    |    |    | 11.00   |    |    |    |       |
| Mo       |    |         |    |    |         |    |    |    |       |
| C        | Si | Mn      | P  | S  | Cr      | Ni | Mo | V  | Ta    |
| W        | N  | Cu      | Co | Pb | B       | Nb | Al | Ti | Other |
|          |    |         |    |    |         |    |    |    |       |

Specification for seamless and welded steel tubes for automobile , mechanical and general

engineering purposes. Specific requirements for longitudinally welded stainless steel tubes

### LWCF21 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      | -                        |

### LWCF21 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      | -                        |

### LWCF21 Heat Treatment Regime

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

| LWCF21 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:**