This page is mainly introduced the OLC50S chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of OLC50S, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Grades Special Alloy OLC50S

| OLC50S Standard Number: |                   |              |  |
|-------------------------|-------------------|--------------|--|
| ITEM                    | Standard Number   | Descriptions |  |
|                         | Standard Walliber | Descriptions |  |

| OLC50S Chemical composition(mass fraction)(wt.%) |         |         |  |
|--|---------|---------|--|
| Chemical   | Min.(%) | Max.(%) |  |

| OLC50S Physical Properties |         |             |  |  |
|----------------------------|---------|-------------|--|--|
| Tensile strength           | 115-234 | σb/MPa      |  |  |
| Yield Strength             | 23      | σ 0.2 ≥/MPa |  |  |
| Elongation                 | 65      | δ5≥ (%)     |  |  |
| ψ                          | -       | ψ≥ (%)      |  |  |
| Akv                        | -       | Akv≥/J      |  |  |
| HBS                        | 123-321 | -           |  |  |
| HRC                        | 30      | -           |  |  |

| OLC50S Mechanical Properties |         |             |  |
|------------------------------|---------|-------------|--|
| Tensile strength             | 231-231 | σb/MPa      |  |
| Yield Strength               | 154     | σ 0.2 ≥/MPa |  |
| Elongation                   | 56      | δ5≥(%)      |  |
| ψ                            | -       | ψ≥(%)       |  |
| Akv                          | -       | Akv≥/J      |  |
| HBS                          | 235-268 | -           |  |
| HRC                          | 30      | -           |  |

| OLC50S Heat Treatment Regime |              |              |              |       |
|------------------------------|--------------|--------------|--------------|-------|
| Annealing                    | Quenching    | Tempering    | Normalizing  | Q & T |
| $\checkmark$                 | $\checkmark$ | $\checkmark$ | $\checkmark$ |       |



| OLC50S 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<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Steel Bar                | Round Bar, Flat Bar,<br>Square Bar          | Ф8-1200mm*L                   | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning,<br>Shot Blasting,                              |
| Coil / Strip             | Steel Coil /Steel Strip                     | 0.03-16.0x1200mm              | Cold-Rolled & Hot-<br>Rolled                | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |
| Pipes / Tubes            | Seamless Pipes/Tubes,<br>Welded Pipes/Tubes | OD:6-219mm x<br>WT:0.5-20.0mm | Hot extrusion, Cold<br>Drawn, Welded        | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED                |

We can produce Special Alloy the specifications follows: