

This page is mainly introduced the LWHT 316S33 chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of LWHT 316S33, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Grades Stainless Steels LWHT 316S33

### LWHT 316S33 Standard Number:

| ITEM | Standard Number | Descriptions                                                                                                    |
|------|-----------------|-----------------------------------------------------------------------------------------------------------------|
| 1    | BS 3605-2       | Austenitic stainless steel pipes and tubes for pressure purposes. Specification for longitudinally welded tubes |

### LWHT 316S33 Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) | Max.(%) |
|----------|---------|---------|
| C        |         | 0.07    |
| Si       |         | 1.00    |
| Mn       |         | 2.00    |
| P        |         | 0.045   |
| S        |         | 0.03    |
| Cr       | 16.50   | 18.50   |
| Mo       | 2.50    | 3.00    |
| Ni       | 11.00   | 14.00   |

### LWHT 316S33 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      | -                        |

### LWHT 316S33 Mechanical Properties

|                  |         |                 |
|------------------|---------|-----------------|
| Tensile strength | 231-231 | $\sigma_b$ /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      | -                              |

### LWHT 316S33 Heat Treatment Regime

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

### LWHT 316S33 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 Stainless Steels the specifications follows:**