

This page is mainly introduced the STS317LTP Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of STS317LTP, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel STS317LTP

| STS317LTP Standard Number: |                 |                            |
|----------------------------|-----------------|----------------------------|
| ITEM                       | Standard Number | Descriptions               |
| 1                          | D 3576 (2011)   | Stainless steel pipes      |
| 2                          | D 9536 (2011)   | Stainless lined steel pipe |

| STS317LTP Chemical composition(mass fraction)(wt.%) |    |         |    |    |    |         |    |    |       |
|---|----|---------|----|----|----|---------|----|----|-------|
| Chemical  |    | Min.(%) |    |    |    | Max.(%) |    |    |       |
| C   |    |         |    |    |    | 0.03    |    |    |       |
| Si  |    |         |    |    |    | 1.00    |    |    |       |
| Mn  |    |         |    |    |    | 2.00    |    |    |       |
| P   |    |         |    |    |    | 0.045   |    |    |       |
| S   |    |         |    |    |    | 0.030   |    |    |       |
| Cr  |    | 18.00   |    |    |    | 20.00   |    |    |       |
| Ni  |    | 11.00   |    |    |    | 15.00   |    |    |       |
| Mo  |    | 3.00    |    |    |    | 4.00    |    |    |       |
| N   |    | 0.10    |    |    |    | 0.22    |    |    |       |
| C   | Si | Mn      | P  | S  | Cr | Ni      | Mo | V  | Ta    |
| W   | N  | Cu      | Co | Pb | B  | Nb      | Al | Ti | Other |
|   |    |         |    |    |    |         |    |    |       |

Stainless lined steel pipe

| STS317LTP 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      | -                        |

| STS317LTP 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      | -                        |

| STS317LTP Heat Treatment Regime |           |           |             |       |
|---------------------------------|-----------|-----------|-------------|-------|
| Annealing                       | Quenching | Tempering | Normalizing | Q & T |
| √                               | √         | √         | √           | √     |

| STS317LTP 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, | Φ8-1200mm*L       | Forging, hot rolling and              | Black, Rough Turning,   |

|               |  |                            |                                   |   |
|---------------|--|----------------------------|-----------------------------------|---|
|               | Square Bar                               |                            | cold rolling, Cast                | 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:**