

This page is mainly introduced the SUS 317L TPY Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 317L TPY, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel SUS 317L TPY

### SUS 317L TPY Standard Number:

| ITEM | Standard Number | Descriptions                                |
|------|-----------------|---|
| 1    | G 3468 (2011)   | Large diameter welded stainless steel pipes |

### SUS 317L TPY Chemical composition (mass fraction) (wt.%)

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

Large diameter welded stainless steel pipes

### SUS 317L TPY 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      | -                        |

### SUS 317L TPY 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      | -                        |

### SUS 317L TPY Heat Treatment Regime

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

### SUS 317L TPY 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, | $\Phi 8$ -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:**