

This page is mainly introduced the SUS 405 TP Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS 405 TP, 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 405 TP

| SUS 405 TP Standard Number: |                 |                       |
|-----------------------------|-----------------|-----------------------|
| ITEM                        | Standard Number | Descriptions          |
| 1                           | G 3459 (2012)   | Stainless steel pipes |

| SUS 405 TP Chemical composition (mass fraction) (wt.%) |    |    |    |         |    |    |         |    |       |
|--------------------------------------------------------|----|----|----|---------|----|----|---------|----|-------|
| Chemical                                               |    |    |    | Min.(%) |    |    | Max.(%) |    |       |
| C                                                      |    |    |    |         |    |    | 0.08    |    |       |
| Si                                                     |    |    |    |         |    |    | 1.00    |    |       |
| Mn                                                     |    |    |    |         |    |    | 1.00    |    |       |
| P                                                      |    |    |    |         |    |    | 0.04    |    |       |
| S                                                      |    |    |    |         |    |    | 0.03    |    |       |
| Cr                                                     |    |    |    | 11.50   |    |    | 14.50   |    |       |
| Ni                                                     |    |    |    |         |    |    | 0.60    |    |       |
| Mo                                                     |    |    |    |         |    |    |         |    |       |
| N                                                      |    |    |    |         |    |    |         |    |       |
| Al                                                     |    |    |    | 0.10    |    |    | 0.30    |    |       |
| C                                                      | Si | Mn | P  | S       | Cr | Ni | Mo      | V  | Ta    |
|                                                        |    |    |    |         |    |    |         |    |       |
| W                                                      | N  | Cu | Co | Pb      | B  | Nb | Al      | Ti | Other |
|                                                        |    |    |    |         |    |    |         |    |       |

Stainless steel pipes

### SUS 405 TP 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 405 TP 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 405 TP Heat Treatment Regime

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

### SUS 405 TP 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:**