

This page is mainly introduced the STS410J1FB chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of STS410J1FB,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 STS410J1FB

| STS410J1FB Standard Number: |                 |                                                 |
|-----------------------------|-----------------|-------------------------------------------------|
| ITEM                        | Standard Number | Descriptions                                    |
| 1                           | D 3691 (2001)   | Stainless steel blooms and billets for forgings |

| STS410J1FB Chemical composition(mass fraction)(wt.%) |         |         |
|------------------------------------------------------|---------|---------|
| Chemical                                             | Min.(%) | Max.(%) |
| C                                                    | 0.08    | 0.18    |
| Si                                                   |         | 0.60    |
| Mn                                                   |         | 1.00    |
| P                                                    |         | 0.040   |
| S                                                    |         | 0.030   |
| Cr                                                   | 11.50   | 14.00   |
| Ni                                                   |         | 0.60    |
| Mo                                                   | 0.30    | 0.60    |
| N                                                    |         |         |

| STS410J1FB 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      | -                        |

| STS410J1FB 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      | -                        |

### STS410J1FB Heat Treatment Regime

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

### STS410J1FB 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          | $\Phi 8$ -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:**