

## 1.4550 347

| X6CrNiNb18-10 | %C   | %Si  | %Mn  | %P    | %S    | %Cr  | %Cu | %Mo | %Nb  | %Ni  |
|---------------|------|------|------|-------|-------|------|-----|-----|------|------|
|               | -    | -    | -    | -     | -     | 17.0 | -   | -   | 10*C | 9.0  |
|               | 0.08 | 1.00 | 2.00 | 0.045 | 0.015 | 19.0 | -   | -   | 1.00 | 12.0 |

### STEEL PROPERTIES

1.4550 347, is an austenitic stainless steel. Good corrosion resistance, especially in environments where intergranular corrosion resistance is required. Good weldability, but precautions should be taken to avoid sensitization, which could lead to intergranular corrosion. Post-weld heat treatment may be required in certain cases.

### EQUIVALENT GRADES

|            |             |               |
|------------|-------------|---------------|
| EN 10088-3 | 1.4550      | X6CrNiNb18-10 |
| AFNOR      | Z6CNNb18.10 |               |
| JIS        | SUS347      |               |
| AISI       | 347         |               |
| BS         | 347S17      |               |

### APPLICATIONS

1.4550 347 Used in high-temperature applications such as aircraft and engine parts. Chemical and petrochemical processing equipment. Pharmaceutical and food processing equipment. Heat exchangers and high-temperature exhaust systems.

### HEAT TREATMENT

1.4550 347 is supplied in annealed +AT conditions.

### Mechanical Values for 1.4550 347 at room temperature in EN 10088-3: 2014 inconditions 1C, 1E, 1D, 1X, 1G, 2D

| Diameter (mm) | Heat Treatment Condition | Hardness HB max. | 0.2% Proof strength min. | Tensile Strength Rm Mpa | Elongation after fracture A % Min. |       | Impact Energy (ISO-V) KV J Min. |       |
|---------------|--------------------------|------------------|--------------------------|-------------------------|------------------------------------|-------|---------------------------------|-------|
|               |                          |                  |                          |                         | (long)                             | (tr.) | (long)                          | (tr.) |
| -             | +AT                      | -                | -                        | Max 900                 | -                                  | -     | -                               | -     |
| ≤160          | -                        | 230              | 205                      | 510 to 740              | 40                                 | -     | 100                             | -     |

# 1.4550 347

**Mechanical Values for 1.4550 347 Bright Bars at room temperature in EN 10088-3:2014 in conditions 2H, 2B, 2G, 2P**

| Diameter<br>(mm) | Annealed                  |           | Heat<br>Treatment<br>Condition | 0.2%<br>Proof<br>strength<br>min. | Tensile<br>Strength<br>R <sub>m</sub> Mpa | A5 % Min<br>Elongation |       | Impact<br>Energy<br>(ISO-V) KV<br>J Min. |       |
|------------------|---------------------------|-----------|--------------------------------|-----------------------------------|---|------------------------|-------|--|-------|
|                  | R <sub>m</sub> Mpa<br>Max | HB<br>Max |                                |                                   |   | (long)                 | (tr.) | (long)                                   | (tr.) |
| ≤10              | 880                       | 240       | +AT                            | 175                               | 800 to 1050                               | 8                      | -     | -  | -     |
| 10 <t ≤ 16       | 880                       | 240       | +AT                            | 165                               | 800 to 1050                               | 98                     | -     | -  | -     |
| 16 <t ≤ 40       | 800                       | 250       | +AT                            | 155                               | 800 to 1000                               | 10                     | -     | 20                                       | -     |
| 40 <t ≤ 63       | 760                       | 230       | +AT                            | 145                               | 750 to 950                                | 12                     | -     | 20                                       | -     |
| 63 <t ≤ 160      | 730                       | 220       | +AT                            | 136                               | 750 to 950                                | 12                     | -     | 14                                       | -     |

## PRODUCTS OFFERED

- PEELED BARS
- BRIGHT BARS
- HEXAGONS
- SQUARES
- FLAT BARS
- WIRES