## SUSTAINABLE STAINLESS STEEL



## 1.4435 316L

| X2CrNiMo18-14-3 | %C    | %Si  | %Mn  | %Р    | %S    | %N   | %Cr  | %Mo  | %Nb | %Ni  |
|-----------------|-------|------|------|-------|-------|------|------|------|-----|------|
|                 | -     | -    | -    | -     | -     | -    | 17.0 | 2.50 | -   | 12.5 |
|                 | 0.030 | 1.00 | 2.00 | 0.045 | 0.030 | 0.11 | 19.0 | 3.00 | -   | 15.0 |

#### **STEEL PROPERTIES**

1.4435 316L, is an austenitic stainless steel with excellent corrosion resistance and a wide range of applications. offers excellent corrosion resistance and is highly resistant to various corrosive environments, including those with chloride ions. It is suitable for a wide range of applications where corrosion resistance is essential.

#### **EQUIVALENT GRADES**

EN 10088-3 1.4435 X2CrNiMo18-14-3

AFNOR Z2CND17.13

JIS SCS16 AISI 316L BS 316S11

#### **APPLICATIONS**

1.4435 316L is widely used in a variety of applications, including chemical and pharmaceutical equipment, food processing equipment, marine and offshore components, medical devices, and various industrial equipment where corrosion resistance and formability are crucial.

#### **HEAT TREATMENT**

1.4435 316L is supplied in annealed +AT conditions.

# Mechanical Values for 1.4435 316L at room temperature in EN 10088-3: 2014 in conditions 1C, 1E, 1D, 1X, 1G, 2D

| Diameter<br>(mm) | Heat<br>Treatment<br>Condition | Hardness<br>HB max. | 0.2%<br>Proof<br>strength<br>min. | Tensile<br>Strength<br>R <sub>m</sub> Mpa | Elongation<br>after<br>fracture A<br>% Min. |       | Impact<br>Energy<br>(ISO-V) KV<br>J Min. |       |
|------------------|--------------------------------|---------------------|-----------------------------------|-------------------------------------------|---------------------------------------------|-------|------------------------------------------|-------|
|                  |                                |                     |                                   |                                           |                                             | (tr.) | (long)                                   | (tr.) |
| -                | -                              | -                   | -                                 | -                                         | -                                           | -     | -                                        | -     |
| <= 160           | +AT                            | 215                 | 200                               | 500 to 700                                | 40                                          | -     | 100                                      | -     |

## SUSTAINABLE STAINLESS STEEL



# 1.4435 316L

Mechanical Values for 1.4435 316L Bright Bars at room temperature in EN 10088-3: 2014 in conditions 2H, 2B, 2G, 2P

| Diameter                                                                                                                                   | Annealed                  |           | Heat                   | 0.2%<br>Proof    | Tensile                        | A5 % Min   |       | Impact<br>Energy     |       |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|------------------------|------------------|--------------------------------|------------|-------|----------------------|-------|
| (mm)                                                                                                                                       | R <sub>m</sub> Mpa<br>Max | HB<br>Max | Treatment<br>Condition | strength<br>min. | Strength<br>R <sub>m</sub> Mpa | Elongation |       | (ISO-V) KV<br>J Min. |       |
|                                                                                                                                            |                           |           |                        |                  |                                | (long)     | (tr.) | (long)               | (tr.) |
| =<10                                                                                                                                       | 400                       | 305       | +AT                    | 200              | 600 to 950                     | 25         | 1     | -                    | -     |
| 10 <t<=16< td=""><td>400</td><td>305</td><td>+AT</td><td>194</td><td>600 to 950</td><td>25</td><td>-</td><td>-</td><td>-</td></t<=16<>     | 400                       | 305       | +AT                    | 194              | 600 to 950                     | 25         | -     | -                    | -     |
| 16 <t<=40< td=""><td>235</td><td>280</td><td>+AT</td><td>186</td><td>500 to 850</td><td>30</td><td>-</td><td>100</td><td>-</td></t<=40<>   | 235                       | 280       | +AT                    | 186              | 500 to 850                     | 30         | -     | 100                  | -     |
| 40 <t<=63< td=""><td>235</td><td>260</td><td>+AT</td><td>179</td><td>500 to 850</td><td>30</td><td>-</td><td>100</td><td>-</td></t<=63<>   | 235                       | 260       | +AT                    | 179              | 500 to 850                     | 30         | -     | 100                  | -     |
| 63 <t<=160< td=""><td>235</td><td>245</td><td>+AT</td><td>172</td><td>500 to 750</td><td>40</td><td>-</td><td>100</td><td>-</td></t<=160<> | 235                       | 245       | +AT                    | 172              | 500 to 750                     | 40         | -     | 100                  | -     |

#### PRODUCTS OFFERED

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