## SUSTAINABLE STAINLESS STEEL



## 1.4539 904L

| X1NiCrMoCu25-20-5 | %С    | %Si  | %Mn  | %Р    | %S    | %N   | %Cr  | %Cu  | %Мо | %Ni  |
|-------------------|-------|------|------|-------|-------|------|------|------|-----|------|
|                   | -     | -    | -    | -     | -     | -    | 19.0 | 1.20 | 4.0 | 24.0 |
|                   | 0.020 | 0.70 | 2.00 | 0.030 | 0.010 | 0.15 | 21.0 | 2.00 | 5.0 | 26.0 |

#### STEEL PROPERTIES

1.4539 904L is a high-alloy austenitic stainless steel with excellent corrosion resistance, especially in aggressive environments. It is used in applications where resistance to various corrosive agents are critical.

#### **EQUIVALENT GRADES**

EN 10088-3 1.4539 X1NiCrMoCu25-20-5

AFNOR Z1NCDU2520

JIS -

AISI 904L BS 904S13

#### **APPLICATIONS**

1.4539 904L is used in a wide range of applications, including chemical processing equipment, pharmaceutical and petrochemical industry components, heat exchangers, and marine applications. It is selected for situations where excellent corrosion resistance to a variety of corrosive media is required

#### **HEAT TREATMENT**

1.4539 904L is supplied in annealed +AT conditions.

# Mechanical Values for 1.4539 904L 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 Proof<br>HB max. strengt<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. |       |
|------------------|--------------------------------|---|-----|---|---|-------|--|-------|
|                  |                                |   |     |   | (long)                                      | (tr.) | (long)                                   | (tr.) |
| -                | +AT                            | -   | -   | Max 800                                   | -   | -     | -  | -     |
| <= 160           | ı                              | 230                                       | 230 | 530 to 730                                | 35  | -     | 100                                      | _     |

## SUSTAINABLE STAINLESS STEEL



# 1,4539 904L

Mechanical Values for 1.4539 904L 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                    | 205              | 600 to 930                     | 20         | -     | -                    | -     |
| 10 <t<=16< td=""><td>400</td><td>305</td><td>+AT</td><td>190</td><td>600 to 930</td><td>20</td><td>-</td><td>-</td><td>-</td></t<=16<>     | 400                       | 305       | +AT                    | 190              | 600 to 930                     | 20         | -     | -                    | -     |
| 16 <t<=40< td=""><td>230</td><td>280</td><td>+AT</td><td>175</td><td>530 to 880</td><td>25</td><td>-</td><td>100</td><td>-</td></t<=40<>   | 230                       | 280       | +AT                    | 175              | 530 to 880                     | 25         | -     | 100                  | -     |
| 40 <t<=63< td=""><td>230</td><td>260</td><td>+AT</td><td>160</td><td>530 to 880</td><td>25</td><td>-</td><td>100</td><td>-</td></t<=63<>   | 230                       | 260       | +AT                    | 160              | 530 to 880                     | 25         | -     | 100                  | -     |
| 63 <t<=160< td=""><td>230</td><td>245</td><td>+AT</td><td>145</td><td>530 to 730</td><td>35</td><td>-</td><td>100</td><td>-</td></t<=160<> | 230                       | 245       | +AT                    | 145              | 530 to 730                     | 35         | -     | 100                  | -     |

#### PRODUCTS OFFERED

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